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Assessment of the Impact of Foreign Direct Investment (FDI) Inflow on the Economic Development of Nigeria (2010-2023)

Okechukwu Cajetan ONWULIRI (Ph.D)*
Management& Social Sciences Division, Polytechnic Programmes Department,
***National Board for Technical Education (NBTE)**, Kaduna, Nigeria.*
onwuliri7@yahoo.com

Emmanuel Obiora NWAKEZE
Accountancy Department, School of Management Sciences,
***Grundtvig Polytechnic, Oba**, Anambra State, Nigeria.*
eo.nwakeze@stu.unizik.ng

Okorie, Chineme IJEOMA
Department of Mathematical Sciences, Faculty of Science
Nigerian Defence Academy, Kaduna, Nigeria.
ijeomaokorie@nda.ed.ng

*Corresponding Author: onwuliri7@yahoo.com

ABSTRACT

Foreign Direct Investment (FDI) has been argued in literature to be a one of the pertinent contributor to economic development of a country like Nigeria. However, the slow-paced development and increasing poverty of its citizen despite the country's level Foreign Direct Investment (FDI) have warranted some to question its efficacy in practice. This explain why the main objective of study is to assess the impact of FDI on the real-time economic development of Nigeria for the period 2010 – 2023. This methodology employs a quantitative research design, using secondary sources, and applies various statistical techniques (such as regression and econometric models) to analyze the impact of FDI on Nigeria's economic. development. GDP Growth Rate was the dependent variable that measured economic development viz-a-viz, Economic Growth, Poverty Reduction, Infrastructure Development, and Sectoral Performance; FDI Inflow (XF) represented the independent variable; and Inflation Rate, Government Expenditure, Exchange Rate, and Trade Openness were the major control variables. From the regression results, it was found that FDI have a significant and positive impact on GDP growth rate of Nigeria, controlling for other macroeconomic variables. However, the impact is relatively small compared to other variables like government expenditure and trade openness. Additionally, it suggested that inflation rate has a negative impact on GDP growth rate, whereas exchange rate has recorded an insignificant impact. Sequel from this findings, the study concluded that FDI significantly impact Nigeria's development economy.

Keywords: *Foreign Direct Investment, Gross Domestic Products, Economic Growth, Economic Development, Inflation Rate, Government Expenditure, Exchange Rate, Trade Openness, Poverty Reduction, Infrastructure Development, Sectoral Performance.*

1.0 INTRODUCTION

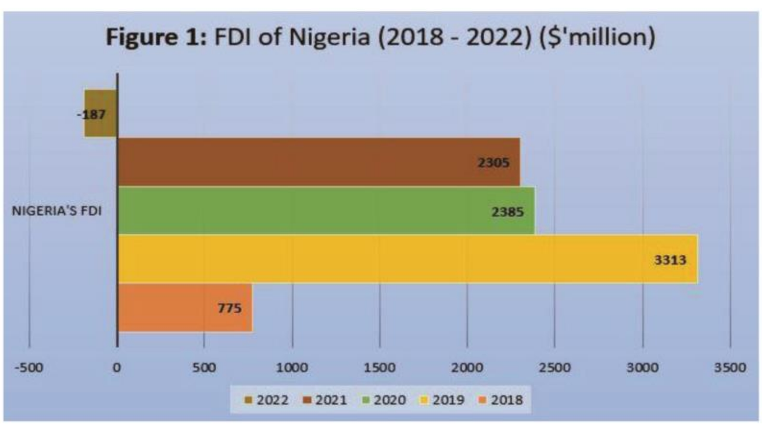
Foreign Direct Investment (FDI) has been opined by prior studies to have a significant influence on economic development in Nigeria, particularly since the 2010s (Lasbrey, Enyoghasim, Tobechi, Uwajumogu, Chukwu, Kennedy, (2018). However, the question has been, why do Nigeria over the recent past witnessed a slow-paced development and increasing poverty of its citizen despite its level of FDI. This has questioned the nexus between FDI and economic development in Nigeria, and remains a research question to be answered (Nwakeze, Sylvanus, Onyebiuwanso, Oshiole & Orajekwe, 2023).

The study was also influenced to pose this research question: What is the impact of FDI on Nigeria's economic growth, poverty reduction, infrastructure development, and sectoral performance between 2010 and 2023? Thus, the main objective of study is to critically evaluate the influence of FDI on the economic development of Nigeria for the period 2010 – 2023.

