

Analysis of the Impact of Tax Revenue on Foreign Direct Investment in Nigeria

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Abstract: *This research looked at how tax revenue affected foreign direct investments (FDI) in Nigeria over a 21-year period, from 2000 to 2021. Time Series data from the CBN statistical bulletin, CBN annual reports, and the Federal Inland Revenue Service Annual Report were used in the analysis. Independent factors that were examined in relation to FDI were tax revenue as measured by the Petroleum Profit Tax (PPT), Corporate Tax (COT), Value Added Tax (VAT), Tertiary Education Tax (TEDT), and Custom and Excise Duties (CED). Descriptive statistics, correlation analysis, and multiple regression analysis were used on the dataset in E-VIEW version 9.0, and the results showed that PPT, COT, and VAT, had a significant effect on FDI, whereas TED and CED do not. The results of the study indicate that tax income plays a crucial role in attracting foreign direct investment in Nigeria. It is suggested that the government invest tax money in essentials like reliable electricity and well-maintained roads. The result would be a reduction in the overall cost of doing business in the country, which would encourage more investment. As a result, domestic investment will rise, further contributing to GDP expansion.*

Keywords: *Tax, Revenues, Corporate, Value Added, Excise Duties*

Introduction

The developed and developing nations rely on taxes. Even after oil, Nigerian governments have relied on tax revenue. Tax revenue was 26% in 2010, 52% in 2016, and 44% in 2017 (CBN, 2017). Alphonsus (2019) states that taxes is a powerful tool that governments use to raise revenue, set fiscal goals, and control consumption and production of certain goods and services. The 1993 Value Added Tax and 1994 Education Tax Acts, as well as the 2011 Personal Income Tax Amendment Act, were introduced to address this issue. The reforms, which underpin the government's fiscal strategy, sought to increase investment and consumption spending and correct external imbalances (Alphonsus, 2019).

Most economies use macroeconomic policies to attract foreign investment and raise tax revenue (Egwakhe and Odunsi, 2019). Tax instruments are a major part of fiscal policy and increase tax revenue, market deregulation, investment climate refinement, and investment opportunities. Fiscal strategy diversifies tax revenue without overburdening small businesses, which makes them vulnerable to external shocks and early mortality. Unhappiness, legal and quasi-sector tax collection, and various taxes all lower Nigeria's tax revenue. However, Osibanjo indicated that VAT earned N767 billion in 2015, N828 billion in 2016, and N972 billion in 2017, resulting in a combined non-oil sector increase of 25% but only 51% in 2017 (Vanguard, 2018). Given the reduction in foreign direct investment and the scale and depth of terrorism, this observation is favourable, but how long it will last is unclear. Economic integration and political democratisation have encouraged substantial investment, capital mobility, and financial flight across borders to seek economic opportunities and returns on investment. Opportunity-driven behaviour often reduces risk by diversifying assets, accessing new markets, labour, and natural resources (Egwakhe and Odunsi, 2019).

Thus, FDI globalises politics and economics. Foreign direct investment has become strategically significant in nations' economic booms due to its exponential expansion and sustainable development of nations' and global economies (Bayar & Ozturk, 2018). Thus, Ogbokor (2018) noted that FDI continues to vulcanize host economies, access global markets, and improve product and process quality. Jun (2015), Gaalya (2015), and Bayar and Ozturk (2018) found that FDI transfers technology, goods, and services. FDIs provide managerial competency and skills to improve organisational competence and overseas market access (Boora & Sandeep, 2017; Silesh, 2017). FDI and industrial growth should boost the host nation's tax collection.

Tax discourse says FDIs increase tax income, which is vital to the global village. Globalisation promotes cross-border investments to increase tax revenue (Egwakhe and Odunsi, 2019). Foreign direct investment helps countries embrace foreign technologies, develop human capital, and create jobs. These benefits generate corporation taxes. Taxes have a huge impact on foreign direct investment and the economy (Oyeabo, Azubike and Ebieri, 2019). Corporation tax policy is crucial to attracting foreign direct investment. Ekpung and Okoi (2014) say high company taxes hurt economic growth and deter foreign direct investment. Investors often compare countries' tax rates before investing. This study examines how tax income affects foreign direct investment in Nigeria.

