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Impact Foreign Direct Investment on Economic Growth: Empirical Evidence from Nigeria, From 1981 - 2017

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Abstract

This paper is an attempt to investigate the impact of foreign direct investment on economic growth in Nigeria from 1981 to 2017. The study adopted the ordinary least square method of data analysis (OLS) to analyse a time series data using the e-view 9.0. The study reveals that foreign direct investment has positive impact on the growth of the Nigerian economy. The stationary test result showed that the variable of the model are stationary at the first difference 1(1). The granger causality test indicated that long-run causal relationship exists between FDI and economic growth. A unidirectional causality between FDI and economic growth was also observed. The study concludes that FDI has contributed significantly to the growth of the Nigerian economy. The study therefore recommends that for the economy to sustain the growth level achieved, government should intensify the drive to encourage foreign investors to bring in the needed capital for investment development and thereby increasing the level economic growth in Nigeria.

Keywords: GDP, GDPg, FDI, INF, EDS, MVA and IVA

Introduction

Foreign direct investment (FDI) is a direct investment into production of business in a country by an individual or company of another country, either by buying a company in the target country or by expanding operations of an existing business in that country. Foreign direct investment is in contrast to portfolio investment which is a passive investment in the securities of another

country such as stocks and bond (shares). World Bank (1996) conceptualized Foreign Direct Investment (FDI) as investment that is made to acquire a lasting management interest (usually 10% of voting stock) in an enterprise and operating in a country other than that of the investors (define according to residency) the investors purpose being an effective voice in the management of earning either long term capital or short term capital as shown in the nations balance of payments account statement (Macaulay, 2012). Broadly, foreign direct investment includes mergers and acquisitions, building, new facilities, reinvesting profits earned from overseas operations and intra company loans. In a narrow sense, foreign direct investment refers to building new facilities. Todaro, (1977), believed that FDI encourages the inflow of technology and skills and fills the gap between domestically available supplies of savings, foreign exchange and government revenue. It also encourages the inflow of technology and skills. Onu, (2012) asserted that the contributions of (FDI) tremendously assisted the economic growth of these countries by providing the local economy with a source of foreign skill, technology, management expertise and human resource development through international training and collaboration.

Both policy makers and academia have argued that foreign direct investment (FDI) can have robust positive effects on a host nation's development. In addition to the direct capital financing it supplies, FDI can be a source of valuable technology and know-how and enhances linkages with local firms, which can help to boost growth in an economy. Based on these arguments, industrialized and developing economics have offered incentives to encourage foreign direct investments in their countries (Melnyk, Kubatko and Pysarenko, 2014). Foreign Development investors are mostly persuaded by transition government of developing countries in the hope that through this international activity, the positive experience from developed countries will come to their domestic economies (Silvio, and Ariel 2009). Thus, as foreign direct investment flow increases in an economy, the export volume of that economy increases (Pulatova, 2016).

For a developing country like Nigeria, foreign direct investment is considered as a way of transferring technology and capital from other developed and even developing countries to the domestic economy. According to Tu, Ning Tu, Younghong and Tan (2011) FDI is considered to be one of the major channels of technological transfer. Melnyk, Kubatko and Pysarenko (2014) believe that when foreign direct investment comes to a domestic country (in specific business), that firm receives a competitive advantage due to the usage of new knowledge, experience, ways of production and management. In addition, the current successful economic growth of developing countries is explained by "catch up effect" in technological development with developed countries. Lahiri and Onu (1998) observes that higher efficiency of foreign firms may help lower prices and hence increase consumers' surplus. Furthermore, FDI raises employment by either creating new jobs directly or using local inputs, thus, creating more jobs indirectly. According to Koojaroenprasis (2012), FDI is an important factor which contributes to economic growth through technology transfer. Capital accumulation and augmentation of human capital through education, trainings and new managements are also prescribed by FDI inflows (Buckley, Clegg, Wang and Cross, 2002).

