

Foreign Direct Investment Inflows and Tax Revenue Performance in Nigeria (1987-2019)

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Abstract

The study investigates the effects of foreign direct investment inflows on tax revenue performance in Nigeria, using time series data that covers periods from 1987 to 2019. The empirical techniques used in this study are unit root test, co-integration test and VECM. According to the unit root test results, all the series are integrated of order (1). The Johansen co-integration test suggests that long-run relationship exists among the selected series. The study found that Real Gross Domestic Product (log first difference RGDP) exhibits positive and significant relationship with Tax Revenue Performance in the short run, while Foreign Direct Investment (FDI) and Real Gross Domestic Product (RGDP) have positive and significant effect on Tax Revenue Performance in the long run. As well the VEC granger causality/Exogeneity Wald Chi-squared Test shows that the explanatory variables have joint significant effect on Tax Revenue Performance in the short-run. It is recommended that, government should create enabling socio-economic environment through the provision of sustainable infrastructure, review the current list of tax incentives, tackling corruption and terrorism that will promote inflow of foreign direct investment and thus, resulting in higher tax revenue yield in Nigeria.

Key words: Foreign direct investment; tax revenue performance; real gross domestic product

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I. Introduction

Foreign direct investment (FDI) has become one of the most salient features of today's globalization drive and a prominent strategy in nations' economic renewal due to its exponential contributions to the growth and sustainable development of every nation. The efficient utilization of resources within developing nations all over the world and Africa in particular, have triggered rethinking on policy framework redesign, which aimed at attracting foreign direct investment (Achugamonu, Ikpefan, Taiwo & Okorie, 2016).

From a convergence perspective, FDI are regarded as one of the characteristics of global economy, since it typically encompasses packages of capital, technical management, and organisational know-how spill-over to least developed nations (Amanuel, 2017; Getinet & Hirut, 2006). In the work of Million, Azime and Gollagari (2016) and Ogunjimi and Amune (2017) foreign direct investment was asserted to have served as an alternative investment strategy to close resources gap, saving-investment gap, technological gap, revenue-expenditure gap and, output and export gap among others in developing countries. In addition, Bayar and Ozturk (2018) and Ogbokor (2018) demonstrated that FDIs not only bring financial capital but also entrepreneurial and technological skills, while contributing to tax revenue, employment generation, productivity spill-overs, and technological transfer to these countries.

Despite the positive and significant impacts of foreign direct investment in the host countries, it may also lead to negative unintended consequences. These include crowding out local firms, repatriation of profits, dependency on foreign investment, exploitation of resources both labour and raw material, environmental pollution and degradation, suppressing domestic entrepreneurship, unsuitable products and technology and stimulating class conflict (Badeji & Abayomi, 2011; Million, Azime & Gollagari, 2016).

Globally, the trend of foreign direct investment inflows showed a decreased from \$2.033 trillion in 2015 to \$1.539 trillion in 2019 amid weak economic growth and significant policy risks, as perceived by multinational enterprises (MNEs). The share of developed, developing and transition economies stood at \$800.24billion, \$684.7billion and \$54.9billion in 2019 from \$1,274.4billion, \$729.9billion and \$37.5billion in 2015 (UNCTAD, 2020).

In Africa, FDI inflow fell from \$57.6billion in 2015 to \$45.4 billion in 2019, out of which \$10.7 billion came to West Africa sub-region in 2015, but increased to \$10.87billion in 2019 respectively (UNCTAD, 2020). In 2019, Egypt was Africa's biggest destination of FDI, with total FDI inflows of \$9.0 billion. South Africa recorded \$4.6billion, Congo with \$3.4 billion and Ethiopia \$2.5billion. With respect to Nigeria, the inflow of FDI fell from \$3.59 billion in 2015 to \$3.2997billion in 2019 despite her position in Africa (UNCTAD, 2020).

