

## FOREIGN INVESTMENT AND EMPLOYMENT GENERATION IN NIGERIA

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### Abstract

*The study examined the impact of foreign investment on employment generation in Nigeria. The study made use of secondary data, after carrying out a unit root test on all the variables and the result showed that foreign investment, employment rate and poverty rate are integrated of order one, hence the study employed the use of Vector Autoregressive Scheme as an appropriate methodology. The result of the study showed that employment rate and Gross Domestic Product per capita exhibited a greater impact on Gini. Also foreign investment has a greater impact on the level of poverty reduction and finally foreign direct investment also has positive relationship on employment rate in the country. The conclusion of the study is that the major reason for the low impact of foreign investment on employment generation is that foreign investment inflow into the country has been towards certain sectors (oil and gas, communication, construction, etc.) at the expense of those sectors (agriculture, tourism and manufacturing) that has the greatest potential for reducing unemployment and for poverty reduction in the country, hence FI is good and should be encourage to those neglected sectors in other to improve employment generation.*

**Keywords:** foreign investment, employment generation, poverty reduction

### Introduction

Nigeria Investment climate has improved since the inception of civilian rule in 1999 this was formerly unattractive before with seven military coups after independence. The transition of government from military to civilian and from civilian to civilian government, and an ongoing effort to create a better electoral system for smooth change of government since this is the first point of evaluation for any investors. This has improved the country's image in the League of Nations. Also the frequent oversea trip of government officials both at federal and state levels to woo foreign investors is another measure to increase the inflow of FDI into the country. In pursuance of an investment friendly environment, government has embarked on heavy investment in social infrastructure, to aid production of goods and services. Another basic step in this line was the liberalization of the communication sector which has increased the inflow of FDI and also enhances better communication to make business easier and faster and aid effective operation of foreign enterprises, Okoh (2004).

Furthermore, the privatization policy of the federal government has increase the inflow of FDI into the country. The stringent regulations and approval procedure affecting foreign investors has been relaxed

in so many ways. Too many changes in policies and regulations altered the rule of the game so frequently those investors kept away from projects with long gestation period to the extent that trading and importation of consumables became the most reliable profitable business undertakings. To correct this, government now institutionalized many of these policies. Okpe and Abu (2009),said " business operatives may come to a standstill if official hand are wet" this explain why government has taken measures to fight corruption which is widespread in many government and public agencies, so as to boost foreign investors confidence in doing business in Nigeria. Increase in qualified personnel through Education and Training like the oversea training sponsored by Petroleum Training and Development Fund (PTDF) and the federal government amnesty programme.

The external sector reform consisted of the introduction of a foreign exchange market for determining a realistic Naira exchange rate, the abolition of import licensing, dismantling of quantitative quota restriction as well as reduction in the number of barred imported commodities. The recognition of deregulatory policy in 1995 is in recognition of the need to adopt appropriate financial, trade and exchange policies which could improve the competitiveness of exportable in the international markets. The aftermath of all these measures has been

an increase in the inflow of FDI and improve income distribution, for instance, the increase in the level of efficiency of the communication system has increase FDI inflow, provide jobs for millions of Nigerians both directly and indirectly and it has enhance better standard of living UNCTAD (2001). The spillover effects of MNC's are the establishment of so many indigenous companies to either serve as feeder firms or assist in sales and distributions of products or provide other related services. Mass Production through importation of high technology and improvement in the level of skilled-workers, more efficient management system has prevailed in most of the privatized firms.

Foreign investment is a strong force which has a positive impact on growth and development through employment generation which leads to increase in income for the people, who in turn save and this is further reinvested into the economy for development and growth. Thus we experience reduction in poverty, as such, it has to be adequately planned for if a nation is to experience a reasonable reduction in unemployment and poverty through growth and development. In addition, wealth appeared to be highly concentrated in Nigeria, unemployment in both rural and urban areas plus poverty rate in rural areas increased at an alarming rate due to high level of population growth rate, poor infrastructure, high gender blindness and high level of illiteracy.

