



## Effect of Foreign Direct Investment on Nigerian Economy

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### Abstract

Foreign direct investment has always been acknowledged as one of the sources of economic growth of a country as it has been noted to have a positive and significant relationship with economic growth. However, the FDI inflow and the economic growth of Nigeria seem to be operating inversely in the current decade. This study examines the impact of foreign direct investment in the economic growth of Nigeria between 2007 and 2017 as it is believed that the impact of FDI is location and period-specific. Regression analysis was carried out using time series secondary data. The model specification for the regression analysis was derived from the Solow growth model. The results of the analysis revealed all independent variables having a positive relationship with economic growth for the scope of the study but with only FDI being statistically insignificant to the economic growth of the country during the period. The R<sup>2</sup> of the model was 0.96 implying that 96% of the variations in economic growth can be explained by the model. The study, therefore, recommends that to make sure foreign direct investment trickle down Nigeria's economy; the flow of FDI into the economy has to be monitored and influenced to direct it into sectors that need massive investment in the country such as the Agricultural sector which has been noted over the years for its failure or inability to attract foreign direct investment and whereas the sector is the first point of contact if Nigeria is to enjoy sustained economic growth.

**Keywords:** Economic growth; Economy

### Introduction

Over the years, Nigeria like every other developing country has shown great interest in foreign direct investment (FDI) in its path towards economic growth and development. This is well highlighted by the investment code that created the Nigerian Investment Promotion Commission in 1995 [1] and there are various ways the government has tried to make the economy suitable for investors to thrive in as the years roll by. Apart from the government, people interested in the welfare of the economy have also shown interest in the impact foreign direct investment has on the Nigerian economy.

Nigeria like most African countries are still developing and some belief in the impact of foreign direct investment on their path to

economic growth and development but unfortunately, the efforts of most of these countries to attract foreign direct investment have been futile [2]. Due to its market size and resource endowment, Nigeria has been one of the most favoured countries for investors. Thus, the country accounts for a large proportion of foreign direct investment inflow in Africa. However, the level of foreign direct investment attracted by Nigeria is mediocre and even decreasing (Trading Economics, 2015). This could be due to the economic environment of the country or some certain policies which may not be supportive of foreign direct investment inflow.

As change is constant, the economy is not as it has always been; this is even highlighted by the economic recession the country experienced just recently. From statistics available, foreign direct investment inflow during the period of the recession increased heavily but dropped to about 30% at the outset of recovery in the 2nd quarter of 2017 (Trading Economics). This suggests a negative relationship between FDI and economic growth and not the positive relationship often associated with this relationship. Also, in the first quarter of 2018, statistics show that the FDI inflow increased but the GDP growth rate of the country decreased.

Generally, comparing these variables over the past ten years, available statistics show that in periods where the economy was receding, the inflow of FDI was increasing while in periods or quarters where FDI inflow was decreasing, the real GDP growth rate was increasing. There is a need for a new and more accurate analysis on the impact of foreign direct investment on the economic growth of Nigeria. The country is changing and there are new policy plans in motion as each new government proposes strives to move the country towards development thus causing the economic environment and the macroeconomic features of the economy to change as well. Therefore, there is a need for further examination of the relationship between foreign direct investment and growth in the country.

### Literature Review

The study reviewed some key growth theories as it relates to foreign direct investment.

According to the standard neoclassical theories, economic growth and development are based on the utilization of land, labour and capital in production. Since developing countries in general, have underutilized land and labour and exhibit a low savings rate, the marginal productivity of capital is likely to be greater in these countries. Thus, the neo-liberal theories of development assume that interdependence between the developed and the developing countries can benefit the latter. This is because capital will flow from rich to poor areas where the returns on capital investments will be highest, helping to bring about a transformation of 'backward' economies. Furthermore, the standard neoclassical theory predicts that poorer countries grow faster on average than richer countries because of diminishing returns on capital. Poor countries are expected to converge with the rich over time because of their higher capacity for absorbing capital [3].