Tax revenue as an important source of government financing economic development among others has called for urgent attention by various stakeholders. Tax has been identified as a compulsory payment levied by

the government on both natural and fictitious persons such as companies, to meet the expenditure incurred in providing common benefits to the citizens of a country (Jimoh, Adegoriola & Adeyemo, 2020). In the view of Emmanuel and Ibrahim (2020) tax is a compulsory contributions for which no explicit, reciprocal benefit is provided to the taxpayer. According to Alavuotunki, Haapanen and Pirttilä (2019) tax is referred to as a mandatory financial charge or some other type of levy imposed upon an individual or other legal entity by the government in order to raise fund towards the provision of various public expenditures. Revenue is defined as the total amount of earnings that accrues to an organization to assist in financing its activities (Olunga & Solomon, 2019).

Tax revenue has become a major source of government revenue all over the world and as such, government use tax proceeds to carry out their traditional functions and obligations to the people (Azubike, 2009). Chigbu and Njoku (2015) discussed that the primary aim of taxation is to generate revenue capable of financing government expenditure at all levels of government. This is done by imposing taxes on individuals, groups, businesses and corporate bodies by the constituted authorities.

In the light of the tax discourse, the role of FDIs to tax revenue increase is vital in highly integrated global village. One of the noticeable features of today's globalization drive is conscious encouragement of cross-border investments, to especially increase tax revenue base. Many countries (especially developing) see attracting FDI as strategy and important element to close three gaps, which include provision of fund for investment, availability of foreign exchange and contribution to the government tax revenue towards economic development (Gaalya, 2015; Jun, 2015; Quazi, Vemuri & Solima, 2014). In addition, Million, Gollagari and Azime (2016) further expatiates that foreign firms are not only expected to provide employment generation, productivity spillover, backward and forward linkages but also to fill budget deficits through their contribution of taxes paid by transnational companies. Based on the above, this study set out to empirically investigate the effects of foreign direct investment inflows on tax revenue performance in Nigeria.

II. Theoretical Review

The theoretical review is anchored on work whose assumptions have been tested and accepted in literature both at national and international levels. This paper discussed two theories which have relevance to it. These include eclectic paradigm and ability to pay theory of taxation.

The Eclectic Paradigm

The eclectic paradigm as developed by John Dunning (1988) offered a general framework for determining the extent and pattern of both foreign-owned and domestic production owned by foreign enterprises. The theory is a mixture of three different ingredients of FDI, tagged OLI (Denisia, 2010). This combines the factors that are key to other theories of FDI namely ownership advantage (O), location advantage (L) and internalization advantage (I). According to Sean-Leigh (2007), ownership advantage must be present in a host country which is sufficient enough to counter disadvantages of competing with firms in their home country. Shenkar (2007) identified natural resources endowments, manpower and capital, technology and information, managerial and marketing skills and organization systems to constitute ownership advantage. Location advantage (L) is determined by the host country for the activities of multinational enterprises. Benefits arising from both quantitative and qualitative include factors of production, resources availability (natural and labour), infrastructure, lower costs of transportation and telecommunications, large market size, attractive government tax and investment policies, cultural relations, language and so on, are the location specific advantages. For internalization advantage, Buckley and Casson (1976) argued that, firms will create an internal market (internalize external market) in order to increase profits and avoid certain costs because of market imperfections in intermediate products and notable knowledge.

Taxation Theory

Ability To Pay Theory

The proponent of ability to pay theory was Pigou (1920). According to Bhartia (2009) a taxation theory may be derived on the assumption that there need not be any relationship between tax paid and benefits received from state activities. This theory states that one should be taxed according to the ability and capacity to pay. It is simply an attempt to maximize an explicit value judgment about the distributive effects of taxes. Bhartia (2009) argue that a citizen is to pay taxes just because he can, and his relative share in the total tax burden is to be determined by his relative paying capacity. The principle behind this theory is that people with higher incomes should pay more taxes than people with lower incomes. This therefore, appears very reasonable and just in the sense that, tax should be levied on the basis of the taxable capacity of an individual or a corporate body so that justice can be achieved.