Unemployment has been a major economic issue in the developing economies of the world, Nigeria is no exception to this economic problem. Nigeria economy was on the path of growth after independence because of the growth witnessed in the agricultural sector. But, the problem of unemployment became pronounced because of the civil war where millions of agile and Entrepreneurs were displace from their place of abode. Again, lack of adequate education and training also constitute to the growth of unemployment since most of them could not be employ. Also, of note is the economic recession which has characterized our economy over time, lots of businesses equally left the country because of the additional problem of poor power supply and lastly government privatization policy also contributed to the problem of unemployment, with almost all their workers laid off while their being owned allowances and salaries.

### **Statement of the problem**

Foreign direct investment started flowing into Nigeria especially in the oil and gas sector because of the discovery of crude oil. According to Makola (2003), immediately after Nigeria civil war, foreign direct investment inflow into the country also jumped up because of the need for massive reconstruction and rehabilitation of infrastructure. Hence employment generation and poverty reduction, but, pace of population growth which was higher than available resources constitute a very big issue Bamidele (2003). The argument that private international capital flows particularly foreign direct investment along with international financial aid are vital complement to national and international development in the area of reducing poverty as highlighted by the United Nation (UN) conference on Finance for Development (FfD). But despite the annual inflow, poverty level according to empirical studies is still alarming.

Also an important fact is that exposure to foreign competition play vital role in skill upgrading, employment generation and poverty reduction, [Moran (1998)]. The inflow of foreign direct investment has been a veritable tool for the reduction of poverty, Mayne (1997). But despite the increasing inflow of foreign direct investment and foreign aid on annual basis into Nigeria, obviously the level of unemployment and poverty is still very high, so the study has to find out the impact foreign direct investment has on employment generation and poverty reduction in Nigeria.

The objective of this study is to determine the impact of foreign investment on employment generation in Nigeria, and determine the contribution of foreign direct investment to poverty reduction in Nigeria. So the study aims to contribute to existing literature by examining the impact of FDI on employment generation in Nigeria. Hence, a critical look at the impact of FDI on employment generation will offer an immense contribution to government ways of reducing unemployment, improving on the distributional impact of FDI and the need to make government at various levels evolve measures to generate employment in the country.

### **Literature review**

#### **Concept of foreign direct investment**

According to Jhinghan [1998], foreign capital can enter a country in the form of Private capital or public capital. Private foreign capital may take the form of direct and

indirect investments. Foreign direct investment means that the concerns of the investing country exercise de facto or de jure control over the assets created in the capital importing country by means of that investment. foreign direct investment may take many forms, the formation in the capital importing country of a subsidiary of a company of the investing country, the formation of a concern in which a company of the investing country has a majority holding, the formation in the capital importing country of a company financed exclusively by the present concern situated in the investing country, setting up a corporation in the investing country for the specific purpose of operating in the other concerns, or the creation of fixed assets in the other country. Foreign direct investment can be seen as investment that is made to acquire a lasting management interest [ usually 10 percent of voting stock] in an enterprises operating in a country other than that of the investor [defined according to residency] the investor's purpose being an effective voice in the management of the enterprises. It is the sum of equity capital, reinvestment of earnings, other long term capital and short run capital as shown in a nation's balance of payments account/statements [IMF 1977 and World Bank, 1996]. Also, foreign direct investors is an individual, an incorporated and/or unincorporated enterprises that is a subsidiary, associate, or branch operating in country other than the country of residence of the investor or investors.

### **FDI and employment generation**

Mattew and Ogunlusi (2017) said government should put various facilities in place which will serve as an encouraging factor to foreign investors. And common markets should be encouraged by the government which will inform the interest of the foreign investors. Synd and Mohammad (2009), observed that over the past two decades, India and China received a major chunk of foreign direct investment from developed countries and foreign direct investment flows to Pakistan also increased significantly. Many studies show that the inflow of foreign direct investment plays significant role in generating employment in host countries. The study undertook an empirical study on creation of employment opportunities by foreign direct investment during 1985-2008 in Pakistan, India and China, the Seemingly Unrelated Regression (SUR) method was used for estimation of the impact of foreign direct investment inflows on employment levels in three countries. The result suggested that only GDP has a significant impact upon the level of employment in all of the three countries. In addition, foreign direct investment doesn't

have any impact on the creation of employment in Pakistan, India and China.