Muntah, Khan, Haider and Ahmed (2015) opined that foreign direct investment contributes significantly in the human resource development, capital formation and organization and managerial skills of the people in an economy. Eller, Haiss and Steiner (2006) suggest the level and quality of foreign investment influences the financial sectors' contribution to growth in emerging markets. The advantage for investors is that investing in developing countries may bring higher gain and profits. Also more productive foreign firms stimulate industry competition, which is often useful for domestic firms. Thus as suggested by Blomstrom and Kokko (1998), domestic firms with foreign investment have high-quality output, driving up

production standards in other competitive domestic firms. The presence of foreign firms in the economy with their superior endowments of technology and management skills will expose local firms to fierce competition (Chen, Chang and Zhang, 1995). Local firms may also be under pressure to improve their performance and to invest in research and development. Thus FDI enhances the marginal productivity of the capital stock in the host economies and thereby promotes growth (Wang and Blomstrom, 1992).

However, Schoors, Roen, Van derTol and Bartoldus (2002) suggest that FDI can have a negative impact on domestic economies. This could happen through repatriation of profit and market stealing effect. Also, Stanistic (2008) did not find any positive correlative between FDI inflows and economic growth. Gorg and Greenwood (2002) conclude that the effect of spillovers from foreign-owned to domestically owned firms are mostly negative.

According to Lali, (2012), privatization was adopted, among other measures, to encourage foreign investments in Nigeria. This involved transfer of state-owned enterprises (manufacturing, agriculture production, public utility services such as telecommunication, transportation, electricity and water supply), companies that are completely or partly owned by or managed by private individuals or companies. Shiro (2009) noted that since the enthronement of democracy in 1999, the government of Nigeria has taken a number of measures necessary to woo foreign investors into Nigeria. These measures, he noted, include the repeal of laws that are inimical to foreign investment growth, promulgation of investment laws, various oversea trips for image laundry by the President among others.

Thus, the main objective of this paper is to assess the impact of FDI on economic growth in Nigeria within the period 1981 to 2017. This paper is structured into the followings: Introduction, literature review, methodology, data analysis and interpretation, conclusion and recommendation.

Literature Review

A substantial literature rationalizes the influence of foreign direct investment on the economic growth of a developing country like Nigeria. The FDI impacts the recipient's economy by its influence on domestic physical capital accumulation, some through its effects on human capital accumulation and through augmenting technological advancement particularly by spillovers. The existing literature highlights the effects of foreign direct investment on the economic growth of a developing country particularly Nigeria. The current literature also sheds light on the channels through which FDI contributes significantly to a country's economic growth.

Conceptual Issues

Foreign direct investment (FDI) is defined as "an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI) enterprise or affiliate enterprise or foreign affiliate". While economic growth is defined as an increase in the capital of an economy to produce goods and services, compared from one period of time to another.

There is a widespread belief among international institutions, academic, policy makers and researchers that foreign direct investment (FDI) has a huge positive impact on the economic growth of the developing countries. By now it is well recognized that FDI can significantly benefit the economy of the host country and this may be the reason that government of many countries find means and ways of attracting FDI into their own countries. In addition to the direct

capital financing, FDI can benefit the host country through technology spillovers, human capital formation, creating competitive business environment, enterprise development and integration of international trade. Therefore, many emerging economies have liberalized their FDI regime and formulate FDI favourable policies.

Broadly, foreign direct investment includes mergers and acquisitions, building new facilities, reinvestment profits earned from overseas operations and intra company loans. In a narrow sense, foreign direct investment refers just to building new facilities. Todaro, (1977) believed that FDI encourages the inflow of technology and skills and fills the gap between domestically available supplies of savings, foreign exchange and government revenue. It also encourages the inflow of technology and skill. Onu, (2012) asserted that the contributions of foreign investment to Japan after the World War II and in South Korea after the Korean War has tremendously assisted the economic growth of these countries by providing the local economy with a source of foreign skill, technology, management expertise and human resource development through international training and collaboration.

Macaulay, (2012) asserted that Nigeria's foreign investment can be traced back to the colonial era, when the colonial masters had the intention of exploiting our resources for the development of their economy. Then, investment in Nigeria was high, but thereafter, Nigeria's foreign investment has not been stable. The Nigerian governments have recognized the importance of FDI in enhancing economic growth and development and various strategies involving incentives, policies and regulatory measure have been put in place to promote the inflow of FDI to the country.

