sciendo
STUDIA UNIVERSITATIS ECONOMICS SERIES
"Vasile Goldiș" Western University of Arad
SUES
2021 - 31(1) DOI: 10.2478/sues-2021-0004

ANALYSIS OF THE IMPACT OF NON-OIL TAXATION ON FOREIGN DIRECT INVESTMENT AND ECONOMIC SERVICES IN NIGERIA

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(Received: October 2020; Accepted: December 2020; Published: January 2020)

Abstract. *This study assessed the nonoil taxation effect on foreign direct investment and economic services from 1994 to 2019 in Nigeria. This study further evaluated the causality bearing amid foreign direct investment, economic services, value-added tax, company income tax, capital gain tax, custom and excise duties, and education tax, devotedly hiring Units root, VECM, Johansen co-integration, and Granger causality tests. Outcomes uncovered that value-added tax has a positive significant effect on economic services but a negative influence on foreign direct investment. Furthermore, value-added tax granger-cause foreign direct investment and economic services. It is also exposed that company income tax and capital gain tax possessed short-run and long-run negative significant influence on foreign direct investment but positive influence on economic services. More so, custom and excise duties upsurge economic services and foreign direct investment positively and significantly. Conclusively, taxation has negative significant impacts on foreign direct investment but upsurge economic services positively in Nigeria. It is recommended that since company income tax impacted foreign direct investment negatively both in the long run and short run, the government should lessen company income tax and upsurge capital allowance bestow on foreign direct investment in order to improve and attract foreign direct investment which will perpetually decrease poverty rate in Nigeria. Also, the government should employ taxation to realize more improvement in economic services and minimize all barriers to foreign direct investment attraction such as import duties and other levies to inspire investors.*

Keywords: Foreign direct investment; Non-oil taxation; Value added tax; Company income tax; Custom and excise duties; Economic services.

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JEL Classification: F21; H24; N61; L63

1. Introduction

Taxation (TA) has been employed by the government to influence economic activities and attain macroeconomic objectives of a nation such as improved aggregate demand and level of economic services, income distribution and pattern of resource allocation. Taxation is an involuntary contribution levied on private units such as individuals, properties, or businesses, which enables the government to carry out its capital projects in the country. It does not include public borrowing, user charge fee, gifts, fines and postal rate, etc. TA is basically designed to aid the government in actualizing its obligation for the entire socio-economic well-being of the inhabitant. However, issues often arise that require selective taxation to be applied when the economic concern in tax administration focus on improved economic stability and growth, and employment level in the country through FDI. Sunday, Arzizeh, and Okon (2013) highlighted that taxes trigger the net profit on capital, as well as affect the capital mobility between countries. In this view, Kaldor & Hume (2004) stated that there should be adjustment in the attitude geared towards inward foreign direct investment especially when most countries have opened their policies to entice investment from outsiders to their countries. He justified further that FDI is very important because investments from foreign companies increase tax revenue, exports, employment, innovation, and new technology into the economy.

In Nigeria, the attention for external sourcing of investment capital is anchored on two basic reasons. Firstly, it is based on a deprived level of domestic savings that have been insufficient for the actualization of long-term capital outlay required to rapidly accelerate economic development and growth. Secondly, it is based on the decline in the world market oil price of the 1980s which negatively affected the government's proceeds profile, leading to low economic activities in the country. FDI has been pronounced as investment prepared to obtain a lasting 10% management interest of voting stocks, and a minimum 10% share (equity) in a company functioning in a country apart from investor country (Nwillima, 2003; World Bank, 2007).

The influx of FDI has been drastically reduced because of the accelerated growth of non-oil taxation income garnered from foreign investors. However, a sharp drop in FDI aftermath led to a financial crisis. In order to find a solution to this problem, tax incentives were introduced mainly to persuade foreign capital inflow in the country. Meanwhile, it was assumed that the inflow of foreign resources raises the carrying capacity of the economy which is drastically reduced since the Nigeria oil boom. It was in these notions that Nigeria's investment promotion council in 1995 was founded to deliberate the effective tax incentive packages to promote,

coordinate, and encourage foreign investment inflow into the country, with particular consideration to commendable sectors and industries (Joseph and Fidelis, 2017). Hence, deliberation on how tax policy is designed in attracting foreign investors in developing economies like Nigeria.

FDI produces positive effects on host economies as believed by the policymakers. Some out of these advantages are foreign technology adoption and externalities. Externalities are employee training, licensing agreement, limitation, and the new processes introduced by foreign firms (Alfaro, 2006). Foreign investment is either a portfolio or direct investment that contains non-Citizens investment in the domestic economy. It is direct if it involves physical assets investment in a host country by foreign investors. According to Agbachi (1998), the main aim of foreign investors is to maximize their incomes. FDI has been regarded as the main source of economic growth through foreign firms which are perceived to dominate the tactical part of the mining and extractive sector which comprising oil industries. Furthermore, the excessive tax ratios submerge FDI in any country but those with reasonable tax rates influence and encourage FDI. Adegbite (2020) asserted that no investor can ever invest in a country where there is insecurity and high taxation as that would amount to taking an unnecessary risk because a high tax rate forcefully erodes foreign investment returns. It is exposed by UNCTAD that the indigenous economy has missed an aggregate of #1.33 trillion FDI due to high taxation. With this assertion, it is pertinent to examine non- oil taxation impact on FDI and economic services in Nigeria. Based on this background, the purpose of this study is to evaluate the effect of nonoil taxation on foreign direct investment in Nigeria. Another objective is to determine the impact of nonoil taxation on economic services in Nigeria.

2. Literature review

2.1. Taxation, Foreign Direct Investment (FDI) and Economic services

Taxation is regarded as the forceful income realized by the government from the consumption profit, incomes, and goods and services production. It also levied forcefully on personal incomes, company proceed, capital gains petroleum profit, and capital transfers. It is also an instrument engaged by the government to fully actualize its fiscal responsibilities (Adegbite, 2020). It is characterized by imperative attributes such as certainty, neutrality, convenience, cost of collection and equity (Adegbite, 2020).

2.1.1. Taxation's Functions

Taxation exhibited the responsibilities of allocation, control, incentive, regulation, and promoting.

1. Fiscal responsibilities are exhibited through budget formation which is pertinent for the actualization of the holistic and national state program. The fiscal roles provide for the attainment of a social goal and the establishment of the state's financial funds necessary for implementing the fiscal roles of social, defense, and environmental protection
2. Allocation as a germane responsibility of taxation articulates their benefit as a distinct centralized instrument of apportionment relations and comprises of social income reallocation to numerous sets of citizens from wealthy people which eventually provides social stability.
3. Taxation's regulatory function is initiated immediately after the state started taking an active part in society's economic arrangement. This function is intended to achieve specific taxation policy goals through taxation mechanism.
4. Control as a responsibility of taxation is displayed when the state superintends the economic/ financial activity of natural and juridical persons. This contributes further to monitor the sources of revenue and the bearings of spending.
5. The **incentive** role stipulates distinct taxation arrangements for a specific group of inhabitants, who are social go-getters (partakers in wars, etc.)