On the other hand, Adam (2000) made a clear consensus that FDI puts more money in the pockets of employees than domestic firms'. Graham (2000) presents an enthusiastic defense of globalization in general, on FDI in particular, the central lesson here is that, the poorer your country, the greater the advantage you will have working for a foreign firm. On top of this, Lall (2001) suggest that well managed FDI is a useful source of increase in employment, though strong state management, as demonstrated in East Asia's newly industrialized countries, is a necessary condition. In a paradox, such state management, the author argues, may make it harder to attract FDI down the line.

In a table, Lall (2001) indicated that the ratio of average wage paid by foreign firms to domestic firms for all countries is ratio one to five [1:5], while for the Less Developed Countries it is one to eight [1:8]. Workers connected to FDI would emerge as a separate segment of the society, whose alignment with multinational capital and the state would facilitate core country access to LDCs resources, for instance, well paid workers are likely to be in support of extended tax holidays for their employers, to their benefit, but to the potential detriment of broader society. Lall's argument that strong states are needed to milk FDI for maximum benefits is also consistent with the dependency argument that LDCs development hinges on the ability of states to utilize their limited sovereignty to leverage bargains out of MNCs.

Palle and Phillippe (1998), are of the opinion that since the trough in 1982, the growth of real foreign direct investment outflows and inflows for the OECD countries has been very high, for outfacing that of foreign trade and real GDP. While such flows are likely to have increased the efficiency with which global capital is been used, these have also lead to consensus that outflows from the industrial countries serve as an instrument for exporting job to low wage countries. They found only limited evidence that foreign direct investment outflows lead to job losses in the source countries, while it that domestic investment tends to decline in response to foreign direct investment outflows, emerging market economies receive only a small, albeit growing share of global outflows. It also appears that high labour cost encourages outflows and that exchange rate movement may exacerbate such effects.

Anna (2002) presented potential effects of foreign direct investment on the quality, quantity and location of employment in host countries. The result of the study show direct impact of foreign direct investment on employment creation/preservation in Polish manufacturing during transition. In 1993-2000, employment growth in foreign direct enterprises did not compensate for the decline in domestic controlled employment. However, the effect differs between industries, he opined that foreign presence has a positive impact on performance of domestic industries as a whole in terms of both usage of capital intensive technologies and labour productivities.

Omorogbe and Ubeagbu (2007) believed foreign direct investment is a strong force which has a positive impact on growth and development through employment generation which leads to increase in income for the people, and this further invested into the economy for the development and growth. Thus, they experience reduction in poverty. As such, it has to be adequately planned for, if a nation is to experience a reasonable reduction in poverty through growth/development of her economy. Their paper enunciated that it is not possible for Nigeria to reduce her poverty level throughout without the right conducive environment, political stability, institutional and structural reforms that stimulate foreign direct investment.

Michael, Carl and Bitu (2001), wrote that foreign investment is a key ingredient of successful economic growth and development in developing countries, partly because the very essence of economic development is the rapid and efficient transfer and cross-border adoption of "best practices". Foreign investment is especially well suited to affecting this transfer and translating it into broad-based growth not leased by upgrading human capital. Moreover, the delivery of socio-services to the poor from insurance schemes to such basic services as water and energy can clearly benefit from reliance on foreign direct investment. In short, foreign direct investment remains one of the most effective tools in the fight against poverty.

### **Empirical literature**

Gopinath and Chen (2003), analyses time series data on foreign direct investment and wages for 15 advanced countries and 11 developing countries. They opined that the distributional consequences of foreign direct investment in advanced host countries differ from those in developing host countries. Similarly, the result

presented by Figini and Gorg (2006) suggest that pooling host countries at different levels of development is appropriate. Using a panel of more than 100 countries for the period 1980-2002, Figini and Gorg (2006) depict two different patterns in the relationship between inward foreign direct investment and wage inequality. Wage inequality increases with foreign direct investment in developing host countries, but this effect diminishes with further increases in foreign direct investment.