Statement of the Problem

Despite years of fiscal policies, the economy hasn't stabilised. Foreign direct investment inflows rose from 0.91 percent in 1981 to 10.83 percent in 1994 before decreasing to 5.05 and 0.9 percent in 2009 and 2017, respectively (CBN, 2017).

Sato (2017) concluded that tax income negatively affects foreign direct investment in Europe, while Wolff (2016) found no such effect. Klemm and Parys (2019) discovered a strong negative relationship between tax revenue and foreign direct investment in poor nations; Babatunde and Adepeju (2018) found a positive relationship. Peters & Kiabel (2015), Akinwunmi, Olotu & Adegbe (2017), and Saidu (2015) also discovered a negative link between tax revenue and foreign direct investment in Nigeria.

Countries differed significantly. Nigerian research differs. Some research analysed data improperly. Most of the study was done in Europe and other developed nations, unlike Nigeria. Unfortunately, officials have applied these studies to Nigeria. This may worsen macroeconomic contradictions. Given the importance of foreign direct investment to Nigeria's economy, it's important to understand how various levies affect its entry.

According to a literature analysis, most studies used single and double independent variables to measure tax revenue and foreign direct investment in Nigeria. This study fills a literature gap on tax revenue's impact on foreign direct investment in Nigeria. The alarming rate of terrorism involves unlawful violence, various dangerous weapons, attack on larger society by group for the purpose of coercion, intimidation, and instilling fear in people and/or killing, acts like suicide bombing, car bombing, rocket propelled grenades, assassinations, abductions and kidnapping, disguising and hijacking for ideological purpose that focused extermination of human lives and destruction of properties.

Finally, tax revenue, such as Petroleum Profit Tax (PPT), Company Income Tax (CIT), Value Added Tax (VAT), Education Tax (EDT), and Custom and Excise Duties (CED), can discourage foreign direct investment into a sector of the economy. In Nigeria, these taxes are always rising. This study analyses tax revenue and foreign direct investment in Nigeria.

Review of Related Literature

Conceptual Review

Tax revenue, categories, and foreign direct investment were covered in the conceptual review. The literature review will cover these in detail.

Tax Revenue and Its Forms

Tax revenue pays for government spending (Hornby, 2010). Taxes are government-mandated (Hornby, 2010). In industrialised countries, it is a reliable revenue source (Ibanichuka, Akani, & Ikebujo, 2016). Even resource-dependent emerging nations are strengthening tax administrations to maximise tax revenue. Everyone pays income-based taxes (Ibanichuka et al., 2016). The government utilises taxation to address income inequality and social inequity (James, 2015). Revenue performance is determined by comparing actual tax collection to the percentage of predicted tax revenues (Cyan, Martinez-vazquez, & Vulovic, 2013).

Adenugba and Chike (2013) say Nigeria's government relies on tax revenue mobilisation. Global taxation includes company income tax. Any company's profits accruing in, derived from, brought into, or received in Nigeria in respect of, among other things, any trade or business for any period of time are subject to taxes, including education tax, petroleum profit tax, value added tax, and customs and excise duties (Balogun, 2015). Thus, taxation helps countries meet their needs and become self-sufficient. Taxes affect all economies worldwide (Abiola and Ehigiamusoe, 2014). Taxation is the government's most reliable source of revenue, according to Balogun (2015).

Direct and indirect taxes exist. Direct tax revenue is categorised. Educational, petroleum profit, corporate, and personal income taxes are examples. Indirect taxation in Nigeria is dominated by Value Added Tax and Customs and Excise Duty (Umoru & Anyiwe, 2013).

Foreign Direct Investment

Foreign direct investment (FDI) provides foreign exchange, capital, technology transfer, managerial skills, job creation, and higher exports to host nations, according to Arfan, Dawood, Abdullah, and Faudziah (2012). Foreign direct investment (FDI) boosts economic growth in the emerging global economy (World Development Report, 2011). Foreign direct investment (FDI) is a major source of foreign capital for developing countries' industrialisation and growth, making it an economic growth engine. In the 21st century, the International Monetary Fund (IMF) and the World Bank preferred FDI over foreign aid (FA) to start or support development processes, planning, and programming in poor countries (UNCTAD, 2016).