2.1.2. Foreign Direct Investment (FDI)

This is the procurement of real assets in a country by non-residents within the country. FDI similarly is the acquisition of real assets by non-residents within the country. It is commonly categorized as either vertical, conglomerate, or horizontal. Horizontal direct investments refer to a situation in which the investor creating the same kind of business operation as it is operating in its home country in a foreign country. Vertical investment is the investment in which dissimilar but interrelated business activities from the main business of investors are acquired or established in a foreign country.

A conglomerate kind of FDI is the one in which an individual or a company invests in a foreign business which devoid of connection with the home country's current business. Since this kind of investment comprises a firm in which an investor has no earlier knowledge, it frequently takes the method of a joint business with a foreign establishment previously operating in an industry. The aggregated benefits of FDI are listed below:

- FDI provides indigenous economic assistance in numerous locations. Any individuals or companies that partake in FDI provides indigenous community growth for their home and headquarters. Profits realized are frequently ploughed into business to increasing workers and organizational strengths which further emits new job opportunities and invariably upsurge community growth.

- FDI increases government revenue. FDI upsurges government realizable income levels, increase worker income which eventually creates new investment and incomes that assist societies to start sprouting.
- It also increases human resources. In developing and under-developed economies, human skills are inadequate in agricultural work, basic labor, and other entry-level skills. FDI creates educational opportunities for personal skill improvement.
- It aids foreign establishments with the required experience. Investors who convey more than money to FDI relationships can also transport their personal experiences within a precise industry. For the foreign establishment, such an investment can generate an instant flow in productivity. Investments can also aid better facilities for foreign business, enhanced equipment assets, and developed vendor access.
- FDI also produces new prospects for workers. Workers who are engaged by the investing establishment can travel abroad to acquire new experience, ideas and cultures which can upsurge their productivity at home. Foreign employees can secure better access for best practices in an establishment which assists them to generate new opportunities and experience as well.

2.1.3. Effect of Taxation on Foreign Direct Investment

Virtually, every government is powerful to entice FDI into their respective countries. It generates new opportunities, jobs, conveys new technologies and, generally promotes employment and growth. It results in a net increase in national income shared with the government through wages, profits, proceeds and income of foreign-owned companies' taxation, and other business taxes.

FDI also favorably upsurges local income through spillover effects such as new technologies introduction and human skill (capital) improvement. Given these probable advantages, policymakers can continually re-access their tax procedures to certify the attractiveness of an inbound investment. Tax strategies may also upkeep direct investment from abroad, as an outbound investment may support access to efficient production and foreign markets scale economies, resulting in increased and efficient net domestic income. In the same vein, governments invariably fulfill their promises to offer a competitive tax and conducive environment for FDI to thrive. Tax is regarded as an imperative factor in any progressive decisions on investment establishment. This translated that FDI is fascinated and motivated into countries where the tax rate is considerate, cost of production is minimized and profit is maximized through access to skilled labor, economic services, regulatory, and non-discriminatory framework, well-developed infrastructure, and low tax payment.

2.1.4. Economic Services (ECS)

An economic service refers to services provided by the government for the betterment of the populace. These services are provided to meet the wants and the needs of the people in the country. These are services considered imperatives and indispensable for the standard of living. Services such as defense, agricultural services, transportation and communication, road and construction, education, and other services are considered necessary for a better life. The government provides these services for the people for a free or lower cost for the purpose of creating a peaceful environment. It also provides these services to bridge the gaps between the rich and the poor in an economy. These essential services minimize the unnecessary fluctuations in an economy in the case of the capitalist in the system. According to Adegbite (2020), these economic services can be effectively implemented and achieved through the active collection of taxes. Taxation is designed to develop and improve socio-economic services and is executed through the allowances system, exemptions and other preference arrangements. The tax legislation in force demands the encouragement of taxpayer categories for their effective fulfilling of their civil right.

2.1.5. Company Income Tax: (COMPTAX)

The Companies Income Tax (COMPTAX) Act administers companies' taxation payable for assessment year profits at 30%, that is, it is based on the self-assessed of a preceding fiscal year of government. It includes profits derived from, accrued in, brought into and received from business, trade or investment. The duplication **(**regeneration**)** responsibilities are explained by taxing roads, exploitation of natural resources (mineral and primary resources), the state utilizes these incomes to redevelop the resources exploited. When FDI is attracted into the country, it is expected that such investment will be subjected to a 30% tax rate on the assessable profit. Thus, FDI and economic services are the function of company income tax.

2.1.6. Education Tax (EDT)

This referred to the tax forcefully imposed at 2% on the company assessable profit, that is, adjusted profit before tax and capital allowances of registered establishments in Nigeria. This is regarded as a social obligation to all companies to contribute to and support the country's educational development. It is also collected to enhance human capital development which invariably will bring in economic services and foreign direct investment. Also, When FDI is attracted into the country, it is expected that such investment will be subjected to a 2% education tax rate on the assessable profit.

2.1.7. Value Added Tax (VATTAX)

This was introduced in 1994 to replace sales tax at a 5% flat rate before the year 2020 but currently 7.5% on taxable goods and services at every stage of production which the final consumer swallows the burden. This type of tax is superintended by the Federal Board of Inland Revenue (FIRS) on behalf of the state government. It is also levied on imported goods but except exported goods, so as to encourage exportation of goods and services. It is applying to all supplied, manufactured, imported goods and services except those goods specifically exempted such as medical, pharmaceuticals products, learning, and educational materials and equipment. This tax also generates a relationship with FDI in terms of resources imported (raw materials) by the foreign investor for the operation in the home country. The government also benefitted from this tax because VATTAX is collected forcefully on every stage of FDI production, and the proceeds from such investment enhance ECS.

2.1.8. Custom and Excise Duties (CEDTAX)

Excise duties are forcefully imposed on goods manufactured locally while customs duties are imposed forcefully on imported goods from foreign countries to Nigeria. The dissimulating role inhibits socio-economic growth processes through the cognizant taxation burden exaggeration. These taxes support and encourage local infant industries through import prohibition. CEDTAX enhances foreign direct investment and also bring in economic services through an effective collection of this tax.

2.1.9. Capital Gain Tax (CGTAX)

CGTAX refers to tax forcefully collected on realized profit on the sale of non-inventory assets. CGTAX is gathered from the disposal of qualifying precious metals, bonds, real estate, stocks, and property. It is also tax collected from obtainable sale profit or exchange of specific assets. In Nigeria, CGTAX is 10% levied on the profits obtained from the disposal of the qualifying assets which is recognized under the CGTAX Act. CGTAX encourages stock market investment, real estate investment and other assets investment which produces business growth. CGTAX also generates more inequalities in income. That is people who have investment income fall already into the wealthy category. They possess enough disposable income for investments that produce a healthy investment return.