2.2 Review of Empirical Literature

From the study conducted by Gaspareniene, Remeikiene and SiviKiene (2019) on the impact of foreign direct investment on tax revenue of different type of taxes in Lithuania using data for the period 2008 to 2017, the finding showed that FDI had positive and significant impact on total tax revenue but with the biggest impact on Value Added Tax. An empirical study by Gobachew, Debela and Shubiru (2017) equally examined the determinants of tax revenue in Ethiopia and the study found that, foreign direct investment inflows positively and significantly influences tax revenue performance. In the same manner, this position was re-examined by Aslam (2015) who investigated tax revenue and FDI in Sri Lanka with results indicating that FDI significantly and statistically impacts on tax revenue, with a long run relationship between the foreign direct investment and tax revenue. Mahmood and Chaudhary (2013) investigation on FDI and tax revenue in Pakistan shared similar conclusion that, positive and significant impact exists between tax revenue and FDI. Likewise, Okey (2013) worked on tax revenue effect on FDI in West Africa demonstrated that FDI affects tax revenue, especially tax on income and profit positively and significantly. In a similar study conducted by Sarisov and Koc (2010) which investigated the impact of FDI inflow on corporate tax revenue in 21 OECD countries, it was ascertained that FDI inflows had positive impact on the corporate tax revenue in the selected OECD countries. Eda, Başak and Burcu (2016) had same conclusion that FDI inflows affect tax payments of the firms with different technology levels in Turkey during 2004-2012 period. Odabas (2016) investigated FDI inflow on tax revenues in the transition economies of European Union and found that, FDI inflow boosts both the economic growth and tax revenue while this translates to improvement in the welfare of the country. Alabede (2016) evaluated how tax revenue responds to financial inflow from FDI, the finding revealed that tax revenue efforts of West Africa sub-region countries respond significantly and positively to the inflow of FDI and total foreign aid. From the same perspective, Gnanngnon, (2017) examined the impact of foreign direct inflow on non-resources tax and corporate tax revenue which covers 172 countries both developing and developed countries using unbalanced dataset for the period 1980 to 2013. The empirical results confirmed that the impact of FDI inflows on each of these two types of government revenue depends on the level of the FDI inflows, expressed in percentage of host countries' Gross Domestic Product (GDP). A similar study by Bayar and Ozturk (2018) that investigated the impact of FDI inflows on tax revenue shows a positive and significant impact on foreign direct investment inflow but exhibited not significant effects on the total tax revenues at the panel level. However, FDI inflows affected the total tax revenues positively in Iceland, Israel, Sweden, the United Kingdom, and the United States, while FDI inflows affected the total tax revenues negatively in Austria, France, Italy, and Poland.

Contrarily, the study of Million, Azime and Gollagari (2016) who conducted a study on the impact of foreign direct investment inflows on aggregate and disaggregates tax revenues in Ethiopia suggests that the foreign direct investment had a negative impact on the aggregate tax revenue both in the short and long run. Also, Bunescu and Comaniciu (2014) found a weak correlation between tax revenue and FDI inflow. In a similar manner, Tabasam (2014), worked on the interaction among tax revenues and FDI inflows in Pakistan for the period 1975-2012 using time series analysis, and it was found that FDI inflows affected tax revenue negatively.

III. Methodology

This study adopts *ex-post facto* research design which connects the use of historical and secondary form of data which are not, under the control of the researcher. The major sources of data for this study were obtained from Central Bank of Nigeria Annual Report, World Development Indicators, Federal Inland Revenue Service Annual Report, and National Bureau of Statistics. The independent variables are foreign direct investment inflows (FDI) and supported with Real Gross Domestic Product (RGDP) as additional explanatory variable, while tax revenue is the dependent variable that consist of taxes and duties collected by the Federal Inland Revenue Service and the Nigerian Custom Service respectively. In order to describe the trend of foreign direct investment inflows in Nigeria and determine its effect on tax revenue performance in Nigeria, the study adopts model specification based on the previous observation drawn from the brief literature reviewed on the subject (Gaspareniene et al., 2019; Gobachew et al., 2017; Mahmood et al., 2013; Odabas, 2016; Omodero, 2019). Ordinary least Square technique was used to carry out the multiple regression with aid of E-view version 10