The main channels through which foreign direct investment affects economic growth have been highlighted by the new growth

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theorists and they have developed a simple endogenous growth model which demonstrates the importance of foreign direct investment in engendering growth through technological diffusion. Typically, technological diffusion via knowledge transfer and adoption of best practice across borders is arguably a key ingredient in rapid economic growth. And this can take different forms. Imported capital goods may embody improved technology. Technology licensing may allow countries to acquire innovations and expatriates may transmit knowledge. Yet, it can be argued that foreign direct investment has the greatest potential as an effective means of transferring technical skills because it tends to package and integrate elements from all of the above mechanisms. These also can boost the host country's economy via capital accumulation, the introduction of new goods and foreign technology (according to the exogenous-growth theory view), and also by enhancing the stock of knowledge in the host country by way of the transfer of skills according to the endogenous growth theory

Several works have been done on the relationship between foreign direct investment and economic growth and the analysis that has been carried out have been for different periods i.e. different data. And as earlier said the relationship is location and period-specific thereby resulting in the conclusion of the several analyses to vary. As theory predicts or illustrates (a positive relationship between foreign direct investment and economic growth), it is of no surprise that most of the analysis illustrate also a positive relationship between economic growth and foreign direct investment in Nigeria. While the likes of [4-7] all concluded that foreign direct investment was positive and significantly contributed to the economic growth of Nigeria for the period of their analysis. Others like [8-9] concluded that in the period of their analysis, although foreign direct investment exhibited a positive relationship with economic growth, its impact was insignificant.

Another group of results to take note of are those of [10,11] where they concluded that for the period of their analysis, the relationship between foreign direct investment and economic growth was negative i.e. an increase in foreign direct investment for that period, not only did it not lead to an increase in economic growth, there was instead a reduction in the GDP growth rate. With these conclusions, we see a contrary conclusion to what theory predicts and also the need for a review of the impact of foreign direct investment in the country as we can see that it is not always positive in every period or even significant to the growth of the economy

### Sectoral Distribution of Nigeria's GDP

Table 1 above shows the sectoral distribution of Nigeria's GDP in recent year. From the table, we can see the steady decline in the contribution of some sectors to the economy of the country as the year passes and also the steady increase in the contribution of some other sectors as the economy as tried to diversify and stop its reliance on just one sector. From the changes in the contribution of the different sectors in the country's GDP, we can see how total output is affected and how each sector affects economic growth [12-16].

In 2004 the oil sector was responsible for about 26.4% of the country's GDP on its own, but in recent years now, as seen in 2017, the oil sector alone (crude petrol and gas sub-sector) accounted for just 8.67% of the country's GDP. It is apparent which sectors are now the major contributors and which sectors are declining. The data shows that within 2013 and 2017, there has been an increase of 9.84% in the service sector's contribution, 9.84% increase in the trade sector,

12.04% increase in the building and manufacturing sector, 16.47% increase in the agricultural sector but a 5.38% decline in the industrial sector and this is mainly due to the 16.43% decline in the production from the oil sector

The Table 1 shows the decline in the value of the total GDP in year 2016 where the economy was in recession and output was in decline. Although some other sectors also reduced in total output during that period, the table shows the large decline in the output of the industrial sector, or to be more precise, the oil sector and this shows how changes in the oil market affects the economy or used to affect the Nigerian Economy. But due to the emergence of the service sector and the resurgence of the agricultural sector, coupled with a steady increase in the trade sector and other sectors, the country has been able to push output and leave recession and hopefully continue on the right path towards economic development through diversification [17-22].

	Sectors	2013	2014	2015	2016	2017
1	Agriculture	23.33	22.9	23.11	24.45	25.08
	Crop	89.81	89.68	89.49	89.69	89.86
	Livestock	6.99	7.07	7.22	7.14	7.01
	Forestry	1.05	1.05	1.05	1.03	1.03
	Fisheries	2.15	2.2	2.25	2.14	2.1
2	Industry	20.59	20.54	19.29	17.76	17.98
	Crude Petrol & Gas	54.6	50.84	49.77	47.03	48.22
	Solid Minerals	0.64	0.69	0.77	0.73	0.71
	Manufacturing	44.77	48.47	49.45	52.25	51.07
3	Building and Manufacturing	3.59	3.82	3.88	3.71	3.72
4	Wholesale and Retail Trade	16.62	16.57	16.95	17.17	16.86
5	Services	35.87	36.16	36.76	36.91	36.36
	Total GDP	63,218.72	67,152.79	69,023.93	67,931.24	68,490.98

**Table 1:** Sectoral Distribution of Nigeria's GDP (2010 constant price (%))  
Source: Central Bank of Nigeria, Statistical Bulletin, 2018 compiled edition.