2.2. Theoretical Review

2.2.1. Financial Theory of Investment

The financial theory of investment was developed and propounded by James Duesenberry. This was known as the investment cost of capital theory. These

theories disregard the investment decision function of the cost of capital by the firm. They assumed that the tax rate epitomizes the cost of capital to the firm. It translates that unlimited funds are accessible to the organization at the market interest rate. This also translates that the capital of the company is determined according to the available tax rate. That is investment is the function of the tax and market interest rate. The tax rate of the country determines the level of investment in the country. In other words, the supply of capital of any organization is very elastic. In reality, an unrestricted supply of capital is not accessible to the organization in any time period at the market interest rate. This study is anchored on this theory because the availability of organization funds depends on the tax policy and interest policy of the country.

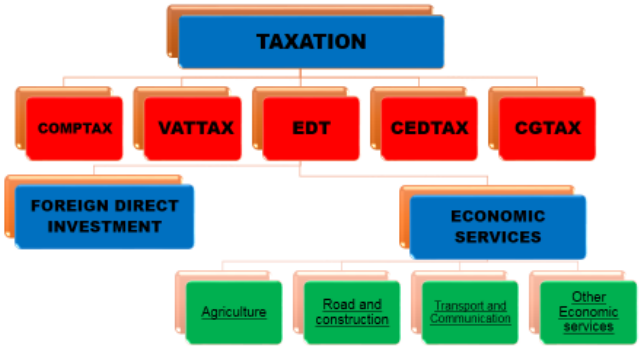

Figure 1 Conceptual Framework
Source: By authors.

2.3. Empirical Review of Related Studies

Oloyede (2012) examined the FDI impact on agricultural sector development in Nigeria. This research engages secondary data which covered 1981 to 2012. The results from the ADF test and granger causality test exposed the negative effect of FDI on agriculture. The study endorses that an enabling environment must be created to attract investment on both short- and long-term basis. This study is on the FDI effect on agriculture which was not extended to taxation.

Jamilu (2013) studied corporate taxation effect on FDI in Nigeria. The study employed secondary data which was obtained from the CBN statistical bulletin and National Bureau of Statistic publications from 1970 to 2013. It was concluded that corporate tax imparted FDI negatively. The research advocated that to further increase the economic climate for FDI in Nigeria, there is an urgent need for the Nigerian government to lessen the cost of operation by reducing drastically corporate tax rates to boost the influx of FDI into the country. However, this study was limited to a single component of taxation.

Adeleke**,** Olowe and Oladipo (2014) surveyed FDI impact on Nigeria economic growth. Secondary data were sourced from CBN publications such as annual reports, Statements of accounts and statistical bulletin. It was concluded that FDI had a positive significant effect on Nigeria's economic growth. It was further recommended that the government should liberalize the foreign sector in Nigeria so that all blockades to trade like import and export duties, arbitrary tariffs; and other levies should be amended to encourage investors. The FDI impact on economic growth was gauged in this study which was not elongated to taxation.

Rudolf (2014) examined taxation impact on OECD economic growth. In addition, the study evaluated the individual taxes' impact on the economic growth by employing regression analysis to gauged taxation impact on OECD countries from 2000 to 2011. This paper analysis was based on a protracted neoclassical growth model. Based on the analysis results it was evident that taxation impacted OECD economic growth positively and significantly. It is advocated that to stimulate the economic growth of OECD countries, personal income taxes and corporate taxation should be lowered, and income tax revenues should be substituted with indirect tax revenues. This study was surveyed in OECD but the resulting outcome cannot be implemented in Nigeria because of a different region.

In another study by Ojo and Oladipo (2017) where taxation implication on the construction industry in Nigeria was examined. Primary data was employed through administered questionnaires. Stimulated data were analyzed with inferential and descriptive tools. The study, after validating the negative significant effect of taxation on the Construction Company, suggested that appropriate supervision and understanding of tax policies and systems are required by tax authorities and investors in order to entice tax compliance. The study emphasized the taxation effect on Construction Company but not on FDI and ECS.

Okumoko, Akarara and Opuofoni (2018) observed FDI impact on Nigeria's economic growth using annual data collected from CBN statistical bulletin of 1981 and 2016. Johansen Co integration, Augmented Dickey Fuller (ADF), Pairwise Granger causality, and Error Correction Model (ECM) tests were employed to carry out an analysis. It was concluded that FDI has a positive significant impact on the economic growth of Nigeria. The study suggested that the construction of strong infrastructure that boosts a country's capital stock is highly needed by the private sector and government to enhance FDI influx which would eventually enhance economic growth. However, the outcome is mainly confined to economic growth.

Olaniyi, Ajayi and Oyedokun (2018) examined the tax policy incentives effect on FDI in Nigeria. The study embraced multiple regression, ex-post-facto research design, and correlation methods to analyze the data realized from the CBN database. It was suggested among others after validated the positive significant

effect of tax policy incentives on FDI, that government should look for a justifiable level of the VAT TAX and custom duty to be paid by foreign materials importers with maximum FDI level into the country. Though, the study gauged tax policy incentives effect on FDI only which is absolutely different from the current study.

Odhiambo and Olushola (2018) examined the relationship between economic growth and taxation in Nigeria. Ordinary least square (OLS) were employed in assessing the taxation specified model. It was concluded that taxation and economic growth embraced a positive relationship with each other. The study endorsed that government should establish an appropriate tax system with the importance of broadening the tax base, and there should be an upward review of tax rates to upsurge the tax effort and ensures taxation optimal contribution towards economic development and growth. Nonetheless, this study was also restricted to economic growth and taxation with different scope to the current study.

Adegbite and Fasina (2019) surveyed taxation impacts on Nigeria's revenue generation. Causality between revenue generation and taxation was also examined by utilizing the Johansen co-integration method and the Granger causality tests. The study concluded that taxation has a positive effect on revenue generation. The study recommended that the regulatory authorities assigned with accountability, and tax collection responsibility should further be empowered, supported, and motivated by the government to enforce taxpayers' compliance in order to upsurge revenue generated for the government to actualize its fiscal responsibilities.

Omodero (2019) investigated corruption effects on FDI inflows in Nigeria. The study garnered and analyzed data from 1996 to 2017 through the World Bank website and OLS method respectively. The findings from the reports of analysis coffered that corruption displayed a significant and positive effect on FDI. It was exposed further that inflation impacted FDI negatively and significantly but the exchange rate and Nigeria corruption ranking position impacted FDI positively and insignificantly. The study supported and recommended that strong institutions together with a legal system should be established by the government to curb the prevailing corruption so as to protect and save Nigeria's future. However, this study was restricted to corruption effects on FDI which was not elongated to non-taxation effects on FDI. Therefore, the economic implication of the study is irrelevant to the current scope.