3.1 Model Specification

The econometric regression model adopted for this study is expressed in logarithm form in order to bring them at same base, as stated below:

$$Y = f(X_1, X_2)$$

$$TRP = f(\text{FDI}, \text{RGDP})$$

$$\text{LOGTRP}_t = \alpha_0 + \beta_1 \text{LOG}(\text{FDI})_t + \beta_2 \text{LOG}(\text{RGDP})_t + \mu_t$$

Where:

- α_0 = Constant or Intercept
- $\beta_1 - \beta_2$ = Parameter or coefficient of explanatory variable
- μ_t = Error term
- TRP= Tax Revenue Performance
- FDI= Foreign Direct Investment Inflow
- RGDP = Real Gross Domestic Product
- LOG= Logarithm

3.2 Statement of Hypothesis

- H₀₁:** Foreign direct investment inflow has no significant effect on tax revenue performance in Nigeria.
- H₀₂:** Gross domestic product has no significant effect on tax revenue performance in Nigeria.

IV. Results and Discussion

This section presents analysis of data collected, interpretations and discussion of findings. This involves the descriptive analysis, unit root test, and estimation of the model formulated. Table 1 presents the summary statistic results for the variables of interest. This is the preliminary part of the current study’s empirical analysis. The descriptive statistics and the potential correlational relationships among the selected variables of interest are presented. The variables of interest discussed here include: Tax Revenue Performance (TRP), Foreign Direct Investment (FDI) and Real Gross Domestic Product (RGDP).

Table 1: Summary Statistics

	<i>TRP</i> (N = 33)			<i>FDI</i> (N = 33)			<i>RGDP</i> (N = 33)		
	<i>Mean</i>	<i>Median</i>	<i>Std.Dev</i>	<i>Mean</i>	<i>Median</i>	<i>Std.Dev</i>	<i>Mean</i>	<i>Median</i>	<i>Std.Dev</i>
	2,057.17	898.57	2,231.84	0.69	0.62	0.61	19,937.44	477.53	30,269.38
	<i>Minimum – Maximum</i>								
Min/Max	14.04		6,520.00	0.02		2.97	204.81		71,387.83
	<i>Jarque-Bera</i>			<i>Probability</i>					
J-Bera Prob.		0.000	0.000		0.003	0.000		0.000	0.000
	<i>Correlation Matrix</i>								
TRP		1							
FDI		0.304							
RGDP		0.910			0.290			1	

Source: Authors’ Computation 2021. **Note:** **TRP** denotes Tax Revenue Performance, **FDI** denotes Foreign Direct Investment and **RGDP** represents Real Gross Domestic Product.

According to the result in Table 1, the ‘N’ means the number of observations for each of the variable and it is 33. Tax Revenue Performance (TRP) is seen to be having an average value of ₦2,057.17billion of which its take values between ₦14.04billion and ₦6,520.00billion with standard deviation of 2231.84. Foreign Direct Investment (FDI) has an average value of ₦0.69billion with standard deviation of 0.61 and the values during the period under review are between ₦0.02billion and ₦2.97billion. The minimum and maximum value of Real Gross Domestic Product (RGDP) during the period of this study are ₦204.81billion and ₦71,387.83billion respectively with its rate of dispersion (standard deviation) being 30,269.38, and its average value is ₦19,937.44billion. Generally, the Jarque-Bera and its probability for each of the series indicates that the series are not normally distributed thus, they are log transformed. Furthermore, the correlation analysis’ result at the lower portion of the Table 1 shows the continuous strength of the different associations among the variables under study. Looking closely at the results, the associations among the variables are positive with that of TRP and RGDP being a strong one ($r = 0.910$). However, the potential correlational relationship between FDI and RGDP is found to be positive and relatively small ($r = 0.290$). This means that the potential association among

variables that are considered as the independent variables in the empirical part of this study is not so high to the point of causing multicollinearity problems.

Stationarity or Unit Root Test

To examine the time series properties of the selected variables, the summary of the unit root tests carried out on the variables are presented in Table 2. The unit root tests approach adopted are Augmented Dickey Fuller (ADF) and Phillips-Perron (PP) in their level and first difference forms.