### Sectoral Composition of FDI in Nigeria

Table 2 provided data up to 2001 while Table 3 provided data from 2014, about 13 years of missing data. But from the tables above, it is apparent how focus had shifted from the extractive industries which were the main sectors in the early phase of the nation to now other several sectors such as banking, financing, services, telecommunications, etc. with each of them having high stock of the FDI inflow at several times.

YEAR	Minin g & Quarr ying	Manufa cturing	Agric ulture	Transport & Communication	Building & Construction	Trading & Business	Miscellaneo us Services
1970-1974	51.2	25.1	0.9	1	2.2	16.9	2.7
1975 - 1979	30.8	32.4	2.5	1.4	6.4	20.4	6.1
1980 - 1984	14.1	38.3	2.6	1.4	7.9	29.2	6.5
1985 - 1989	19.3	35.3	1.4	1.1	5.1	32.6	5.2
1990 - 1994	22.9	43.7	2.3	1.7	5.7	8.3	15.4
1995 - 1999	43.5	23.6	0.9	0.4	1.8	4.5	25.3
2000 - 2001	30.7	18.9	0.6	0.4	2	25.8	21.5
1970 - 2001	30.3	32.2	1.7	1.1	4.7	19.1	10.9

**Table 2:** Sectoral Composition of FDI in Nigeria, 1970-2001 (Percentages)  
Source: CBN Statistical Bulletin (various issues).

	2014	2015	2016	2017	2018 Q1	2018 Q2
Agriculture	0.4	2.5	0.6	3.7	5.2	7.4
Banking	13.9	23.3	25.5	21.8	47	20.7
Brewery	0	0.2	1.5	0.6	0	0
Construction	0.8	0.7	0.9	2.3	0.2	0.8
Electrical	0.2	5.4	3.4	0.9	0.7	0.9
Financing	39	21.9	2.6	7.4	19.3	10.6
IT Services	0.1	0.3	0	0.4	0	3.4
Oil And Gas	3	0.8	19.7	7.7	3.4	1.7
Production	13.6	10.8	8.3	12.9	5.7	14.7
Services	7.9	5.1	8.2	25.5	13.1	33.7
Telecoms	14.3	24	25.5	12.7	3.5	0.8
Trading	5.6	4.3	3.4	1.3	1.1	4.2
Transport	0	0.3	0.1	0.1	0	0.9

**Table 3:** Sectoral Composition of FDI in Nigeria, 2014-2018 (Percentages)  
Source: Nairametrics.

It is important to note how focus had moved from sectors like trading and business, manufacturing, building and construction which used to contribute about 19.1%, 32.3% and 4.7% but now in recent times have stocks just about 4.25%, 14.7% and 0.8% respectively as at the second quarter of 2018. New sectors that now account for a large volume of FDI stock in the country include the service sector with a stock of 33.7% as at 2018 second quarter, the banking and finance sector which both had stocks as high as 47% and 39% respectively in recent years and even till now remain main attractors for investors.

### Methodology

The methodology for this study is mainly quantitative analysis and with the use of secondary data obtained from certain institutions in the country such as the Central Bank of Nigeria (CBN) through the use of the internet. The method of analysis is the Ordinary Least Squares method (OLS) regression technique applied to time series data covering 2007 to 2017. For the model specification used in carrying out the analysis, the growth accounting equation was used, this growth accounting equation was derived from the Solow growth model. Output grows because of increases in inputs as well as increases in productivity, as a result of improved technology and a highly skilled labour force. Thus, the production function presents a quantitative connection between inputs and output:

$$Y = AF(K, L)$$

Where Y is output, K is capital, L is labour and A is total factor productivity

The effect of FDI on economic growth is analyzed in the standard growth accounting framework. To begin with, the capital stock is assumed to consist of two components: domestic and foreign-owned capital stock. Therefore, for the model specification, capital is represented by foreign direct investment. The dependent variable for the model is economic growth which will be measured by the GDP level of the country while the independent variables for the model are total factor productivity growth, FDI inflow in the country and the labour force of the country.