Gohou and Soumare (2009), in their study, made use of foreign direct investment net inflow per capital and the UNDP's Human Development Index (HDI) as the principal variables. The study analyses confirm the positive and strongly significant relationship between foreign direct investment net inflows and poverty reduction in Africa but finds significant difference among Africa regions. They also find out that foreign direct investment has more impact on welfare in poorer than in richer countries. Arbenser (2004) examined the impact of foreign direct investment on incomes of households in Ghana, the study shows that increase in foreign direct investment inflow raises the households income by more than 1.3 percent household urban skilled registers the highest percentage increase in income followed closely by household rural agriculture, and the least income gain accrues to households urban non-skilled. It also establishes that increase in foreign direct investment inflow and reduction of tariff levels is complementary policies that enhance households' welfare.

According to Jayaraman and Baljeet (2007), who undertook an econometric study of the impact of foreign direct investment in Fiji employment rate during a 30 year period through a multivariate modeling strategy by including GDP. They found out unidirectional long run causality running from foreign direct investment to employment and a unidirectional causality running from foreign direct investment to GDP in the short run. The policy implications of their study are that Fiji should continue not only its current proactive policies to attract foreign direct investment inflows but also maintain appropriate environment including political stability for retaining the inflows. Abor and Harvey (2008) investigated the effect of foreign direct investment on employment creation and wages in Ghana. They indicated that foreign direct investment has a significant and positive effect on employment levels in Ghana, but has an insignificant effect on wages. Also those foreign investments can greatly argument domestic effort by creating more jobs in the economy, and affect

employment quantitatively, but not necessarily qualitatively, their wages sub-sector and locations as important factors influencing employment level. Also, productivity, labour union, firm size and location are noted as significant in affecting wages in Ghana.

Ogwumike, et al (2003) analyzed "Labour force participation, earnings and income inequality. They analyze among other things, the distributions of structure of main job earnings, determinants and income inequality in Nigerian labour market. The result of the study shows that inequality is more pronounced in paid employment than in self-employed segment of Nigeria labour force, it is higher among women involvement in paid employment than their female counterparts. It is generally higher in the rural areas than in the urban areas and within group inequality mainly explains income inequality in Nigeria. The study concluded that, large market size, low-labour costs and high returns in natural resources are amongst the major determinants in the decision to invest in developing countries. while FDI is good for wages and FDI is equally a useful sources of increase in employment, the skills of labour forces are expected to have an impact on the decision about FDI location and large market size also attract FDI with low cost of labor.

Alayande (2003) posited that, a high rate of unemployment and underemployment, a large public sector, low wages and poor working conditions characterized the labour market in Nigeria. But, underemployment and unemployment are prominent features of the informal labour surplus economy are not being fully exploited. In the 1960s and 1970s the Nigerian economy provided jobs for its teeming population and absorbed considerable imported labour in the scientific sectors. The wage rate compared favourably with international standards and there was relative industrial peace in most industry sub-groups. Following the oil boom of the 1970s, there was mass migration of people, especially the youth, to the urban areas seeking for jobs. FDI serve as a major component of the capital and financial account of a nation's balance of payment (BOP). Therefore, Nigeria's dire need for foreign investment could be classified into three broad aspects, one foreign investment is required to fill the savings and foreign exchange gaps and thereby enable the country to achieve its economic potential. The supply side of the economy requires a massive injection of foreign resources in order to elicit the necessary increased output, minimize the growth of

unemployment and reduce the inflation rate significantly. Foreign investment inflow is required to stimulate the acquisition of technology, transform the structure of domestic output and diversify and expand the non-oil export sector. Makola (2003).

### Theory of foreign investment

Accelerator principle: The theory says that the rate of investment expenditure depends upon changes in the level of output. That is increase in output puts pressure on existing production capacity which necessitates a high rate of investment expenditure. In essence the principles describes a situation where how much a business choose to spend in capital investment will be influenced by how quickly demand is growing for their products. The accelerator effect fits the behavior of an economy best when either the economy is moving away from full employment or when it is already below that level of production, this is because high levels of aggregate demand hits against the limits set by the existing labour force, the existing stock of capital goods, the availability of natural resources and the technical ability of an economy to converts inputs into products.