Table 2: Unit Root Test

Variable/ t-Stat /Prob.		Augmented Dickey-Fuller (ADF)			Phillips-Perron (PP)		
		@Level	@1 st Diff.	Order	@Level	@1 st Diff.	Order
TRP	t-Stat Prob.	-0.423 0.982	-5.492*** 0.001	I(1)	-0.671 0.967	-11.560*** 0.000	I(1)
FDI	t-Stat Prob.	-1.804 0.677	-7.573*** 0.000	I(1)	-3.140 0.115	-8.085*** 0.000	I(1)
RGDP	t-Stat Prob.	-1.932 0.615	-5.511*** 0.001	I(1)	-1.932 0.615	-5.511*** 0.001	I(1)

Source: Authors' Computation 2021. **Note:** **TRP** denotes Tax Revenue Performance, **FDI** denotes Foreign Direct Investment and **RGDP** represents Real Gross Domestic Product. ***, ** and * 0.01, 0.05 and 0.10 levels of significance respectively.

The ADF test results in Table 2 clearly shows that the null hypotheses that all the selected have unit roots can be safely accepted at level within the 1% and 10% conventional alpha levels of significance. Alternatively, the acceptance of null hypothesis indicates that the series are not stationary at level. Nevertheless, both the ADF and PP at first difference strongly suggest that the series are integrated of order zero (1) thus it's worth concluding that the series have to be first differenced to achieve stationarity.

Lag Selection Criteria

Following the unit root test results that suggest that the empirical analysis should be carried out using differenced series; there is a need to investigate the long run properties of the variables of interest. In order to do this, we began by selecting the appropriate lag length using VAR Lag Order Selection Criteria and the results are presented in Table 3.

Table 3: Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
1	-68.971	NA	0.043*	5.377*	5.802*	5.510*
2	-63.825	8.161	0.058	5.643	6.492	5.909
3	-60.990	3.911	0.092	6.068	7.341	6.467
4	-54.620	7.468	0.122	6.250	7.947	6.781

Source: Authors' Computation 2021. **Note:** * indicates lag order selected by the criterion, **LR:** sequential modified LR test statistic (each test at 5% level), **FPE:** Final prediction error, **AIC:** Akaike information criterion, **SC:** Schwarz information criterion and **HQ:** Hannan-Quinn information criterion

In Table 3, Sequential modified LR test statistic (LR), Final prediction error (FPE), Akaike information criterion (AIC), Schwarz information criterion (SC) and Hannan-Quinn information criterion (HQ) for selection of the appropriate lag length are reported and each test at 5% level. However, we consider the optimal lag length of 1 in our subsequent analysis as indicated by FPE, AIC, SC and HQ criteria.

Johansen System Co-integration Test and Long-run Relationship

To examine the long run properties of the selected variables, Johansen System Cointegration Test approach is considered with all the variables in their log first difference forms as suggested by the unit root test results and the result is presented in Table 4.

Table 4: Johansen System Co-integration Test

Hypothesized No. of CE(s)	Trace Statistic	5% Critical Value	Prob.
R = 0	41.580**	35.193	0.009
R = 1	18.195	20.262	0.094
R = 2	5.480	9.165	0.235
Hypothesized No. of CE(s)	Maximum Eigen value Statistic	5% Critical Value	Prob.
R = 0	23.385**	22.300	0.035
R = 1	12.715	15.892	0.148
R = 2	5.480	9.165	0.235

Source: Author’s computation, 2021. Note: Standard Error in Parenthesis, T-statistic in square bracket and ** denotes 5% level of significance.

According to the result in Table 4, both the trace and maximum – Eigen value test statistics suggest that the null hypothesis of no co-integration (Ho) among the variables can be rejected. It shows that there is at least 1 co-integrating relation among the variable. This means that long run relationship exists among Tax Revenue Performance (TRP), Foreign Direct Investment (FDI) and Real Gross Domestic Product (RGDP).