### Results and Findings

The OLS regression result revealed that the coefficient of the first independent variable (FDI) to be positive (2.84131) which implies a positive relationship between the dependent variable (economic growth) and FDI i.e. for the period estimated in this model, FDI contributed positively to the economic growth of the country. For the

second and third independent variables, Labor Force and Total factor productivity growth, the coefficients were 0.0144501 and 2874.89 respectively which implies a positive relationship between economic growth (GDP) and the variables show in below Table 4.

Variable	Coefficient	Standard Error	t-statistic
FDI	2.84131	3.524	0.81
LFC	0.0144501	0.001658	8.77
TFP	2874.89	1208	2.37
Constant	-370497	104100	-3.56
R2=	0.96		
Adjusted R2=	0.95		
Durbin-Watson (D-W) =	1.57		
F-value =	60.78		

**Table 4:** The OLS Regression Result Source: Authors' Computation using E Views 2020.

The R2 for the model is 0.96 which implies that the model can explain 96% of the changes in the variations of GDP (the dependent variable) while the Adjusted R2 is 0.95. The t-statistics for FDI is 0.81 revealing that FDI is statistically insignificant to the economic growth of Nigeria for the period of the study while for the labour force and total factor productivity; the t-statistics were 8.87 and 2.37 respectively and this reveals that the two variables (labour force and total factor productivity) are statistically significant to the economic growth of the country. The Durbin Watson test revealed a statistic of 1.57 when calculated which implies some degree of positive autocorrelation in the model while the F statistics was 60.78 which implies that the overall model is significant [23-25].

### Conclusion and Recommendation

As theories are not just random thoughts but tested facts and also as seen in the case of some countries, foreign direct investment inflow should contribute positively to the economic growth of the country and in the case of Nigeria, although statistically insignificant, for the period of the study, FDI exhibited a positive relationship with economic growth. One aspect that should not be ignored though is the statistical insignificance of FDI which hints that even though the relationship was positive, FDI did not contribute much to the growth of the country.

One major reason for that is the sectoral inflow of foreign direct investment in the country. There is no doubt that there are specific sectors, particular in each country where investment is solely and largely needed for the country to grow, and in Nigeria here, enough emphasis cannot be placed on the need for the country to be able to feed itself before going into several other aspects.

The Agricultural sector in the country needs a large transformation and from the data revealed, this sector has never been one of the favorite sectors in attracting foreign direct investment. This can be due to several reasons but as seen in the theoretical literature, inflow in the Agricultural sector is needed and the government should do its best in making the sector attractive and begin large scale mechanized farming in the country. The advantages of doing this are numerous for the present economy right now.

Not only the sectoral inflow but several features in the country that are not working as they should be our part of the reasons foreign direct investment is not able to have a significant impact on the economy of the country. It is time to stop worrying about the volume of foreign direct investment for now, but instead to make sure the

investment currently in the country are in the right places and are subjected to conditions that will lead to positive externalities. The policy situation in the country also goes a long way in determining a lot of these factors so a knowledgeable and competent leader or administration is needed.