The accelerator effects is shown in a simple accelerator model

$$Q \text{----} P_c \text{----} K \text{----} I$$

Q stands for output,  $P_c$  stands for Production Capacity, K stands for Capacity Stock and I stand for Investment.

The model is based on the following assumptions:

There is full-capacity utilization in the production process  
The accelerator is constant overtime.

The constancy of the accelerator implies that the production process is subject to constant returns to scale.

Symbolically, let  $K$  = capital stock

$Y$  = level of output

$W = K/Y$  = capacity output ratio

$W$  is the accelerator

If  $W = K/Y$

$K = WY$

$\Delta K = W \Delta Y$ , this is the accelerator principle, as output changes ( $\Delta Y$ ), and capital stock ( $\Delta K$ ) changes the same direction.

Let  $K_t$  = Capital stock at period  $t$

$Y_t$  = output level at period  $t$

$K_{t+1}$  = capital stock at period  $t+1$

$W$  = accelerator

$K_t = W Y_t$  ----- (1)

Similarly  $K_{t+1} = W Y_{t+1}$  ----- (2)

Subtracting (1) from (2)  
 $K_{t+1} - K_t = WY_{t+1} - WY_t$   
 $K_{t+1} - K_t = W(Y_t + \Delta Y)$   
 $\Delta K = W\Delta Y$   
 $W\Delta Y = \Delta K$   
 $\Delta Y = 1/W \Delta K$

This change in income can be represented in an augmented accelerator principle, by change in income of employed labour, while change in capital stock can be represented with change in investment.[ FDI as a form of investment], therefore,

$$\Delta Y = \alpha_0 + \alpha_1 FDI + U_t$$

**Research methods**

The nature of the data in the research work is secondary; data on poverty rate were extracted from the Nigerian Statistical Factsheet on Economic and Social Development. Data on employment rate and were extracted from annual Statistical digest of National Bureau of Statistics, various issues and CBN Statistical Bulletin, various edition.

**Model specification:**

With special reference to the works of Muhammad and Naveed (2008) which inquire the relationship between FDI and income distribution, originally suggested by Ehrlich (1977) and Layson (1983). The equation is modeled below;

$$Gini = \alpha_0 + \alpha_1 FDI + \alpha_2 CV + \mu_t \quad (i)$$

A model representing the impact of FDI on employment generation is stated thus with certain modification to suit the purpose of this study.

$$EMP = f(FDI) \dots \dots \dots (ii)$$

Specifying the third model in explicit form

$$EMP = \alpha_0 + \alpha_1 FDI + \alpha_2 GINI + U_t \quad (\text{model i})$$

Where FDI= foreign direct investment, GDPC= Real GDP per capita, and UNP= unemployment rate.

$$PVT = f(FDI) \dots \dots \dots (iii)$$

Specifying the second model in explicit form

$$PVT = \beta_0 + \beta_1 FDI + \beta_2 GINI + U_t \dots \dots \dots (\text{Model 2})$$

Identification and operational definitions of variables  
 FDI= foreign direct investment as share of GDP may increase income inequality by reinforcing the power of privilege groups and creating enclaves of well paid employees of the multinational corporations surrounded by marginalized poor.

GDPC= Real per capita GDP (economic growth) raises income inequality through its unequal distribution according to upper echelon phenomenon. Economic growth improves income of lower segments of population through its distributed channels. If growth is labour absorbing, then incomes of poor sections of population will increase.

UNP= Unemployment rate. UNP increases income inequality through decrease in the purchasing power of the people, poverty level will equally increase, hence income inequality becomes more unequal

PVT= poverty rate, an increase in poverty rate will lead to increase in income inequality, if income distribution improves, the level of poverty is expected to fall

Ut== stochastic disturbance term.