Overseas direct investment can also enter overseas markets in nations that restrict foreign goods. Khandare (2016) views FDI as a tool. As Imoudu (2012) found in their transactions, foreign direct investments can have negative effects. Imoudu (2012) found: Foreign ownership diminishes comparative advantage; foreign investors may devalue a firm without adding value to stakeholders; economic re-colonization or refined servitude; capital flight and wealth repatriation. FDI's face similar problems, but as they grow, so will their tax revenue.

Theoretical Review

Eclectic Paradigm of Dunning Theory

This analysis uses Dunning (1993)'s concept that FDI inflows are driven by market access, large-scale privatisation, and political and economic stability. The eclectic paradigm of Dunning, also known as OLI, proposes that the firm's size, access to markets and resources, ability to coordinate complementary activities like manufacturing and distribution, and ability to exploit differences between countries determine the realisation of three groups of ownership advantages. Thus, locational advantages such country natural endowments, transportation costs, macroeconomic stability, cultural traits, and government constraints, as well as internationalisation incentives from leveraging external market inefficiencies. Lowering uncertainty, transaction costs, and state-created faults like tariffs, foreign currency controls, and subsidies improves knowledge generation. Taxation and macroeconomic stability are considered in the host country. Effective tax and average tax rates determine tax incentive policy, while inflation and exchange rates determine macroeconomic stability (Alphonsus, 2019). Dunning (1981) does not discuss the multiple ways taxation affects OLI conditions and FDI decisions.

The "direct effect" of host country taxation on the after-tax hurdle rate of return on investment and the "budget effect," which recognises the basic role of tax in funding government programmes (e.g. infrastructure development, education) that lower costs of accessing factors in the host country, may be important factors in an investor's assessment of host country location advantages. The OLI paradigm emphasises many crucial decision margins that drive FDI choices and flows. The framework suggests export sales and licencing as alternatives to FDI. The framework emphasises the need to account for concerns, including applicable tax elements (e.g. tax relief for exports), related to the costs of relying on these alternatives when assessing the relative importance of tax among other factors influencing FDI (Alphonsus, 2019).

Inbound and outbound tax incentives may effect net foreign direct investment. Taxes positively affect inbound investment if retained earnings tax rates are considered (Leibfritz, Thornton & Bibbee, 1997). Home country taxation can also affect FDI decisions. If domestic and foreign investments achieve the same purpose (e.g., producing the same good), substitutability between investment locations might effect FDI. Thus, FDI may be affected by both the effective tax rate on FDI income and the effective tax rate on equivalent investments in the home nation (Jun, 1994). Taxes can effect global investment by changing net profitability. Foreign direct investment (FDI) sometimes involves multiple tax jurisdictions, making multinational corporations' tax treatment of foreign source income in their home country difficult (Alphonsus, 2019).

2.4 Empirical Review

Oladipo, Olubunmi, Olusegun, and Dada (2020) examined how business income tax mediates the effect of foreign direct investment on Nigerian revenue. Secondary data sources were examined to illustrate the issue. The National Bureau of Statistics, related literature, and the Central Bank of Nigeria's Statistical Bulletin provided secondary data. Foreign direct investment, company income tax, petroleum profit tax, and corporate tax data from 1990 to 2020 was extracted using ordinary least square regression, including T-test, R-square, Standard Error Test, Durbin Watson test ADF/PP unit root and co-integration test. Empirical evidence shows FDI boosts Nigerian revenue. Co-integration between variables showed that foreign direct investment positively affects revenue creation, using business income tax as a mediating component. Foreign direct investment boosts corporate income tax revenue, which boosts Nigeria's economy. Thus, to boost tax revenue and economic growth, the government should prioritise policies that attract FDI and use it to fund infrastructure development.

Gasparnien, Remeikien, and Ivickien (2020) examined how foreign direct investment affects Lithuanian tax revenue. The empirical component of the article examines the relationship between FDI, tax revenues, and personal income, value added, and corporate income taxes using data from 2008 to 2017. Correlation and regression analysis were utilised to analyse and compare scientific material. According to the analysis, foreign direct investment boosts tax collection overall, although its effects vary by tax type. The data showed value added tax collections were most affected. Thus, foreign direct investment appears to boost tax revenue.