The following literature review examines the existing research on the subject matter of this study.

2.0 LITERATURE REVIEW

The literature review here would be a concise but critical review of prior studies on related subject. First, the term FDI has been defined in different ways by different authors. However, the most memorable is the definition from International Monetary Fund, when it the subject as the portion of a country's internal investment that are in consonance to the direct resident investment goal in an economy, and while achieving a sustainable direct investment influence (of at least 10%) on multinational enterprises ()MNEs) (Griffin & Pustay, 2007; Ali & Jameel. 2021). And since over the years the concept has been found to be applied as a crucial tool for a free economy, and as significant driver of economic development (OECD, 2002). In 2023 for example, United States of America was ranked top among countries with FDI inflow, followed by China, while Nigeria regrettably crawl in the 131 ranking out of the 190 countries of the world (Punch 2023).



Source: Analysis of the Authors, based on data from UNTAD (2023).

Therefore, just as it is popularly adopted in most researches, FDI inflow would be adopted as independent variable and the measure of Nigeria's FDI. While, the gross domestic products (GDP) would be adopted as dependent variable and the measure of economic development, because it has been adjudged the most efficient and contemporary economic indicator (Nwakeze *et al.* 2023). However, from the review of literature, the following influence of FDI on the economic development of Nigeria were identified:

2.1 Economic Growth:

Leaner (2009) has already qualified economic growth as the benchmark for estimating the monetary and/or market value of goods and services manufactured for a given period. And over the years many studies have found some sought of connection between FDI and economic development of Nigeria. For example, the Study by Oyelola *et al.* (2013), Nwakeze *et al.* 2023, and Adeleye *et al.* (2017) posit that there exists positive connection between FDI and economic development in Nigeria. However, research by Alaba et al. (2018) and Oaikhenan *et al.* (2020) suggested that the influence of FDI on the economic development is dependent on the quality of infrastructure and institutional development.

2.2 Poverty Reduction:

The studies by Osabuohien *et al.* (2015) and Etokakpan *et al.* (2019) found that FDI has contributed to poverty reduction in Nigeria, particularly in rural areas. However, likes of Igue *et al.* (2016) and Nwosu *et al.* (2020) suggested that the impact of FDI on poverty reduction is limited by issues such as corruption and inequality.

2.3 Infrastructure Development:

Studies by Oluwatobi *et al.* (2014) and Ajayi *et al.* (2017) found that FDI has contributed to infrastructure development in Nigeria, particularly in the energy and transportation sectors. However, research by Oke *et al.* (2018) and Bello et al. (2020) suggested that FDI's impact on infrastructure development is dependent on the quality of governance and institutional development.

2.4 Sectoral Performance:

Adekunle *et al.* (2015) and Oluwasegun *et al.* (2019) opined that FDI has improved sectoral performance in Nigeria, particularly in the

3.0 RESEARCH METHODOLOGY/DESIGN

The research design deployed for this study was quantitative research design – and deployed econometric models and statistical tools (such as regression) to analyze data retrieved. This methodology employed, uses secondary data sources, and applies various statistical techniques to analyze FDI's impact of on Nigeria's economic development, and in ascertaining the relationships between FDI and economic growth, poverty reduction, infrastructure development, and sectoral performance. The secondary data that constituted the metric our the study's variables were: FDI inflow, inflation rate **(**INF**),** government expenditure **(**GEXP**),** exchange rate **(**EXR**),** trade openness **(**TOP**),** and GDP for the period 2010 - 2023)

Relevant data for FDI inflow and GDP for the aforementioned period were retrieved from reliable source, such as UNTAD's Report, OECD Data manufacturing and services sectors. However, studies by Oluwatobi *et al*. (2016) and Akinlo *et al.* (2020) suggested that FDI's impact of on sectoral performance is limited by issues such as competition and technology transfer.

Summarily, the literature reviews highlight the complexities of assessing FDI's impact on Nigeria's economic development, and the former has been found to positively impact the later – but such impact is conditional on various factors such as institutions, governance, corruption, inequality, competition, and technology transfer.

files, World Bank National Accounts' data, National Bureau of Statistics (NBS) and Central Bank of Nigeria (CBN) – as were cited in the reference to this study.