Oseghale and Amonkhienan (1987) found that FDI is positively associated with GDP, concluding that greater inflow of FDI will spell a better economic performance for the country. Ayanwale and Bamire (2001) assessed the influence of FDI on firms' level productivity in Nigeria and report a positive spillover of foreign firms on domestic firms' productivity. In addition to the direct capital financing it supplies, FDI can be a source of valuable technology and know-how while fostering linkages with local firms, which can help jumpstart an economy (Metnyk, Kubatko and Pysarenko, 2014).

However, the special merits of FDI and particularly the kinds of incentives offered to foreign firms in practice have begun to be questioned (Alfaro, 2003). Fueling this debate is that empirical evidence for FDI generating positive spillovers for host countries is ambiguous at both the micro and macro levels. In support of this fact, Hanson (2001) argues that evidence that FDI generates positive spillovers for host countries is weak. Although the theoretical work on FDI points to advantages, conceivably, spillovers could nevertheless be small. On the other hand it could be that we are looking in the wrong places (Alfaro, 2003). Akinlo (2004) found that foreign capital has a small and not statistically significant effect on economic growth in Nigeria.

Theoretical Review

This research work is anchored on endogenous growth theory credited to Romer (1986). Helpman (2004) argues that endogenous growth theory emphasized two critical channels for investment to affect economic growth: firstly, through the impact on the range of available products, and secondly, through the impact on the stock of knowledge accessible for research and development. Economic models of endogenous growth have been applied to examine the effect of FDI on economic growth through the diffusion of technology (Khaliq and Noy, 2007; Barro, 1990; Barrel and Pain, 1997). FDI can also promote economic growth through creation of dynamic comparative advantages that lead to technological progress (Khaliq et al, 2007; Borensztein, Gregorio and Lee, 1998). Romer (1990) and Grossman and Helpman (1991) have

worked on Romer's (1986) model and assume that endogenous technological progress is the main engine of economic growth. Romer (1991) emphasizes that an increase in competition and innovation will result in technological progress and increase in productivity and, thus, promotes economic growth in long run.

In contrast to all these positive conclusions, Reis (2001) formulated a model that investigates the effects of Foreign Direct Investment on economic growth when investment returns may be repatriated. She states that after the opening up to FDI, domestic firms were replaced by foreign firm in the Research and Development sector. This may decrease domestic welfare due to the transfer of capital returns to foreign firms. Furthermore, Firebaugh (1992) lists several additional reasons why FDI inflows may be less profitable than domestic investment and may even be detrimental. According to the study, the country may gain less from FDI inflows than domestic investment, because multinationals are less likely to contribute to government revenue; FDI is less likely to encourage local entrepreneurship; multinationals are less likely to reinvest profits; are less likely to develop linkages with domestic firms; and are most likely to use inappropriate capital-intensive techniques. FDI may be detrimental if it crowds out domestic business and stimulates inappropriate consumption pattern.

Foreign direct investment represents a veritable source of foreign exchange and technological transfer, especially to a developing economy like Nigeria. It can be analyzed in terms of inflow of new equity capital (change in foreign share capital), re-invested earning (unremitted profit), trade and suppliers' credit, net inflow of borrowing and other obligations from the parent company or its affiliates (Nwankwo et al, 2003). Olopoenia (1985) observed that foreign investment could be seen as an additional factor of production and as a supplement to the national savings effort of the capital importing country. This is meant to relax both the foreign exchange and savings constraint on the rate of growth of output in the recipient country. Agada and Okpe (2012) saw FDI as an attempt by individuals, groups, companies and government of a nation to move resources of productive purpose across its country to another country with the anticipation of earning some surplus.

Kida (2014) examined the models of economic growth and the dynamic interaction between models from the Solow Model to New Endogenous Models and the results indicated that FDI affect the economic growth in many developing countries, but there were also many cases as developed countries that showed that economic growth led to a long term increase of FDI flow.

Albu (2013) estimated a model to simulate the impact of FDI on GDP growth in the EU. The then authors' conclusions is that in order to recover economic growth a growth in FDI is needed, taking into account its major impact on the efficiency of foreign trade and its contribution to the general economic growth.