Alphonsus (2019) examined how tax revenue affected foreign direct investment in Nigeria from 1981 to 2017. OLS was used to analyse data from the Central Bank of Nigeria's Statistical Bulletin and the National Bureau of Statistics. Nigerian tax income appears to be linked to foreign direct investment throughout time. Long-term, corporate and personal income taxes hurt foreign direct investment, whereas value added tax and customs and excise duty help. Based on the findings, the government should provide infrastructure, eliminate taxes, simplify tax laws, and lower tax rates to encourage investment.

Terrorism negatively affected FDI-tax revenue performance in Nigeria from 1987 to 2016, according to Egwakhe and Odunsi (2019). An econometric model was followed by hierarchical regression analysis. The Jarque-Berra test showed that the series are normally distributed because the data were robust, appropriate, and met the goodness of fit condition. FDI and tax revenue performance negatively influenced terrorism (-75213.95 and likelihood 0.000), with Adjusted R² 0.9098 and F-stat 95.144. Improving national security would boost tax returns, payments, and foreign investor confidence in Nigeria.

Oyeabo, Azubike, and Ebieri (2019) examined corporate taxation and Nigerian foreign direct investment. Ex post facto analysis employed data from the Central Bank of Nigeria Statistical Bulletin and Federal Inland Revenue Service annual reports from 1985 to 2016, a time of considerable economic liberalisation. Cointegration regression and unconstrained vector auto regression were used to assess the variables' relationship. In Nigeria, petroleum profit tax, education tax, and business income tax have inverse and direct links with foreign direct investment, respectively. It found that corporate taxes have a considerable impact on foreign direct investment in Nigeria and that the government should pursue comprehensive tax reform to increase inflows.

Ade, Rossouw, and Gwatidzo (2018) examined SADC tax revenue performance from 1990 to 2010 using panel data estimation methods. FDI and taxation (CIT rates, VAT rates, tax policy harmonisation variables) on regional tax income were examined. According to the findings, SADC tax income is responsive to VAT and CIT rates and tax policy harmonisation variables but not FDI inflows.

Kinwunmi, Olotu, and Adegbe (2017) examine Nigeria's 1996–2015 FDI inflow and several taxes. This ex-post facto study uses Central Bank of Nigeria Statistical Bulletins and National Bureau of Statistics data. Ordinary Least Square estimated time series data. According to the data, many taxes negatively impact FDI in Nigeria.

Amuka and Ezeudeka (2017) examined whether the incentive strategy changed foreign direct investment into Nigeria's non-oil industry between 1999 and 2016. The study employed a log-log multiple regression model for analysis. The regime transition model helped us evaluate the late-1999 strategy. Corporation income tax and investment allowance symbols were correct. The country's tax incentive policy affected foreign investment in the non-oil sector, suggesting that it can help resuscitate the sector.

Zwick & Mahon (2017) explored how transient tax incentives affect equipment investment using accelerated depreciation. After analysing 120,000 business records, the study reached three conclusions. First, bonus depreciation increased eligible capital investment by 10.4% and 16.9% between 2001 and 2004 compared to ineligible capital. Small firms reacted 95% more than large businesses. Third, firms preferred immediate cash flows over future cash flows. Variability in investment-weighted estimates supports fixed cost or financial friction hypotheses.

Research Methodology

This study used ex-post-facto research. Ex-post-facto (or casual comparative) study looks backwards to explain why relationships exist, by examining how past factors affected current events. Ex-post-facto research examines how independent variables affect the dependent variable. This study should use the ex-post facto research strategy since the independent variables cannot be directly manipulated. The research is post-event.

This study employed time series data from the CBN statistical bulletin, CBN annual reports, and Federal Inland Revenue Service Annual Report for the study period of 2000-2021. This study used data analysis. Time series data were tested for unit roots using Variance Inflation Factor Multicollinearity, Breauch-Godfrey Serial Correlation LM, Breusch-Pagan-Godfrey, and Ramsey tests. RESET, Augmented Dickey-Fuller Unit Root Test. Descriptive statistics and correlation analysis determined the independent-dependent relationship. E-VIEW 9.0 Statistical Analytical Software investigated this hypothesis using multiple regressions. The goal is to estimate the variables' deterministic relationship according to theory. Multiple regression models use longitudinal data to explain changes in the dependent variable based on changes in independent or explanatory factors.