Oyebanji, Adeigbe, Akintoye and Ogundajo (2019) investigated the real sector output effect on tax income in Nigeria. Secondary data through ex-post facto research design was embraced employing trend analysis, descriptive statistics, and stationary tests of Augmented Dickey Fuller (ADF) for data analysis. The study endorsed, after the validation of real sector positive increment effect on tax income, that government should strengthen effort on stimulating real sector growth in an economy in order to attain a more sustainable upsurge in tax income. Nonetheless,

the real sector output effect on tax income was examined in which the outcome is worthless to tax policy implementation.

The gap identified was on the scope, methodology and concept. Extant studies examined the taxation effect on economic growth, construction companies, and revenue generation in Nigeria and OECD. None of the studies examined the taxation effect on FDI and economic services, which was proxied by the aggregate of agriculture, road and construction, other economic services, transportation and communication, in Nigeria. Also, the scope of this study was elongated to 2019 from 1994 which makes the research unique and stand out among the existing studies.

3. Methodology

This research examined the effect of non-oil taxation on FDI and economic services in Nigeria from 1994 to 2019. The data sourced from CBN statistical bulletin and FIRS publications from 1994 to 2019 are COMPTAX, CGTAX, EDT, VAT TAX and CEDTAX, FDI and economic services (ECS) which were analyzed through Co integration, VECM and granger causality test in order to examine non-oil taxation effects on FDI and economic services in Nigeria. Thus, the study hypothesized as follows:

H1: Non-oil taxation significantly influences FDI positively in Nigeria
H2: Non- oil taxation significantly enhances economic services
H3: COMPTAX significantly affects FDI and economic services in Nigeria.
H4: Education tax significantly enhances FDI and economic services in Nigeria.
H5: VATTAX significantly influences FDI and economic services in Nigeria.
H6: Custom and Excise Duties significantly affect foreign direct investment and economic services in Nigeria.
H7: CGTAX significantly influences FDI and economic services in Nigeria.

Model Specification

Model 1

To examine the non-oil taxation effect on FDI in Nigeria. FDI is taken as a dependent variable while taxation components such as COMPTAX, CGTAX, EDT, VATTAX and CEDTAX are independent variables. The regression models are:

$$FDI = f(COMPTAX, CGTAX, EDT, VATTAX, CEDTAX\ \mu) \quad (1)$$

$$FDI = a0 + a1COMPTAX + a2CGTAX + a3EDT + a4VATTAX + a5CEDTAX + \mu1 \quad (2)$$

Model 2

To examine the non-oil taxation effect on economic services in Nigeria. Economic services (proxied by summation of agriculture, road and construction, other economic services, transportation and communication) is taken as the dependent

variable while taxation component such as COMPTAX, CGTAX, EDT, VATTAX & CEDTAX are taken as independent variables.

$$ECS = f(COMPTAX, CGTAX, EDT, VATTAX, CEDTAX\ \mu) \quad (3)$$

$$ECS = a0 + a1COMPTAX\ + a2CGTAX + a3EDT + a4VATTAX + a5CEDTAX + \mu1 \quad (4)$$

Where: ECS - Economic Services, COMPTAX - Company Income Tax, CGTAX - Capital gain Tax, EDT - Education Tax, VATTAX - Value Added Tax, CEDTAX - Custom and Excise Duties

4. Results and discussion

4.1. Impact of Non-Oil Taxation on Foreign Direct Investment in Nigeria

Table 1 The Effect of Non-Oil Taxation on Foreign Direct Investment in Nigeria

Dependent variable	Independent variables	Coefficient	Standard error	T	P>|T|	(95% conf. Interval)
FDI	COMPTAX	-.857269	.211671	-4.05	0.005	-3.156734 1.442195
	CGTAX	-1.610705	.380962	-4.23	0.001	-2.433725 -.7876846
	VATTAX	2.754073	.986225	2.79	0.015	-.6.234639 48.84683
	CEDTAX	1.144148	.492051	2.33	0.037	.8113825 22.07158
	EDT	-.643034	.1670221	-3.85	0.010	-139.4585 10.85153
	CONSTANT	-1805.62	617.1086	-2.93	0.012	-3138.802 -472.4378
$R^2 = 0.6414$	Adj R^2 = 0.6189	Prob > F = 0.0000	Root MSE = 882.26		F(5, 13) = 41.78	

Source: Author's computation (2020)

Table 1 displayed non-oil taxation effect on FDI in Nigeria. 1% rise in COMPTAX reduced FDI by 0.86%. This advocates that COMPTAX has negative significant effect on FDI (β=-.857269, t = -0-81, P>|t| =0.435). Also, 1% rise in CGTAX reduced FDI by 1.61%. This translated that CGTAX imparted FDI negatively and significantly (β=-1.610705, t = -4.23, P>|t| =0.001). That is if CGTAX rises, FDI reduces. More so, 1% upsurge in VATTAX increased FDI by 2.7%. This further suggested a positive significant effect of VATTAX on FDI (β=2.754073, t = -2.79, P>|t| =0.015). More so, 1% upsurge in CEDTAX increased FDI by 1.14%. This also revealed a positive significant effect of CEDTAX on FDI (β=1.144148, t = 2.33, P>|t| =0.037). This is signifying that if CEDTAX upsurges, FDI also upsurges. 1% increases in EDT reduced FDI by .64%. This displayed a negative significant effect of EDT on FDI (β= -.643034, t = -3.85, P>|t| =0.010).

R^2 realized as 64% divulged that explanatory variables are responsible for the variation of non-oil taxation effect on FDI in Nigeria. In the same vein, adjusted R^2 as 61.8% forecasted the incorporated independence variables are sufficed for the determination of non-oil taxation effects on FDI. The residual 38.2% divulged the stochastic error. The hypothesis that non-oil taxation significantly influences FDI

in Nigeria cannot be rejected or discarded. Therefore, non-oil taxation significantly influences FDI in Nigeria. Non-oil taxation is effectively reduces FDI (p-value = 0.012 < 0.05).

In order to check the stationary of the variables involved in this study, the ADF unit root test was employed to know the variable with a unit root. It was discovered that all variables are stationary at level. This predicted that there is a long-run relationship amid the variables employed. Since all the variables are stationary at level, there is the existence of cointegration amid the variables.

Table 2 Unit Root Test

Variables	ADF stat	1% critical value	5% critical value	10% critical value	Order of integration	Remark
FDI	-5.609	-3.240	-3.100	-2.850	I(0)	Stationary
ECS	-6.323	-3.240	-3.100	-2.850	I(0)	Stationary
COMPTAX	-4.892	-3.240	-3.100	-2.850	I(0)	Stationary
CGTAX	-3.742	-3.240	-3.100	-2.850	I(0)	Stationary
VATTAX	-4.621	-3.240	-3.100	-2.850	I(0)	Stationary
CEDTAX	-3.391	-3.240	-3.100	-2.850	I(0)	Stationary
EDT	-3.415	-3.240	-3.100	-2.850	I(0)	Stationary

(*), (**) and (***) means stationary at 1%, 5% and 10% respectively.
Source: Author's computation (2020)

To circumvent underestimate and overestimate involvement of Lag, the selection order criteria test was employed. It was discovered that all the tests involved supported lag 4. HQIC, SBIC and AIC tests all chose four lags, as indicated by the "*" in the output in Table 3.