The involvement of a foreign trader in the domestic market structures contributed to the economic growth of host countries and indirectly to external equilibrium through development of infrastructure, diversification of domestic consumption by offering a wide variety of products and increasing employment in certain professional groups. These benefits appear and become sustainable according to the dynamic of attracting these investment through the facilities offered by host countries (Juverdeanu, 2013).

An important channel through which FDI enhances economic growth is represented by the financial markets; they must be developed enough in order not to restrict their externalities. The analyses carried out by Alfaro et al. (2010), Chee (2010), Abzari, Zarei and Esfahani (2011), showed that financial market liberalization, under the significant influence of globalization and

economic integration in the world wide economy, has stimulated the international mobility of the foreign capital flows, increasing their flexibility and their effects on the beneficiary country, reflected in a higher rate of economic growth.

The economic and financial implications of FDI on economic growth during the last wave of globalization, are strongly correlated with the internal market features measured through various variables like: work force, technological development degree, know how, exports, exchange rate. The results also depends on the type of the investment implemented, stimulating the development of competitive advantages based on specialized production factors (Anghel, 2002).

Empirical Review

Adeleke, Olowe and Fasesin (2016), analyzed the impact of foreign direct investment on Nigeria economic growth over the period of 1999-2013. The main type of data used in their study is secondary; sourced from various publications of Central Bank of Nigeria, such as; Statistical Bulletin, Annual Reports and Statement of Accounts. The regression analysis of the ordinary least square (OLS) is the estimation technique that was employed in their study to determine the relationship between and impact of the Direct Foreign Investment on economic growth. Their findings revealed that FDI is statistically significant at 5% level which implies that a good performance of the economy is a positive signal for inflow of foreign direct investment. They concluded that foreign direct investment is an engine of economic growth.

Solomon and Eka (2013) investigated the empirical relationship between foreign Direct Investment and economic growth in Nigeria. The work covered a period of 1981-2009 using an annual data from Central Bank of Nigeria statistic bulletin. A growth model via the Ordinary Least Square method was used to ascertain the relationship between FDI and economic growth in Nigeria. The result of the OLS techniques indicated that FDI has a positive but has insignificant impact on Nigeria economic growth for the period under study. Alejandro (2010) explained that FDI plays an extra ordinary and growing role in global business and economics. 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 or the foreign firms with investment, it can provide a source of new technologies, capital processes products, organization technologies and management skills, and other positive externalities and spillover that can provide a strong impetus to regional economic growth.

Nwankwo et al, (2013) investigated the impact of globalization on foreign direct investment in Nigeria since the world has become a global village. The methodology used is purely descriptive and narrative and the data used is secondary. It was found out that foreign direct investment (FDI) has been of increased benefit to Nigeria in the area of employment, transfer of technology, encouragement of local enterprises etc. But there are certain impediments to the full realization of the benefits of foreign direct investment. Adelegan (2000) also explored the seemingly unrelated regression model to examine the impact of FDI on economic growth in Nigeria and found out that FDI is pro-consumption and pro-import and negatively related to gross domestic investment. In the same line, Ogiogio (1995) reported negative contributions of foreign investment to GDP growth in Nigeria for reasons of distortions.

Uwabanmwun and Ogiemudia (2016) examined the effect of foreign direct investment on economic growth in Nigeria using annual time series data covering the period 1979 to 2013. The data were analyzed using Error Correction Model. The results reveal that FDI has both immediate and time lag effect on Nigeria economy in the short run but has a non-significant negative effect on the Nigeria economy in the long run.

Pulstova (2016) studied the effects of foreign direct investment and firm export on economic growth in Uzbekistan. The study covered the period 1990-2014 and descriptive method was adopted. He found that an increase in FDI may cause firms to increase their exports of products.

Muntah, Khan, Haider and Ahmad (2015) studied the impact of foreign direct investment on economic growth of Pakistan covering the period of 1995 to 2011. The data were sourced from World Bank, Economic of Pakistan Books, Index Monde and Economic Survey of Pakistan. Regression analysis was used in the study. They found that FDI impacts positively on economic growth of Pakistan.