VEC Model and Long-run Relationship (Normalized Co-integrating Coefficients)

Following the unit root, we construct a model that combines both the short run and long run properties of the selected variables in this study. The model is Vector Error Correction (VEC) model (see the appendix for the raw output). However, focusing on the TRP model implemented using the make model/system proc option in E-view 10, we obtain more efficient parameters estimates as postulated by Hasan (2008).

Table 5:

	Coeff	Std. Dev	t - stat.	Prob.
C(1) – CointEq1	-0.494**	0.102	-4.827	0.000
C(2) – ΔlnTRP (-1)	0.163	0.139	1.174	0.251
C(3) – ΔlnFDI(-1)	0.027	0.038	0.723	0.476
C(4) – ΔlnRGDP(-1)	0.139**	0.054	2.591	0.016
@Trend	0.069	0.014	5.024	0.000

Long-run Relationship (Normalized Cointegrating Coefficients)

	Coeff	Std. Dev	t - stat.
CError Correction Model and Long – run Relationship (Normalized Cointegrating Coefficients)	-8.577**	0.772	-11.116
lnFDI	0.872**	0.323	2.703
lnRGDP	0.158**	0.072	2.188

$R^2 = 0.396$; $Adj R^2 = 0.303$; $F-stat.= 4.258$ and $DW = 2.126$
Heteroskedasticity Tests (Prob.) = 61.476 (0.422)

Source: Author’s computation, 2020. Note: ***, ** and * denote 1%, 5% and 10% levels of significance.

According to the result in Table 5, the Adjusted R² value (0.303) of the TRP model show that the Foreign Direct Investment (FDI) and Real Gross Domestic Product (RGDP) explain about 30.3% of the variances in Tax Revenue Performance (TRP). Furthermore, the F-Statistics values (4.258) which is 4.258 for the same model indicates that the model is significant. The Durbin-Watson statistic value which is approximately 2 suggests that the model is free from autocorrelation problem. Besides, the insignificant value

(Prob. > 0.05) of heteroskedasticity test indicates that the model is free from heteroskedasticity problem. Furthermore, as expected; the negative and significant coefficient of error correction term (coeff. = -0.494; Prob. = 0.000) provide the evidence that TRP reacts to disequilibrium from its own lag and lags of other variables. Generally, the short run effect estimates of parameters associated with the lagged differences of the explanatory variables show that both Foreign Direct Investment (FDI) and Real Gross Domestic Product (RGDP) show positive relationships with Tax Revenue Performance (TRP) but only the positive relationship between Real Gross Domestic Product (RGDP) and Tax Revenue Performance (TRP) is significant at 5% level (coeff. = 0.139; t -stat = 2.591/Prob. = 0.016). This typically means that RGDP has positive and statistically significant effect on Tax revenue performance in Nigeria in the short run.

Conversely, the long run effect estimates of parameters in the lower portion of the Table 5 show that both the Foreign Direct Investment (FDI) and the Real Gross Domestic Product (RGDP) exhibits positive and highly significant relationships with Tax Revenue Performance (TRP) at 5% level (coeff. = 0.871; t -stat = 2.703 & coeff. = 0.158; t -stat = 2.188). These classically suggest that RGDP and FDI have positive and statistically significant effect on Tax revenue performance in Nigeria in the long run.

VEC Granger Causality/Block Exogeneity Wald Test

The study proceeds by examining the joint significance of the explanatory variables; particularly that of Foreign Direct Investment (FDI) and Real Gross Domestic Product (RGDP) on Tax Revenue Performance (TRP) in the short-run using VEC Exogeneity Wald Chi-squared Test and the results are presented in Table 6.

Table 6: VEC Granger Causality/Block Exogeneity Wald Test

	Wald χ^2 Test $\Delta \ln TRP$	Wald χ^2 Test $\Delta \ln FDI$	Wald χ^2 Test $\Delta \ln GDP$
$\Delta \ln TRP$	-	0.020	2.487
$\Delta \ln FDI$	0.523	-	0.493
$\Delta \ln GDP$	6.713***	0.144	-
Joint (All)	6.923**	0.179	2.613

Source: Authors' Computation 2021. **Note:** TRP denotes Tax Revenue Performance, FDI denotes Foreign Direct Investment and RGDP represents Real Gross Domestic Product. ***, ** and * 0.01, 0.05 and 0.10 levels of significance respectively.