**Estimating techniques**

The estimating technique employed in this empirical investigation is based on recent development in co-integration analysis and the error correction model [ECM]. Testing for the existence of unit root is a key pre-occupation in the study of time series model and co-integration. Again, A VAR model describes the evolution of a set of K variables (called endogenous variables) over the same sample period (t=1,2,-----tp) as a linear function of only their past evolution. The choice of this estimation procedure is informed by the need to determine the time series characteristics of the variables that are used in this study. The existence of the concept among the variables on the existence of stable equilibrium relationships among them,

**Results and discussion**

Time series properties of variables in the model  
 The Augmented Dickey Fuller test for unit root was conducted for the variables in the model at both levels, first and second difference as the case may be. Accordingly the null hypothesis is that there is a unit root in each variable, that is each variable is non-stationery/ the rule of thumb is that the null hypothesis of unit root should be accepted if the ADF statistic is less negative than the critical value, otherwise, the direction of the alternative hypothesis.

Table 1; Augmented Dickey Fuller tests for stationarity with Intercept and Linear Trend Unit root test result

Variable	<i>ADF</i>	Order of Integration
	Statistics	
GINI	-34.5555	I (0)*
GDPC	-4.2521	I (0)*
<i>FDI</i>	-5.7162	I (1)*
<i>EMP</i>	-3.7438	I (1)*
<i>PVT</i>	-3.9837	1(1)*

Source: Computed from data

NOTE: *ADF* critical value at 5% is – 3.5867;

\*: Stationary after the first difference

The test in table 1 was conducted with the assumption of constant and trend in the series. This is so because each of the variables shows a relationship with line that is trended. The result therefore indicates that not all variables are non-stationary at their levels. This is so, as their *ADF* statistics are all less negative than the critical values at the 5% level of significance. However, the economic implication of non-stationary series is that of a prolonged or sustained shock if there is any disturbance to the variable. Thus foreign investment, Employment rate and poverty rate all exhibited a prolonged shock. A further test for unit root to ascertain whether such shock is that of infinity or will die out over

time is conducted using the first and second difference of each variable as the case may be. The result, also in table 1 shows that while Foreign direct investment, Employment rate and poverty rate are integrated of order one and they are denoted as I(1). However since there are two models in this study, the results of the Vector Auto regression and Impulse response analysis are presented in the tables below

Var result; Var estimates:

The model expressed Poverty is expressed as a function of foreign direct investment and employment rate was expressed as a function of foreign direct investment and Gini for the second model.

Table 2: Vector auto-regression estimates

	GINI	FDI	PVT	EMP	GDPC
GINI(-1)	-0.108413	-0.961383	-0.001677	0.000719	-852.9288
GINI(-2)	-0.049967	-1.383277	-0.001841	0.000540	-1107.803
FDI(-1)	0.011190	-0.147713	-5.17E-05	2.23E-05	10.50949
FDI(-2)	-0.001166	-0.180242	0.000137	9.68E-05	-92.74074
PVT(-1)	-13.38189	-14.13338	0.794368	0.100245	-806002.5
PVT(-2)	10.36381	40.96679	-0.058831	-0.152830	919964.5
EMP(-1)	46.34764	512.9151	0.379612	0.448697	312198.4
EMP(-2)	-59.35563	331.8436	0.083614	0.243763	59.60199
GDPC(-1)	-1.67E-06	0.000177	1.07E-07	-1.47E-07	0.070272
GDPC(-2)	-6.32E-06	0.000173	1.00E-07	-2.11E-08	0.103244
C	1376.886	-67596.84	-24.34660	28.12662	-28648126
R-squared	0.126546	0.219086	0.811827	0.670023	0.911936
Adj. R-squared	-0.387251	-0.240275	0.701137	0.475919	0.860134
F-statistics	0.246296	0.476937	7.334251	3.451878	17.60418

The result above showed that there is a strong relationship between the endogenous variables. The result portrays the direction of causality considering the value of the F-statistics and the coefficient of multiple determination ( $R^2$ ), it could be concluded that Gini (as a proxy for income distribution) is less endogenous than exogenous as the R-squared, Adjusted R-squared is negative and below 40% with a low F-statistics value than that of Gini coefficient, this signifies that foreign direct investment has low impact on Gini through GDPC and employment rate exhibit a greater impact on Gini.  $EMP = \beta_0 + \beta_1 FDI + \beta_2 GINI + U_t$ , here the value of the F-statistics and the coefficient of multiple determination ( $R^2$ ), it can be concluded that employment rate is more endogenous than exogenous as the R-squared and Adjusted R-squared is above 65% with a high F-statistics value than that of Gini and foreign direct investment. This is further analyzed using the impulse response and variance decomposition.