Table 3 Selection-Order Criteria

Lag	LL	LR	Df	P	FPE	AIC	HQIC	SBIC
0	-1143.29			0.000	3.8e+29	85.1323	85.2179	85.4203
1	-955.831	374.91	36	0.000	5.5e+24	73.9134	74.5128	75.9292
2	-874.656	162.35	36	0.000	3.0e+23	70.5671	71.6803	74.3106
3	-696.837	355.64	36	0.000	3.8e+19	60.062	61.6889	65.5333
4	1348.21	4090.1*	36	0.000	5.3e-43*	-88.756*	-86.6153*	-81.5569*

Endogenous: FDI, COMPTAX, CGTAX, VATTAX, CEDTAX,EDT
Exogenous: _cons. Source: Author's computation (2020)

To confirm the selection-order criteria output result in gauging the suitable Lag, vector auto regression (VAR) was also analyzed. VAR also supported Lags four because HQIC, SBIC and AIC tests all confirmed four lags as indicated by * in Table 4, Table 5 and Table 6 comprised information on the sample, overall model fit statistics and the fit of each equation. According to Table 6, a 1% upsurge in

COMPTAX reduced FDI by 0.24%, this displayed that the long-run negative effect of COMPTAX on FDI existed. Also, 1% rises in CGTAX also downplayed FDI by 0.96%, this also displayed a long-run negative effect of CGTAX on FDI. In the same vein, a 1% rise in EDT, downplayed FDI by .99%. This also displayed a negative long-run significant effect of EDT on FDI. Contrarily, a 1% upsurge in VATTAX raised FDI by 6.29%. This contrarily shows a long-run positive effect of VATTAX on FDI. 1% rise in CEDTAX, diminished FDI by .27%. This further displayed a negative long-run effect of CEDTAX on FDI. The Coefficient appeared to be statistically significant which was confirmed by P>|z| = 0.000.

Table 4 Vector Auto regression

Equation	Parms	RMSE	R-sq	chi2	P>chi2
FDI	13	586.566	0.9914	1969.496	0.0000
COMPTAX	13	273.048	0.8927	141.46	0.0000
CGTAX	13	418.947	0.9824	950.3603	0.0000
EDT	13	2.21029	0.9965	4901.892	0.0000
VATTAX	13	16.7811	0.9970	5661.722	0.0000
CEDTAX	13	36.5297	0.9910	1862.083	0.0000
Log-likelihood =.	Det (Sigma_ml) = -1.02e+07	AIC = 76.89942*	HQIC = 78.44988*	SBIC = 81.84998*	

Source: Author's computation (2020)

Table 5 Vector Error Correction Model

Equation	Parms	RMSE	R sq	chi2	P>chi2
D_ FDI	8	518.897	0.8423	48.05591	0.0000
D_ COMPTAX	8	370.246	0.4313	6.825719	0.5555
D_ CGTAX	8	652.813	0.6025	13.6429	0.0916
D_ EDT	8	4.46693	0.6086	13.99634	0.0819
D_ VATTAX	8	14.041	0.9233	108.3092	0.0000
D_CEDTAX		42.1156	0.6555	17.12309	0.0289
Log likelihood = -291.6162	Det(Sigma_ml) = -3.20e+07	AIC = 40.54308	HQIC = 40.80129	SBIC = 43.14075	

Source: Author's computation (2020)

Table 6 Johansen normalization restriction imposed

Beta	Coefficient	Std Error	Z	P>|z|	[95% Conf. Interval]
_ce1 FDI	1	.	.	.	.
COMPTAX	-.243849	.036395	-6.70	0.000	-.5060796 .9937777
CGTAX	-.963285	.112714	-8.55	0.000	-.7423696 1.1842011
EDT	-.999929	.289834	-3.45	0.005	-25.20421 23.20435
VATTAX	6.285831	1.703477	3.69	0.003	-1.005986 13.57765
CEDTAX	-.272418	.013567	-20.08	0.000	-29.90083 -24.5831
-CONS	3710.076	.	.	.	. .

Source: Author's computation (2020)

Table 7 divulged information on the number of cointegrating equations present in this study. The hypothesis advocates fewer or one cointegrating vector cannot absolutely be accepted because r =1 of 71.4663 is greater than 1% and 5% critical value of 68.52 and 76.07 respectively. Also, the hypothesis advocates fewer or two co-integrating vectors cannot absolutely be rejected since r = 2 which is 44.9085 is below 1% and 5% critical value of 47.21 and 54.46 respectively. This predicted that two co-integrating vectors existed among the variables sampled as indicated by * in Table 7.

Table 7 Johansen Tests for Co-integration

Rank	Eigen Value	Parm	LL	Trace statistic	5% critical value	1% critical	Eigen Value
0	-	6	-638.18078	110.6664	94.15	103.18	-
1	0.88671	17	-618.58075	71.4663	68.52	76.07	0.88671
2	0.77132	26	-605.30183	44.9085*1*5	47.21	54.46	0.77132
3	0.67628	33	-595.15096	24.6067	29.68	35.65	0.67628
4	0.50283	38	-588.86151	12.0278	15.41	20.04	0.50283
5	0.33651	41	-585.16937	4.6435	3.76	6.65	0.33651
6	0.22739	42	-582.8476				0.22739

Source: Author's computation (2020)

Table 8 displayed the granger causality test of the variables observed in this study. It was shown in the first table that COMPTAX granger caused FDI because Prob > Chi2 is 0.045 which less than 0.05 significant level. Also, CGTAX granger caused FDI because Prob>Chi2 is 0.000 which less than 0.05 significant level. That is CGTAX ignited FDI and also, FDI ignited CGTAX. EDT also granger caused FDI, this translated that EDT triggered FDI, and FDI triggered EDT (Prob>Chi2 is 0.000 which below 0.05). VATTAX in the same vein granger caused FDI because Prob > Chi2 is 0.011 which below 0.05 significant level. In addition, CEDTAX granger caused FDI as shown and predicted above that Prob > Chi2 is 0.000 which less than 0.05 significant level. Above all, all the variables jointly granger caused FDI. This is statistically believed as shown that Prob > Chi2 is 0.000 is below 0.05. Therefore, causality existed between non-oil taxation and FDI in Nigeria.