The model states that tax collection from petroleum profit tax (PPT), company income tax (CIT), value added tax (VAT), tertiary education tax (TEDT), and custom and excise duties (CED) greatly affects foreign direct investment (FDI).

The implicit and explicit regression model forms are:

The implicit model is below:

$$FDI=f(PPT, CIT, VAT, TEDT, CED).$$

Restating the model explicitly:

$$FDI = b_0 + b_1PPT_{t-1} + b_2CIT_{t-1} + b_3VAT_{t-1} + b_4TEDT_{t-1} + b_5CED_{t-1} + U_{t-1}$$

Where:

FDI = Real Gross Domestic Product

PPT = Petroleum Profit Tax of a particular period

CIT = Company Income Tax of a particular period

VAT = Value Added Tax of a particular period

CED = Custom and Excise Duties of a particular period

TEDT = Tertiary Education Tax of a particular period

U_t = Error (stochastic) term that covers other sources of tax revenue not covered here.

b_0 = Regression intercept

b_1, b_2, b_3, b_4, b_5 =Regression coefficient

Result and Discussions

Table 1: Descriptive Statistics for the Independent and Dependent Variables

	LOGFDI	LOGPPT	LOGCOT	LOGVAT	LOGTEDT	LOGCED
Mean	4.674693	3.240760	2.654451	2.605788	1.846428	2.494040
Median	4.824754	3.255610	2.817764	2.750431	2.033063	2.473487
Maximum	5.154778	3.640024	3.214102	3.185024	2.448706	2.922881
Minimum	3.693463	2.593508	1.909021	1.752816	0.892095	2.006894
Std. Dev.	0.417988	0.291604	0.450918	0.413786	0.505267	0.260041
Skewness	0.826468	0.456218	0.462522	0.539537	0.491916	0.109224
Kurtosis	2.650921	2.436677	1.681859	2.066634	1.872365	1.969184
Jarque-Bera	2.497299	1.006137	2.269051	1.781125	1.866238	0.971514
Probability	0.002892	0.004672	0.001575	0.000425	0.003325	0.005231
Sum	98.16855	68.05597	55.74347	54.72154	36.92855	52.37483
Sum Sq. Dev.	3.494284	1.700664	4.066547	3.424371	4.850603	1.352422
Observations	22	22	22	22	22	22

Source: E-VIEW 9.0 Output, 2023.

PPT had a mean of 3.2408 within the period 2000 to 2020, with a maximum and minimum of 3.6400 and 2.5935 respectively while the Std. Dev. is 0.2916. This shows that PPT volatility is about 29.16%. COT had a mean of 2.6545 within the period 2000 to 2020, with a maximum and minimum of 3.2141 and 1.9090 respectively while the Std. Dev. is 0.4509. This shows that COT volatility is about 45.09%. VAT had a mean of 2.6058, with a maximum and minimum of 3.1850 and 1.7528 respectively while the Std. Dev. is 0.4138. This shows that VAT volatility is about 41.38%. TEDT had a mean of 1.8464, with a maximum and minimum of 2.4487 and 0.8921 respectively while the Std. Dev. is 0.5053. This shows that TEDT volatility is about 50.53%. CED had a mean of 2.4940 with a maximum and minimum of 2.9229 and 2.0069 respectively while the Std. Dev. is 0.2600, this shows that CED volatility is about 26%. FDI had a mean of 4.6747, with a maximum and minimum of 5.1548 and 3.6935 respectively while the Std. Dev. is 0.4180. This shows that FDI volatility is about 41.80%.

Table 2: Variance Inflation Factors Multicollinearity Test

Variance Inflation Factors

Date: 10/11/21 Time: 14:48

Sample: 2000 2020

Included observations: 20

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.217625	252.9684	NA
LOGPPT	0.024825	309.0761	2.204073
LOGCOT	0.267768	2300.036	7.515096
LOGVAT	0.231878	1906.423	4.031073
LOGTEDT	0.028496	120.9639	8.033626
LOGCED	0.040546	298.6123	3.087356

Source: Eview, 9.0 Outputs, 2023.