$PVT = \beta_0 + \beta_1 FDI + \beta_2 Gini + U_t$ , here poverty is expressed as a function of foreign direct investment and Gini.

Also, considering the value of the F-statistics and the coefficient of multiple determinations ( $R^2$ ), it can be concluded that poverty is more endogenous than exogenous as the R-squared; Adjusted R-squared is above 80% with a high F-statistics value than that of Gini and foreign direct investment. This signifies that poverty is being determined by foreign direct investment and Gini. For the third model;

Impulse response analysis

The impulse response analysis of the vector Autoregressive (VAR) allows us to trace out the time path of the various shocks on the variables of the VAR system. The impulse response tells us how macro-variables respond to shocks in the policy variables. The impulse response estimates is presented as it was used to forecast the behavior of the endogenous variables to a standard deviation shock on Gini coefficient, foreign direct investment, employment rate and per capita GDP.

Table 3; Response of EMP

period	GINI	FDI	PVT	EMP	GDPC
1	1.343277	0.201303	1.305720	3.449494	0.000000
2	1.181432	0.338977	1.262302	1.575625	-0.326185
3	1.183669	1.036796	1.188727	1.678344	-0.186208
4	0.779925	0.596453	0.234552	1.358715	-0.146585
5	0.729563	0.415008	-0.238320	1.055766	-0.114962
6	0.818494	0.256768	-0.558376	0.795244	-0.128098
7	0.738276	0.162509	-0.657442	0.526042	-0.128164
8	0.613051	0.076364	-0.742995	0.257435	-0.119476
9	0.459474	0.009931	-0.798534	0.040095	-0.096637
10	0.323225	-0.060290	-0.833293	-0.138393	-0.074275

Table 4 Response of PVT;

period	Gini	FDI	PVT	EMP	GDPC
1	-0.0578820	0.694908	7.449599	0.000000	0.000000
2	-1.244055	0.197431	6.464585	1.289206	0.237355
3	-1.766903	1.288290	4.770813	1.647261	0.289131
4	-0.689158	1.133104	3.758188	2.146260	0.226120
5	0.054867	0.874649	3.286950	2.697254	0.146564
6	0.583490	0.941560	2.789982	2.699099	-0.010991
7	0.872827	1.051618	2.389890	2.613596	-0.086682
8	0.982073	0.970759	1.778384	2.438627	-0.121959
9	1.035832	0.864271	1.140733	2.179798	-0.141677
10	1.086836	0.728558	0.572592	1.873864	-0.158380

Table 4 a, b and c shows the results of the impulse response analysis derived from their estimated VAR models, the response of Gini to a one standard deviation shock to Gini itself is positive in the first periods and turns negative afterwards, this signifies that Gini exhibit a negative response to a one standard deviation innovation. This is a clear indication that Gini is more dependent variable than foreign direct investment, employment rate and per capita GDP, Gini coefficient is being determined by GDPC, employment rate and foreign direct investment.

The response of poverty to a one standard deviation shock to poverty itself is negative in the first four periods and turns positive afterwards, It means poverty exhibit a positive response to a one standard deviation innovation, which is a clear indication that poverty rate is a less dependent variable than Gini and foreign direct investment. That means poverty rate is less determined by Gini and foreign direct investment. The response of

employment rate to a one standard deviation shock to employment rate itself is positive throughout, this signifies that employment rate exhibit a positive response to a one standard deviation innovation. This is a clear indication that employment rate is less dependent variable than Gini and foreign direct investment, employment rate is largely determined by GDPC.