Table 8 Granger causality Wald tests –
Causality between Non-oil Taxation and Foreign Direct Investment

Equation	Excluded	chi2	Df	Prob> Chi2	Decision
FDI	COMPTAX	6.2148	2	0.045	COMPTAX granger-cause FDI
FDI	CGTAX	16.385	2	0.000	CGTAX granger-cause FDI
FDI	EDT	18.031	2	0.000	EDT granger –cause FDI

FDI	VATTAX	9.8593	2	0.011	VATTAX granger-cause FDI
FDI	CEDTAX	19.165	2	0.000	CEDTAX granger-cause FDI
FDI	ALL	72.233	10	0.000	ALL jointly granger cause FDI
COMPTAX	FDI	9.8603	2	0.032	FDI granger-cause COMPTAX
COMPTAX	CGTAX	1.0797	2	0.583	CGTAX did not granger-cause COMPTAX
COMPTAX	EDT	14.032	2	0.001	EDT granger-cause COMPTAX
COMPTAX	VATTAX	14.127	2	0.001	VATTAX granger-cause COMPTAX
COMPTAX	CEDTAX	1.8947	2	0.388	CEDTAX did not granger-cause COMPTAX
COMPTAX	ALL	65.117	10	0.000	ALL jointly granger –cause COMPTAX
CGTAX	FDI	28.792	2	0.000	FDI granger-cause CGTAX
CGTAX	COMPTAX	5.3887	2	0.068	COMPTAX did not granger-cause CGTAX
CGTAX	EDT	36.45	2	0.000	EDT granger-cause CGTAX
CGTAX	VATTAX	45.214	2	0.000	VATTAX granger-cause CGTAX
CGTAX	CEDTAX	52.392	2	0.000	CEDTAX granger-cause CGTAX
CGTAX	ALL	171.35	10	0.000	ALL jointly granger-cause CGTAX
EDT	FDI	20.129	2	0.000	FDI granger-cause EDT
EDT	COMPTAX	37.321	2	0.000	COMPTAX granger-cause EDT
EDT	CGTAX	10.088	2	0.006	CGTAX granger-cause EDT
EDT	CEDTAX	78.684	2	0.000	CEDTAX granger-cause EDT
EDT	VATTAX	.63398	2	0.728	VATTAX did not granger- cause EDT
EDT	ALL	292.96	10	0.000	ALL jointly granger-cause
VATTAX	FDI	47.741	2	0.000	FDI granger-cause VATTAX
VATTAX	COMPTAX	8.7361	2	0.000	COMPTAX granger-cause VATTAX
VATTAX	CGTAX	3.8788	2	0.013	CGTAX granger-cause VATTAX
VATTAX	EDT	10.259	2	0.144	EDT did not granger-cause VATTAX
VATTAX	CEDTAX	19.073	2	0.006	CEDTAX granger-cause VATTAX
VATTAX	ALL	97.189	10	0.000	ALL jointly granger-cause VATTAX
CEDTAX	FDI	25.593	2	0.008	FDI granger-cause CEDTAX
CEDTAX	COMPTAX	7.0975	2	0.029	COMPTAX granger-cause CEDTAX
CEDTAX	CGTAX	1.1642	2	0.559	CGTAX did not granger-cause CEDTAX
CEDTAX	EDT	2.5694	2	0.277	EDT did not granger-cause CEDTAX
CEDTAX	VATTAX	3.5648	2	0.168	VATTAX did not granger-cause CEDTAX
CEDTAX	ALL	49.987	10	0.000	ALL jointly granger-cause CEDTAX

Source: Author's computation (2020)

Table 9 Direction of Causality between Non-Oil Taxation and Foreign Direct Investment

Equation	Excluded	chi2	Df	Prob> chi2	Decision
FDI	COMPTAX	6.2148	2	0.045	COMPTAX granger- cause FDI
COMPTAX	FDI	9.8603	2	0.032	FDI granger- cause COMPTAX
FDI	CGTAX	16.385	2	0.000	CGTAX granger - cause FDI
CGTAX	FDI	28.792	2	0.000	FDI granger- cause CGTAX
FDI	EDT	18.031	2	0.000	EDT granger- cause FDI
EDT	FDI	20.129	2	0.000	FDI granger- cause EDT
FDI	VATTAX	.98593	2	0.011	VATTAX granger – cause FDI
VATTAX	FDI	47.741	2	0.000	FDI granger- cause VATTAX
FDI	CEDTAX	19.165	2	0.000	CEDTAX granger-cause FDI
CEDTAX	FDI	25.593	2	0.008	FDI granger-cause CEDTAX

Source: Author's computation (2020)

Table 9 exhibited a causal relationship direction amid the variables. It was shown that there is bidirectional causality between FDI and COMTAX. That is FDI

triggered COMTAX, and COMTAX triggered FDI. This translated that both existed for each other, that is COMTAX was ignited to entice FDI and vice versa. Also, it was further discovered that CGTAX granger caused FDI and FDI granger caused CGTAX. This exposed bidirectional causality between FDI and CGTAX. In addition, EDT ignited FDI, and FDI ignited EDT. This also exposed that there is bidirectional causality between EDT and FDI. More so, VATTAX has bidirectional causality with FDI as shown in Table 9 above. This further displayed that VATTAX granger caused FDI and vice versa. Lastly, Table 9 divulged that there is bidirectional causality between CEDTAX and FDI. That is CEDTAX triggered FDI and vice versa.

4.2. Impact of Non-oil Taxation on Economic services in Nigeria

Table 10 The Effect of Non-Oil Taxation on Economic services in Nigeria

Dependent variable	Independent variables	Coefficient	Standard error	T	P>/T/	(95% conf. Interval)	
ECS	COMPTAX	.056847	.015617	3.64	0.006	-.251348	.1376527
	CGTAX	.072735	.032223	2.26	0.042	-.1423504	-.0031199
	VATTAX	3.676993	.833785	4.41	0.001	1.874815	5.479172
	CEDTAX	1.895011	.416486	4.55	0.000	-2.794159	-.9958632
	EDT	.967512	.245561	3.94	0.004	-5.389482	7.324506
	CONSTANT	252.7832	52.19818	4.84	0.000	140.0158	365.5505
R^2 = 0.8204	Adj R^2 = 0.7514	Prob> F = 0.002	Root MSE = 74.626		F(5, 13) = 11.88		

Source: Author's computation (2020)

Table 10 displayed non-oil taxation effect on ECS in Nigeria. 1% rise in COMPTAX reduced ECS by 0.56%. This advocated that COMPTAX had negative significant effect on ECS (β=-.0568476, t = -0.63, P>|t| =0.539). 1% rise in CGTAX upsurged ECS by 0.72%.This also translated that CGTAX imparted ECS positively and significantly (β=-.0727352, t = -2.26, P>|t| =0.042). That is if CGTAX rises, ECS also upsurge. More so, 1% upsurge in VATTAX increased ECS by 3.68%. This further suggested a positive significant effect of VATTAX on ECS (β=3.676993, t = 4.41, P>|t| =0.001). Furthermore, 1% upsurge in CEDTAX increased ECS by 1.89%. This also revealed a positive significant effect of CEDTAX on ECS ((β=1.895011, t = 4.55, P>|t| =0.001). This signified that if CEDTAX in Nigeria upsurges, ECS also upsurges. 1% increase in EDT increased ECS by 0.96%. This displayed a positive significant effect of EDT on ECS (β=-9. 675123, t = 0.33, P>|t| =0.748).