Multicollinearity occurs in a data set when two or more independent variables in multiple regression models are highly correlated. In order to ensure that the results of this study are valid, the variance inflation factor (VIF) computed as shown in Table 4.5.1. Furthermore, the Centered Variance Inflation Factor (CVIF) statistics for all the independent variables consistently lies between 2.2041, 7.5151, 4.0311, 8.0336 and 3.0874 for Petroleum Profit Tax (PPT), Corporate Tax (COT), Value Added Tax (VAT), Tertiary Education Tax (TEDT) and Custom and Excise Duties (CED) respectively. This indicates the absence of multicollinearity problems among the variables under investigation because the cut off value of VIF is 10. Values of VIF that exceed 10 are often regarded as indicating multicollinearity.

Table 3: Data Validity Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.316154	Prob. F(2,12)	0.7348
Obs*R-squared	1.001098	Prob. Chi-Square(2)	0.6062
		Durbin-Watson stat	1.963411

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.105792	Prob. F(5,14)	0.4007
Obs*R-squared	5.662318	Prob. Chi-Square(5)	0.3405
Scaled explained SS	4.877301	Prob. Chi-Square(5)	0.4310
		Durbin-Watson stat	1.320228

Ramsey RESET Test

Equation: UNTITLED

Specification: LOGFDIC LOGPPT LOGCOT LOGVAT

LOGEDT LOGCED

Omitted Variables: Squares of fitted values

	Value	Df	Probability
t-statistic	1.650004	13	0.1229
F-statistic	2.722512	(1, 13)	0.1229
Likelihood ratio	3.802884	1	0.0512

Durbin-Watson stat 1.692008

Source: E-view, 9.0 Outputs, 2023.

From the Table 3 above, it confirms that the Durbin Watson stat that our data has no traits of autocorrelation. **indicates that the model is homoskedastic since the probability values of three parameters are greater than 0.05 level of significance. Ramsey test result reveals that our model is correctly specified and is stable.

Table 4: Augmented Dickey-Fuller Unit root Test

Test Variables	ADF Test Statistic Value	Mackinnon Critical Value @ 5%	Order of Integration	P-Value	Durbin-Watson Statistics	Decision
LOGFDI	-7.830161	-3.029970	1(1)	0.0000	0.608047	Stationary
LOGPPT	-3.678642	-3.029970	1(1)	0.0137	1.827794	Stationary
LOGCOT	-4.004486	-3.831511	1(1)	0.0225	1.514584	Stationary
LOGVAT	-3.982602	-3.029970	1(1)	0.0073	1.544907	Stationary
LOGTEDT	-4.632648	-3.065585	1(1)	0.0026	1.029478	Stationary
LOGCED	-4.169362	-3.029970	1(1)	0.0026	1.225631	Stationary

Source: E-VIEW, 9.0 Outputs, 2023.

The summary of the ADF unit root test output in Table 4.6.1, above revealed that all the variables under investigation i.e. FDI, PPT, COT, VAT, TEDT and CED contain unit root test at their first difference 1(1). Evidence of this could be seen from the value of their respective ADF statistics which is more than the critical value at 5%. Moreover, additional evidence of stationary series could also be seen from the p-value for all variables which is less than 5% level of significance greater than 95% confidence level. They all attained stationarity at first difference i.e. at order one. The Durbin-Watson stat indicates that the data has no traits of autocorrelation problem

Table 5: Correlation Matrix

	LOGFDI	LOGPPT	LOGCOT	LOGVAT	LOGTEDT	LOGCED
LOGFDI	1.000000					
LOGPPT	0.569599	1.000000				
LOGCOT	0.545386	0.713462	1.000000			
LOGVAT	0.520246	0.690719	0.986356	1.000000		
LOGTEDT	0.596593	0.690270	0.929908	0.924804	1.000000	
LOGCED	0.504697	0.646645	0.766649	0.716778	0.658918	1.000000

Source: E-VIEW 9.0 Output, 2023.

Finally, the correlation matrix that is presented in Table 4.6.1 shows the absence of multi-co linearity among the variables since the correlation values are less than 0.7. Furthermore, the result shows the explanatory variables namely; PPT, COT, VAT, TEDT and CED have strong positive correlation with FDI in Nigeria.