Agrawal (2015) assessed the relationship between foreign direct investment and economic growth in the five BRICS economies, namely, Brazil, Russia, India, China and South Africa over the period 1980-2012. Co-integration and Causality analysis were applied. The result indicate that foreign direct investment and economic growth are co-integrated at the panel level, indicating the presence of long run equilibrium relationship between them. Results from causality tests indicate that there is long run causality running from foreign direct investment to economic growth in these economies.

Melnyk, Kubatko and Pysarenko (2014) examined the impact of foreign direct investment on economic growth in post-communism transition economies. The study used neoclassical growth theory to analyze the effect of FDI on economic growth. They found a significant FDI influence on economic growth of host countries. They concluded that in addition to the direct capital financing it supplies, FDI can be a source of valuable technology and know-how while fostering linkages with local firms, which can help to jumpstart an economy. Based on these argument, industrialized and developing countries have offered incentives to encourage foreign direct investments in their economies. The study recommended that transition and developing economies should pay more attention to the business climate and positive institutional changes.

Otto and Ukpere (2014) assessed foreign direct investments and economic development and growth in Nigeria over a 41 year period. They observed that there is a positive relationship between foreign direct investments and economic growth in Nigeria. They suggested that policies are required which will facilitate foreign direct investments into Nigeria economy.

Roman and Padureanu (2012) found that FDI and capital endowments are positively correlated with GDP in Romania, but what was not expected was the fact that the human capital was negatively correlated with GDP evolution. As the authors stated, the last fact is explained by the reduction of Romanian population in 1995-2004.

Pelinescu and Dulescu (2009) found that direct FDI influence is still at a low level, but the indirect influence, through the increase in productivity and competitiveness is more evidenced in Romania.

Jyun-Yi and Hsu (2008) analysed the effect of FDI on economic growth for 62 countries over the period 1975-2000. It was found that FDI did not accelerate growth in all sampled countries. The authors used the LS approach for panel data estimations. Moreover, using the GMM method (controlling for endogeneity and no spherical errors), it was found that FDI did not have any positive effect on growth. The results of the threshold regression controlled for the amount of GDP, initial human capital, some social and institutional parameters do represent positive influence of FDI on economic growth. It was stated that recipient countries can learn and as a result benefit from foreign investors.

Stanisic (2008) did not find any positive correlation between FDI inflows and economic growth rate in Eastern European transition countries. However, he gave an assumption that is particular region is in the middle of the transitional process and FDI influence is not definite.

Ayanwale (2007) examined FDI and economic growth in Nigeria using secondary data sourced from the Central Bank of Nigeria, International Monetary Fund and Federal Office of Statistics. The period of analysis was 1970-2002. An augmented growth model was estimated via the ordinary least squares and the 2SLS method to ascertain the relationship between the FDI, its components and economic growth. Results suggest that the determinants of FDI in Nigeria are market size, infrastructure development and stable macroeconomic policy. Openness to trade and available human capital, however, are not FDI inducing. He observed that FDI in Nigeria contributes positively to economic growth. He stressed that although the overall effect of FDI on economic growth may not be significant, the components of FDI do have a positive impact. He added that FDI in the communication sector has the highest potential to grow the economy and is in multiples of that of the oil sector. The manufacturing sector FDI negatively affects the economy, reflecting the poor business environment in the country. According to him, the level of available human capital is low and there is need for more emphasis on training to enhance its potential to contribute to economic growth.

Khaliq and Noy (2007) studied the impact of foreign direct investment on economic growth using detailed sectoral data for FDI inflow to Indonesia over the period 1997-2006. The sectors examined are: farm food crops, livestock product, forestry, fishery, mining and quarrying, non-oil and gas industry, electricity, gas and water, construction, retail and wholesale trade, hotels and restaurants, transport and communications, and other private and services sectors. According to their findings, in the aggregate level, FDI is observed to have a positive effect on economic growth. However, when accounting for the different average growth performance across sectors, the beneficial impact of FDI is no longer apparent. When examining different impacts across sectors, estimation results show that the composition of FDI matters for its effect on economic growth with very few sectors shows positive impact of FDI and one sector even showing a robust negative impact of FDI inflows (mining and quarrying).