R^2 realized as 62% divulged that explanatory variables are responsible for the variation of non-oil taxation effect on ECS in Nigeria. In the same vein, adjusted R^2 as 55.1% forecasted the incorporated independence variables are sufficed for the

determination non-oil taxation effects on ECS. The residual 44.9% divulged the stochastic error. The hypothesis that non-oil taxation significantly influenced ECS in Nigeria cannot be rejected or discarded. Therefore, non-oil taxation significant influenced ECS in Nigeria.

Table 11 Selection-Order Criteria

lag	LL	LR	Df	P	FPE	AIC	HQIC	SBIC
0	-1180.92				4.4e+32	95.0336	95.1282	95.3749
1	-976.448	408.94	36	0.000	2.1e+27	82.5958	83.3531	85.3261
2	-853.423	246.05	36	0.000	1.7e+25	76.6738	78.0937	81.7931
3	1044.85	3796.6	36	0.000	2.7e-37	71.2682	-69.1857	63.7599
4	3604.32	5118.9*	36	0.000	.	-274.346*	-271.979*	-265.813*

Endogenous: ECS, COMPTAX, CGTAX, VATTAX, CEDTAX,EDT
Exogenous: _cons

Source: Author's computation (2020)

To circumvent underestimate and overestimate involvement of Lag, the selection order criteria test was employed. It was also discovered that all the test involved supported lag 4. HQIC, SBIC and AIC test selected four lags, as indicated by the "*" in the output in Table 11.

Table 12 Vector Auto regression

Equation	Parms	RMSE	R-sq	chi2	P>chi2
ECS	13	101.177	0.8752	119.2381	0.0000
COMPTAX	13	264.396	0.8994	152.0011	0.0000
CGTAX	13	440.389	0.9806	858.4518	0.0000
EDT	13	2.43583	0.9958	4033.163	0.0000
VATTAX	13	28.2191	0.9915	1991.186	0.0000
CEDTAX	13	27.5047	0.9949	3297.546	0.0000
Log likelihood =153.9349	Det (Sigma_ml) = 5.50e-16	AIC = -8.933523	HQIC= -8.553511	SBIC	=-5.110544

Source: Author's computation (2020)

To confirm the Selection-order criteria output result in gauging the suitable Lag, Vector Auto regression (VAR) was also analyzed. VAR also supported Lags four because HQIC, SBIC, and AIC test confirmed four lags as indicated by* in Table 12.

Table 13 Vector Error-Correction Model

Equation	Parms	RMSE	R sq	chi2	P>chi2
D_ ECS	8	106.578	0.2976	3.813588	0.8735
D_ COMPTAX	8	370.36	0.4310	6.81597	0.5566
D_ CGTAX	8	705.769	0.5354	10.37244	0.2399
D_ EDT	8	4.62793	0.5799	12.42413	0.1333

D_ VATTAX	8	22.7445	0.7987	35.70686	0.0000
D_CEDTAX	8	40.8098	0.6765	18.82155	0.0158
Log likelihood = -271.1314	Det(Sigma_ml) = -2872098	AIC = 38.13311	HQIC = 38.39132	SBIC = 40.73077	

Source: Author's computation (2020)

Table 14 Johansen normalization restriction imposed

Beta	Coefficient	Std. Error	Z	P>|z|	[95% Conf. Interval]	
_ce1						
ECS	1	.	.	.	.	.
COMPTAX	.186321	.083062	2.24	0.025	-.235234	.3491184
CGTAX	.191776	.024868	7.71	0.000	.1430362	.2405161
EDT	.102711	.027101	3.79	0.000	4.952646	15.58953
VATTAX	.923155	.083018	11.12	0.000	-10.85872	-7.60428
CEDTAX	.412335	.029202	14.12	0.000	3.550923	4.69577
-CONS	-519.5463	.	.	.	.	.

Source: Author's computation (2020)

Table 13 and Table 14 comprised information on sample, overall model fit statistics and the fit of each equation. According to table 6, a 1% upsurge in COMPTAX rises ECS by 0.18%, this displayed that there exists a long-run positive effect of COMPTAX on ECS. Also, 1% rises in CGTAX surges ECS up by 0.19%, this also displayed a long-run positive effect of CGTAX on ECS. In the same vein, a 1% rise in EDT, downplayed ECS by 0.10%. This also displays a positive long-run significant effect of EDT on ECS. More so, a 1% upsurge in VATTAX, raised ECS by 0.92%. This further showed a long-run positive effect of VATTAX on ECS. 1% rises in CEDTAX, upsurges ECS by 0.41%. This displayed a positive long-run effect of CEDTAX on ECS. The Coefficient appeared to be statistically significant which was confirmed by P>|z| = 0.000.

Table 15 Johansen Tests for Co-integration

Rank	Eigen Value	Parm	LL	Trace statistic	5% critical value	1% critical	Eigen Value
0	-	6	-594.5671	98.5990	94.15	103.18	-
1	0.86752	17	-576.37535	72.2156	68.52	76.07	0.86752
2	0.77245	26	-563.05173	35.5683*5*1	47.21	54.46	0.77245
3	0.51125	33	-556.60861	22.6821	29.68	35.65	0.51125
4	0.49197	38	-550.51361	10.4921	15.41	20.04	0.49197
5	0.39137	41	-546.04476	1.5544	3.76	6.65	0.39137
6	0.8273	42	-545.26757				0.8273

Source: Author's computation (2020)

Table 15 produced information on the number of cointegrating equations present in this study. The null hypothesis stated that there is no cointegrating equations among the sampled variables are rejected because the trace statistic at r = 0 of 98.5990*1 greater than 1% and 5% critical value of 94.15 and 103.18. The hypothesis that there are one or fewer cointegrating vectors cannot be accepted because r =1 of 72.2156 is greater than 1% and 5% critical value of 68.52 and 76.07 respectively. Also, the hypothesis that there are two or fewer co-integrating vectors cannot be rejected because r =2 of 35.5683*5*1 is less than 1% and 5% critical value of 47.21 and 54.46 respectively. This predicted that two co-integrating vectors existed among the variables sampled as indicated by * in Table 15

Table 16 Granger causality Wald tests
- Causality between Non-oil Taxation and Economic services