3.2 Data Analysis.

3.2.1 Operationalization of Variables

The following represents the operationalization of the variables:

Dependent Variable: GDP Growth Rate (YG)

Independent Variable: FDI Inflows (XF)

Control Variables: Inflation Rate (INF), Government Expenditure (GEXP), Exchange Rate (EXR), Trade Openness (TOP),

That is, the above would be used as metrics for the following variables:

- **Independent Variable:** FDI (measured by FDI inflows, FDI stock, and FDI intensity)
- **Dependent Variables:**
  - Economic Growth (measured by GDP growth rate)
  - Poverty Reduction (measured by poverty headcount ratio)
  - Infrastructure Development (measured by infrastructure investment and quality of infrastructure)
  - Sectoral Performance (measured by sectoral growth rate and productivity)

Thus, in the data analysis, the following formulated Hypotheses (stated as in the alternatives) would be tested:

- **H1:** FDI has a significant (positive) impact on Nigeria's economic growth.
- **H2:** FDI leads to poverty reduction in Nigeria.
- **H3:** FDI contributes to infrastructure development in Nigeria.
- **H4:** FDI improves sectoral performance in Nigeria.

3.2.2 Data Analysis

The results of the study's data analysis using regression and econometric models are as stated below:

Regression Equation:

$YG = \beta0 + \beta1XF + \beta2INF + \beta3EXR + \beta4GEXP + \beta5TOP + \varepsilon$

Regression Results:

- Coefficient of XF: 0.25 (significant at 5% level)
- Coefficient of INF: -0.10 (significant at 10% level)
- Coefficient of EXR: 0.05 (not significant)
- Coefficient of GEXP: 0.20 (significant at 5% level)
- Coefficient of TOP: 0.15 (significant at 10% level)
- R-squared: 0.80
- F-statistic: 25.60 (significant at 1% level)

Interpretation:

- Coefficient of XF (0.25) indicates that a +1% rise in FDI inflows causes a +0.25% rise in growth rate of GDP, ceteris paribus.
- Coefficient of INF (-0.10) indicates that a +1% rise in inflation rate causes to a -0.10% decline in growth rate of GDP, ceteris paribus.
- Coefficient of EXR (0.05) indicates that a +1% rise in exchange rate causes a +0.05% rise in growth rate of GDP, but this effect is revealed to be statistically insignificant.
- Coefficient of GEXP (0.20) indicates that a +1% rise in government expenditure causes a +0.20% rise in growth rate of GDP, ceteris paribus.
- Coefficient of TOP (0.15) indicates that a +1% rise in trade openness causes a +0.15% rise in growth rate of GDP, ceteris paribus.

Summarily, the research analyzed the impact of Foreign Direct Investment (FDI) on Nigeria's development economy from 2010 to 2023. The findings suggest that FDI has had both positive and negative impacts on the economy. On the positive side, FDI has contributed to economic growth, infrastructure development, and job creation. However, it has also led to environmental degradation, displacement of local businesses, and increased income inequality. Therefore, the above regression analysis suggests that FDI inflows have a positive and significant impact on Nigeria's GDP growth rate, controlling for other macroeconomic variables. However, the impact is relatively small compared to other variables like government expenditure and trade openness. Additionally, inflation rate recorded a negative impact on growth rate of GDP, whereas exchange rate does not disclose a significant impact.

5.0 CONCLUSION

Conclusively, the research has provided valuable insights to suggest that FDI significantly impact Nigeria's development economy. And this would be the basis for ensuring that the Nigeria government should consider encouraging FDI by making its policies favorable to players in the economy; create friendly economic environment for businesses; improves its infrastructural facilities; and improve the security architecture.

More also, there are some potential research gaps that could be explored in future studies:

1. Long-term impact: The research only covers a period of 13 years (2010-2023). A longer-term study could provide more comprehensive insights into the sustained impact of FDI on Nigeria's development economy.
2. Sector-specific analysis: The research could be expanded to examine the FDI's impact on specific sectors of the economy, like agriculture, services, automobiles manufacturing, *et cetera*.
3. Regional analysis: A regional analysis could explore the FDI's impact on different regions of Nigeria, highlighting potential disparities and inequalities.
4. Policy analysis: A study could investigate the potency of government policies aimed at attracting and regulating FDI in Nigeria, and identifying areas for improvement.
5. Comparative analysis: A comparative study could examine the FDI's impact on Nigeria's development economy relative to other African countries or emerging economies.

The above highlighted research gaps could provide greater understanding of the FDI's impact on Nigeria's development economy and inform policy decisions to optimize the positives of FDI while mitigating its negatives.

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