As in Table 6, the results show that both Foreign Direct Investment (FDI) and Real Gross Domestic Product (RGDP) have joint significant effect on Tax Revenue Performance (TRP) $\chi^2 = 6.923$ ($P - value < 0.05$) in the long run. In addition, the Real Gross Domestic Product (RGDP) exhibits significant effect on Tax Revenue Performance (TRP) $\chi^2 = 6.713$ ($P - value < 0.05$) while Foreign Direct Investment (FDI) do not both in the short run. These result can be linked back to the parameter estimates in Table 5 and suggest that though FDI and RGDP have joint significant effect on TRP but RGDP has a unique significant influence on TRP in the short-run in this current study.

4.3 Discussion

The finding of this study as presented in the above Table 2 showed that foreign direct investment inflow had positive and significant effect on tax revenue performance in Nigeria. This result is in consonance with the findings of Sarisov and Koc (2010), on the impact of FDI inflow on corporate tax revenue in 21 OECD countries. It was ascertained that FDI inflow had positive impact on the corporate tax revenue in the selected OECD countries. Mahmood and Chaudhary (2013) examined FDI on tax revenue in Pakistan concluded that positive and significant impact exists between FDI and tax revenue. Okey (2013) demonstrated that FDI affects tax revenue positively and significantly on income and profit. Thus, a 10% increase in FDI inflows leads to 4.78% increase in total tax revenue. Aslam (2015), investigated a case study of Co-integration relationship between tax revenue and foreign direct investment: evidence from Sri Lanka. The study found that foreign direct investment has positive and significant impacts on tax revenue in Sri Lanka. Odabas (2016) investigated foreign direct investment inflows on tax revenue in the transition economies of European Union. It was found that, FDI inflow boost both the economic growth and tax revenue, while this translates to improvement in the welfare of these countries. Alabede (2016) investigated how tax revenue responds to financial inflow from FDI and foreign Aid? Panel evidence from West Africa Sub-Region. The result confirmed that tax revenue efforts of West Africa sub-region countries respond positively and significantly to the inflow of FDI and total foreign aid. Gobachew *et*

al. (2018) examined the determinants of tax revenue in Ethiopia, found that tax revenue is positively and significantly influenced by the foreign direct investment inflows in Ethiopia between 2000 – 2016.

Conversely, Million, *et al.* (2016) investigated the impact of foreign direct investment flows on aggregate and disaggregate tax revenues in Ethiopia. The study found that the foreign direct investment had a negative effect on the aggregate tax revenue both in the short and long run. Also, Bunescu and Comaniciu (2014) assessed the bivariate correlation between tax revenue and causal factors in 27 EU member countries, but found a weak correlation between tax revenue and FDI inflow.

On the other hand, Bayar and Ozturk (2018) examined the impact of foreign direct investment inflows on tax revenue in OECD countries: A panel cointegration and causality analysis. The study had mixed results, as FDI inflows had a positive effect on tax revenue in Iceland, Israel, Sweden, the United Kingdom and the United States; also FDI inflows exhibited a negative effect on tax revenue in Austria, France, Italy, and Poland.

V. Conclusion and Recommendations

The study examined the effect of foreign direct investment inflow on tax revenue performance in Nigeria for the period 1987-2019. The research provides both theoretical and statistical evidences that showed foreign direct investment inflow affects tax revenue performance in Nigeria. The study therefore, found that tax revenue performance is positively and significantly affected by the foreign direct investment inflows and real gross domestic products in Nigeria, in the long run. Therefore, it is recommended that government should create an enabling environment to attract more foreign direct investment inflows and be cautioned in granting more tax incentives. Also, provision of sustainable infrastructure, tackling corruption and terrorism will promote inflow of foreign direct investment and thus, resulting in higher tax revenue in Nigeria.

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