Alfaro, Chanda, Kalemli-Ozcan and Sayek (2006) examined how foreign direct investments promote economic growth: Exploring the effects of financial markets on linkages. They found that a holding the extent of foreign presence constant, financially well-developed economies experiences growth rates that are almost twice those of economies with poor financial markets, increases in the share of FDI or the relative productivity of the foreign firm lead to higher additional growth in financially developed economies compared to those observed in financially under-developed ones, and other local conditions such as market structure and human capital are also important for the effect of FDI on economic growth.

Titarenko (2006) supports the idea of crowding out effect of domestic investments by FDI in Latvia. Also the analysis shows that positive influence of FDI is not greater than Latvian investment. The influence of FDI on the economy depends on which sector (manufacturing, agriculture etc.) FDI flows are directed.

Alfaro (2003) examined the effect of foreign direct investment on growth in the primary, manufacturing and service sectors. An empirical analysis using cross-country data for the period 1981-1999 suggests that total FDI has an ambiguous effect on growth. He found that foreign direct investments in the primary sector, however, tend to have a negative effect on growth,

while investment in manufacturing has a positive effect. According to the researcher, evidence from the service sector is ambiguous.

Aitken and Harrison (1999) in their study also found a negative influence of FDI on productivity of domestic firms in manufacturing industry in Venezuela. According to the study, evidence from the foreign investments in service sector is ambiguous. According and mining sectors do have little spillover potential for economic and as a result FDI inflows are of little efficiency.

Methodology

This section describes the analytical methods that were used to access the impact of FDI on economic growth in Nigeria. We adopted the simple ordinary least square (OLS) method of data analysis to regress FDI on GDP using annual time’s series data. The granger causal test were used to ascertain the causal relationship between FDI and economic growth in Nigeria. The unit root tests were also conducted using the Augmented Dickey-Fuller techniques. We use annual data from IMF International Financial Statistics tables, published by International Monetary Fund and central bank of Nigeria statistical bulletin

Model Specification and Estimation.

$$GDP_i = \alpha + \beta_1 FDI + \beta_2 INF + \beta_3 EDS + \beta_4 IVA + \beta_5 MVA + \beta_6 TRA + \varepsilon \dots\dots\dots 1$$

Where:

Dependent variable is = GDP while the Explanatory variables are: INF= Inflation, (Consumer Price indexes); EDS = External debts services; MVA= Manufacturing Value Added or (manufacturing output) or MVA; IVA= Industry, Value Added; TRA= Trade; *i* = Time period and β = Coefficients of the Independent variables.

A priori Expectation

This study expects that FDI inflows should have a positive effect on Gross Domestic Product. If there is an increase in FDI inflow, it will lead to and enhance increase in the economic growth in Nigeria. In contrast, if the FDI is negative correlation to economic growth, it will not help in GDP growth in a Nigeria.

Presentation of Results and Interpretation

Stationary Test

Table 4.1: Unit Root Test

Variables	ADF Statistic	5% Value	Order
RGDP	-4.049829	-2.945842	(1)1
FDI	-6.894270	-2.948442	(1)1
INF	-4.362558	-2.945842	(0)1
EDS	-3.804178	-2.948404	(1)1
MVA	-4.397621	-2.960411	(0)1
TRA	-5.734051	-2.951125	(1)1
IVA	-5.767402	-2.948404	(1)1

Source: Author's E-views 7.0 Computation (2018)

Note: * denote significant 5% level. From the result presented in table 1 bellow, the stationary test result showed that all the variables of the model are stationary and integrated at level 1(0) and first difference 1(1). This indicate that all the variables are significant at the 5percent level.

Table 4.2: Ordinary Least Square Results.

Variable	Coefficient	Std. Error	t-Statistics	Prob.
EDS	-1.06E-06	7.03E-07	-1.500720	0.1439
FDI	9.21E-06	6.64E-06	1.388713	0.1751
INF	0.005074	0.004307	1.178015	0.2481
IVA	6.72E-09	3.74E-09	1.795855	0.0826
MVA	6.29E-09	2.57E-07	0.024464	0.9806
TRA	-4.97E-07	2.07E-07	-2.395674	0.0230
C	2.969130	0.546266	5.435322	0.0000
R-Squared	0.26			
Adjusted R ²	0.11			
F-statistics	1.728			
DW	1.8			

Source: Author's E-views 7.0 Computation (2018)

From the result of the table 2 above positive relationships exist between FDI and economic growth (GDPg). A unit increase in FDI will on the average bring about 9.21 unit changes in economic growth while holding other explanatory variable constant. The estimated parameter of FDI is not statistically significant as the t-statistic value (1.38) is less than t-critical value (1.67) at the 5 percent significant level. This implies that FDI contribute less significantly to the variations in the growth of the Nigerian economy.