**Variance decomposition**

This method of analysis gives information about the relative importance of each random innovation or shock to the variable in the Vector Autoregressive Scheme (VAR). It shows the magnitude of the variation in the macro-variables due to the policy variables. The variance decomposition also known as forecast error variance decomposition gives better explanation on the relationship existing between the major variables in the study. The result of the variance decomposition of Gini, poverty rate and employment rate is shown below.

Table 4; Variance Decomposition of Gini

Variance Decomposition of GINI:

Period	S.E.	GINI	FDI	PVT	EMP	GDPC
1	721.3126	100.0000	0.000000	0.000000	0.000000	0.000000
2	746.0664	93.48406	1.616097	0.287060	4.610306	0.002471
3	762.8797	89.77604	1.648450	0.293159	8.147705	0.134651
4	763.3207	89.67237	1.646770	0.373185	8.143201	0.164479
5						
6						
7						
8						
9						
10						

The table above revealed that the magnitude of the shocks to Gini coefficient is being explained by 100% shock to itself in the first period after which it started declining in the periods that follows. The shocks from Gini are obtained as a result of employment rate through the 8% shocks it produces over the periods. But the greater sources of shocks to income distribution are a feed-back shock from its own lag. The impact was 88% percent and remains constant through the 10 periods. This observation suggests that income inequality has sustaining shock overtime.

**Discussion of findings**

The study carried out on the impact of foreign direct investment on employment generation in Nigeria using the Vector Autoregressive (VAR) technique and Augmented Dickey Fuller test for unit root which revealed some findings as regards the structures and impact of foreign direct investment on income distribution in response to shocks in the policy variables. The unit root test was conducted with the assumption of constant and trend in the series. This is so because each of the variables shows a relationship with line that is trended. The result therefore indicates that not all variables are non-stationary at all levels. This is so, as their ADF statistics are all less negative than the critical values at the 5% level of significance. However, the economic implication of non-stationary series is that of a prolonged or sustained shock if there is any disturbance to the variable. This foreign direct investment, employment rate and poverty all exhibited a prolonged shock. These findings also indicate that both variables

do not co-integrate at the same order which further amount to the use of VAR.

The result of the Vector Autoregressive (VAR) analysis revealed that in the model, Gini was less endogenous than foreign direct investment, employment rate and GDPC. The coefficient of the multiple determinations (R2) of Gini was low; 40%. It was further revealed that while foreign direct investment has low impact on Gini, others GDPC and employment rate exhibit a greater impact on Gini. The low impact of foreign direct investment on Gini in this study's findings goes in line with the findings of Tsai(1995) that foreign direct investment gives rise to unequal income distribution in host Less Developed Countries(LDC's). Sumei and Saroja (2005) also find out that foreign investment also increases income inequality in both rural and urban regions. Studies have find out since FDI is skilled biased and wage biased, the general impact on income distribution will definitely be low. Mohammad and Naveed (2008) specifically added that FDI worsen income distribution. This is also in line with the findings of this study, other obvious causes may include the fact that FDI is sector and urban biased.

**Conclusion**

Foreign investors can and do have a major role to play in the country's economic development, they should be encouraged and facilitated, to all the sectors of the economy through a well-developed capital market, qualified human resources, a well developed and maintained infrastructure (especially electricity), political stability and sound macroeconomic policies because all

these are important to foreign investors, so much more, they are important to domestic investors because all these determine risk and profitability of investment.

The result of the empirical findings from this study is that while foreign direct investment is good for economic growth and development of any country. And if foreign direct investment is really encourage into some neglected sectors like agricultural sectors, sports sectors, tourism. Since the greater percentage of the population in the country are still involved in rural/subsistence agriculture and a large pool of unemployed youth abound in the country. Foreign direct investment should be converted towards agric-based industrial sector. Macroeconomic stability should be achieved through a well focused synchronization of fiscal and monetary policies. Improvement in the quality of local factors of production for higher productivity, thus Nigeria must improve the efficiency of its labour force through more investment in human capital. Government should pay attention to the basic problem of foreign direct investment, i.e. Sector biased, skilled biased and location biased so as to distribute the impact of it on all sectors, workers and everywhere in the country.

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