Table 6: Regression Result

Dependent Variable: LOGFDI

Method: Least Squares

Date: 10/04/21 Time: 14:46

Sample: 2000 2021

Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.187907	0.466503	4.690017	0.0003
LOGPPT	0.295045	0.147558	1.872607	0.0422
LOGCOT	1.324983	0.517463	2.560537	0.0226
LOGVAT	0.582271	0.281537	2.068186	0.0466
LOGTEDT	0.051222	0.168809	0.303434	0.7660
LOGCED	-0.226944	0.201359	-1.127061	0.2787
R-squared	0.924354	Mean dependent var		4.701861
Adjusted R-squared	0.897337	S.D. dependent var		0.409382
S.E. of regression	0.131171	Akaike info criterion		-0.981311
Sum squared resid	0.240880	Schwarz criterion		-0.682592
Log likelihood	15.81311	Hannan-Quinn criter.		-0.922998
F-statistic	34.21428	Durbin-Watson stat		1.565642
Prob(F-statistic)	0.000000			

Source: E-view 9.0 Output, 2023.

PPT and FDI

The t-ratio of 1.8726 is less than 2, indicating that PPT has a substantial impact on FDI, while the p-value of 0.0422 is less than the significant value of 0.05. With a value of 0.2950, PPT indicates a favourable relationship with FDI. Increases in FDI of 29.5% can be expected for every 1% change in PPT. Foreign direct investment (FDI) in Nigeria is significantly impacted by PPT. Edewusi & Ajayi, (2019) and Gasparnien, Remeikien, and ivickien (2020) both agree with the finding, however Oyeabo, Azubike, and Ebieri (2019) disagree.

COT and FDI

The t-ratio of 2.5605 is more than 2, indicating the significant impact that COT has on FDI, while the p-value of 0.0226 is less than the significance value of 0.05. With a COT coefficient of 1.3250, a 1% rise in COT would result in a 132.5 % increase in FDI. However, this result is consistent with those of Omoye and Edo (2018), Edewusi and Ajayi (2019), and Naomi and Sule (2015), while contradicting those of Gwa and Kase (2018).

VAT and FDI

The t-ratio for VAT is larger than 2, and the p-value is 0.0466, which is less than the significant value of 0.05, demonstrating the substantial impact that VAT has on FDI. VAT has a positive correlation with FDI (coefficient of 0.5823). Changes of one per cent (1%) in VAT would result in a 58.23% rise in FDI. The Value-Added Tax (VAT) in Nigeria has a major impact on FDI. This result is consistent with those of Alphonsus (2019) and Binglar and Angaye (2020).

TEDT and FDI

The t-ratio of 0.3034 is less than 2, indicating the significant impact TEDT has on FDI, and the p-value of 0.7660 is greater than the significance value of 0.05. The TEDT coefficient is 0.0512, suggesting that TEDT encourages foreign direct investment. An rise of 1% in TEDT is implied to result in an increase of 5.12% in FDI. This result contradicts those of Oyeabo, Azubike, and Ebieri (2019) and Gasparnien, Remeikien, and ivickien (2020).

CED and FDI

CED has a significant impact on FDI, as shown by the t-ratio of -1.1271, which is less than 2, and the p-value of 0.2787, which is greater than the significance value of 0.05. A negative coefficient for CED (-0.2270) suggests that CED discourages foreign direct investment. If CED were to increase by 1%, FDI would fall by 22.7%, as implied. The results are consistent with those of Chigbu and Njoku (2015) but at odds with those of Alphonsus (2019).

Conclusion and Recommendations

The effect of taxes on Nigeria's GDP expansion from 2000 to 2021 was analysed here. Compared to TEDT and CED, the results showed that PPT, COT, and VAT have a far larger impact on FDI. The results of the study indicate that tax income plays a crucial role in attracting foreign direct investment in Nigeria. The suggestions below are offered in hopes that:

1. As a first priority, the government should invest tax money in essential services like reliable electricity and well-maintained roads. The result would be a reduction in the overall cost of doing business in the country, which would encourage more investment. As a result, domestic investment will rise, further contributing to GDP expansion.
2. To promote tax compliance, boost investment, and entice foreign investment, the government's plan is to lower the corporate income tax rate to 20% or less.
3. Streamlining and harmonising taxes across the federation will boost Nigeria's productive output, thus the government should do so.
4. The government should simplify tax rules for clarity and update such laws regularly to maintain them in pace with advancements in the Nigerian economy. The Taxes and Levies Approved for Collection Act No. 21 of 1998 must be strictly enforced.

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