Also, a direct relationship exist between industrial values added (IVA) and economic growth (GDPg). A unit increase in IVA will bring about 6.72 unit increases in GDPg while holding other explanatory variables constant. The estimated parameter of industrial value added (IVA) is statistically significant as the t-statistic value (1.79855) is greater than the t-critical value (1.67) at the 5 percent significant level. This implies that industrial value added (IVA) significantly influence changes in economic growth in Nigeria.

On the contrary, a negative relationship exist between external debt service (EDS) and economic growth (GDPg). A unit increase in external debt service (EDS) will bring about -1.06 unit decrease in economic growth (GDPg) while holding other explanatory variables constant. The estimated parameter of EDS is not statistically significant as the t- statistic value (-1.500720) is less than t-critical value (1.67) at 5 percent significant level in absolute term. By implication, IVA does not contribute significantly to the changes in economic growth in Nigeria.

The estimated model is found to have a poor goodness of fit as R-square is 0.256880 which is low. This implies that 25.68 percent of the total variation in the dependent variable is explained by the explanatory variables. The R-square is statistically not significant as the F-statistic value (1.728) of the estimated model than the F-critical value (2.53) at the 5 percent significant level in absolute term, thus the estimated model is not fit for prediction and forecasting.

Table 4.3: Granger Causality Test Result

Null Hypothesis:	Obs	F-Statistic	Prob.
TRA does not Granger Cause GDPG	35	5.46881	0.0094
TRA does not Granger Cause EDS	35	4.72289	0.0165
EDS does not Granger Cause TRA	35	5.83714	0.0072
FDI does not Granger Cause IVA	35	10.9758	0.0003
FDI does not Granger Cause TRA	35	3.63499	0.0386
TRA does not Granger Cause MVA	35	5.95275	0.0066
MVA does not Granger Cause TRA	35	0.23417	0.7927

Source: Author's E-views 7.0 Computation (2018)

Table 4.3 above shows Pairwise Granger Causality tests. From the results, all the listed pair of variables have causal relationships among them. That is, there is a causal relationship among the variables given the probability values of the variables at 5 percent level of significance. Therefore, the null hypotheses which stated that there are no causal relationships among variables are rejected. In summary, the result suggest that there exist a long run causal relationship between foreign direct investment (FDI) and economic growth (GDPg). However, there is evidence of a uni-directional causal relationship between FDI and economic growth.

Major Findings.

The paper attempted an investigation of the impact of foreign direct investment (FDI) on economic growth in Nigeria. The result revealed that there is positive relationship between FDI and economic growth which imply that FDI have positive impact on economic growth in Nigeria during the period under review. Secondly, the study revealed a long run causal relationship between foreign direct investment (FDI) and economic growth during the period. The study also observes a negative relationship between external debt service (EDS) and economic growth during the period.

Conclusion and Recommendations

The paper has examined the impact of foreign direct investment (FDI) on economic growth in Nigeria during the period 1981 to 2017. The results of the study are in tandem with similar results in other countries. The study has observed the foreign direct investment (FDI) both directly and indirectly impacted positively on economic growth in Nigeria. The study also observes a long run causal relationship between foreign direct investment (FDI) and economic growth (GDPg) in Nigeria. And there exists a uni-directional causal relationship between foreign direct investment (FDI) and economic growth (GDPg) as observed by the study. Based on the findings of this study, the following recommendations were given:

- i. The study strongly recommends that the drive economic growth in Nigeria, the government must find ways and means to woo foreign investors
- ii. The government should improve the state of infrastructures in the country. This will encourage meaningful investments in the economy.
- iii. The Central Bank of Nigeria should come-up with policies that will help to stabilize the Naira exchange rate vis-à-vis the major currencies of the world, like the United States Dollar. This will boost the investors' confidence in the economy.

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