## References

1. Zakari A (2012) The Role of Nigerian Investment Promotion Commission (NIPC) in attracting Foreign Direct Investment in Nigeria Eur Sci 8: 149-161.
2. Olusanya SO (2013) Impact of Foreign Direct Investment Inflow on Economic Growth in a Pre and Post Deregulated Nigeria Economy. A Granger Causality Test Eur Sci 9: 335-356.
3. Egbo OP (2010) An Analysis of Foreign Direct Investment Inflow and Economic Growth in Nigeria. Department of Banking and Finance Faculty of Business Administration, University of Nigeria Enugu Campus.
4. Otto G, Ukpere WI (2014) Foreign Direct Investments and Economic Development and Growth in Nigeria. Mediterranean Journal of Social Sciences 5: 713-720.
5. Opusunju MI, Udo FS, Jiya NS (2015) Impact of Foreign Direct Investment on Economic Growth in Nigeria. International Journal of Advanced Studies in Business Strategies and Management 4: 33-44.
6. Akiri SE, Vehe BM, Ijuo OA (2016) Foreign Direct Investment and Economic Growth in Nigeria: An Empirical Investigation. Int J Econ Bus 2: 55-66.
7. Adigwe PK, Ezeagba CE, Francis NP (2015) Effect of Foreign Direct Investment on Nigerian Economic Growth. European Journal of Research and Reflection in Management Sciences 3: 28-33.
8. Ugwuegbe SU, Okore AO, Onoh JO (2013) The Impact of Foreign Direct Investment on the Nigerian Economy. European Journal of Business and Management 5: 25-33.
9. Ogbonna IC, Nwokoye ES, Uwagomogu NR, Nzeribe G (2012) Economic Growth and Foreign Direct Investment in Nigeria: An Empirical Investigation. Journal of Economics and Sustainable Development 3: 34-40.
10. Olokoyo FO (2012) Foreign Direct Investment and Economic Growth: A Case of Nigeria. Bvimsr's Journal of Management Research 4: 1-29.
11. Umeora CE (2013) Effects of Foreign Direct Investment (FDI) on Economic Growth in Nigeria. Electronic Journal pp: 1-14.
12. Adegbami BO (2012) Foreign Direct Investments and Economic Growth in Nigeria: A Disaggregated Sector Analysis. Journal of Economics and Sustainable Development 3: 66-75.
13. Adeleke KM, Olowe SO, Fasesin OO (2014) Impact of Foreign Direct Investment on Nigeria Economic Growth. Int. J Acad Res Bus Soc Sci. 4: 234-242.
14. Adigun, A.O (2015) Sectoral Inflow of Foreign Direct Investment and Economic Growth in Nigeria. Journal of Economics and Sustainable Development 6: 166-172.
15. Ako RM (2018) Foreign Direct Investment and Sustainable Development: the Nigerian Recession in Perspective. International Journal of Innovative Research in Social Sciences and Strategic Management Techniques 5: 43-54.
16. Asogwa FO, Osundu MC (2014) The Impact of Foreign Direct Investment on Economic Growth in Nigeria J Financ Econ 3:37-45.
17. Ayanwale AB (2007) FDI and Economic Growth: Evidence from Nigeria. African Economic Research Consortium, Nairobi, ISBN: 9966-778-09-8.
18. Blessing E.N, Otuya T (2015) President Goodluck Jonathan's Transformation Agenda and Nigeria's Foreign Policy. Social Science Review 1: 23-34.
19. Emmanuel IJ (2016) Effect of Foreign Direct Investment on Economic Growth in Nigeria. European Business and Management 2: 40-46.
20. Lipsey RE (2004) Home- and Host-Country Effects of Foreign Direct Investment. National Bureau of Economic Research, ISBN: 0-262-03615-4.
21. Odhiambo N.M, Mahembe E (2014) Foreign Direct Investment and Economic Growth: A Theoretical Framework. Journal of Governance and Regulation 3: 63-68.
22. Okon JU, Augustine OJ, Chuku AC (2012) Foreign Direct Investment and Economic Growth in Nigeria: An Analysis of the Endogenous Effects. Current Research Journal of Economic Theory pp: 53-66.
23. Okoye LU, Nwakoby CI, Okorie UE (2016) Deregulating the Nigerian Economy for Enhanced Real Sector Growth. Journal of Policy and Development Studies 10: 144-158.
24. Oyeleke F (2016) Structure of Nigerian Economy.
25. Taiwo JN, Achugamonu BU, Okoye O, Agwu M.E (2017) Foreign Direct Investment: Catalyst for Sustainable Economic Development in Nigeria. Saudi Journal of Business and Management Studies 2: 70-81.

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