Equation	Excluded	chi2	Df	Prob>Chi2	Decision
ECS	COMPTAX	13.344	2	0.042	COMPTAX granger-cause ECS
ECS	CGTAX	11.402	2	0.003	CGTAX granger-cause ECS
ECS	EDT	24.507	2	0.001	EDT granger –cause-ECS
ECS	VATTAX	9.753	2	0.004	VATTAX granger-cause ECS
ECS	CEDTAX	8.997	2	0.006	CEDTAX granger-cause ECS
ECS	ALL	30.744	10	0.000	ALL jointly granger cause ECS
COMPTAX	ECS	22.048	2	0.001	ECS granger-cause COMPTAX
COMPTAX	CGTAX	.07899	2	0.961	CGTAX didnot granger-cause COMPTAX
COMPTAX	EDT	17.281	2	0.000	EDT granger-cause COMPTAX
COMPTAX	VATTAX	.35514	2	0.837	VATTAX did not granger-cause COMPTAX
COMPTAX	CEDTAX	3.3052	2	0.192	
COMPTAX	ALL	70.58	10	0.000	ALL jointly granger –cause COMPTAX
CGTAX	ECS	24.442	2	0.000	FDI granger-cause CGTAX
CGTAX	COMPTAX	12.257	2	0.002	COMPTAX granger-causeCGTAX
CGTAX	EDT	15.808	2	0.000	EDT granger-cause CGTAX
CGTAX	VATTAX	64.457	2	0.000	VATTAX granger-cause CGTAX
CGTAX	CEDTAX	26.566	2	0.000	CEDTAX granger-cause CGTAX
CGTAX	ALL	153.46	10	0.000	ALL jointly granger-cause CGTAX
EDT	ECS	13.572	2	0.001	ECS granger-cause EDT
EDT	COMPTAX	10.41	2	0.005	COMPTAX granger-cause EDT
EDT	CGTAX	12.534	2	0.002	CGTAX granger-cause EDT
EDT	VATTAX	5.7278	2	0.057	VATTAX did not granger-cause EDT
EDT	CEDTAX	.95782	2	0.619	CEDTAX did not granger-cause EDT
EDT	ALL	238.21	10	0.000	ALL jointly granger-cause EDT
VATTAX	ECS	15.894	2	0.002	ECS granger-cause VATTAX
VATTAX	COMPTAX	22.825	2	0.001	COMPTAX granger-cause VATTAX
VATTAX	CGTAX	9.6731	2	0.037	CGTAX granger-cause VATTAX
VATTAX	EDT	.56463	2	0.754	EDT didnot granger-cause VATTAX
VATTAX	CEDTAX	14.936	2	0.005	CEDTAX granger-cause VATTAX
VATTAX	ALL	23.381	10	0.000	ALL jointly granger-cause VATTAX
CEDTAX	ECS	17.501	2	0.000	ECS granger-cause CEDTAX
CEDTAX	COMPTAX	9.9882	2	0.007	COMPTAX granger-cause CEDTAX
CEDTAX	CGTAX	17.731	2	0.000	CGTAX granger-cause CEDTAX
CEDTAX	EDT	2.1994	2	0.333	EDT did not granger-cause CEDTAX
CEDTAX	VATTAX	17.748	2	0.000	VATTAX granger-cause CEDTAX
CEDTAX	ALL	101.16	10	0.000	ALL jointly granger-cause CEDTAX

Source: Author's computation (2020)

Table 16 displayed the granger causality test of the variables observed to gauge the taxation effect on ECS. It was shown in the first table that COMPTAX granger caused ECS because Prob > Chi2 is 0.002 is less than 0.05 significant level. Also, CGTAX granger caused ECS because Prob > Chi2 is 0.003 also less than 0.05 significant level. That is CGTAX ignited ECS and also, ECS ignited CGTAX. EDT also granger caused ECS, this translated that EDT triggered ECS, and ECS triggered EDT (Prob > Chi2 is 0.001 is below 0.05). VATTAX in the same vein granger caused ECS because Prob > Chi2 is 0.004 is below 0.05 significant level. In addition, CEDTAX granger caused ECS as shown and predicted in Table 16 that Prob > Chi2 is 0.006 is less than 0.05 significant level. Above all, all the variables jointly granger caused ECS. This is statistically believed as shown that Prob > Chi2 is 0.000 which below 0.05. Therefore, causality existed between non-oil taxation and ECS in Nigeria.

Table 17 Direction of Causality between Taxation and Economic services

Equation	Excluded	chi2	Df	Prob> chi2	Decision
ECS	COMPTAX	13.344	2	0.042	COMPTAX granger- cause ECS
COMPTAX	ECS	22.048	2	0.001	ECS granger- cause COMPTAX
ECS	CGTAX	11.402	2	0.003	CGTAX granger - cause ECS
CGTAX	ECS	24.442	2	0.000	ECS granger- cause CGTAX
ECS	EDT	24.507	2	0.001	EDT granger- cause ECS
EDT	ECS	13.572	2	0.001	ECS granger- cause EDT
ECS	VATTAX	9.753	2	0.004	VATTAX granger – cause ECS
VATTAX	ECS	15.894	2	0.002	ECS granger- cause VATTAX
ECS	CEDTAX	8.997	2	0.006	CEDTAX granger-cause ECS
CEDTAX	ECS	17.501	2	0.000	ECS granger-cause CEDTAX

Source: Author's computation (2020)

Table 17 showed the direction of causality amid the variables sampled. It was shown that there is bidirectional causality between ECS and COMTAX. That is ECS triggered COMTAX, and also COMTAX triggered ECS. This translated that both variables existed for each other, that is COMTAX was ignited to entice ECS and vice versa. Also, it was further discovered that CGTAX granger caused ECS, and ECS granger caused CGTAX. This further exposed bidirectional causality between ECS and CGTAX. In addition, EDT ignited ECS, and ECS ignited EDT. This also exposed bidirectional causality between EDT and ECS. More so, VATTAX has bidirectional causality with ECS as shown in Table 17 above. This further displayed that VATTAX granger caused ECS and vice versa. Lastly, Table 17 divulged that there is bidirectional causality between CEDTAX and ECS. That is CEDTAX triggered ECS, and vice versa.

4.3 Discussion of Findings

With reference to the empirical results garnered from this study, it is now obvious absolutely that company income tax possessed short-run and long-run negative significant impact on FDI as supported by Jamiu (2013). This displayed that the income forcefully collected through COMTAX has a negative effect on FDI. This translated that company income tax weight on FDI, reduced FDI influx into the country. Also, capital gain tax created an unfavorable atmosphere for the investment from abroad to sprout because of the negative effect it bestowed on FDI both in the short run and long run. More so, education tax possessed short-run and long-run negative significant impact on FDI. The implication is that 2% of education tax-deductible from assessable profit has financial and investment implications on reinvestment. These taxes directly affected companies' assessable profit which has implications on FDI reinvestment or plough back profit. The higher the income forcefully collected as tax, the lesser will be the FDI. Value-added tax, and custom and excise duties imparted foreign direct investment positively and significantly both in the short run and in the long run, this translated that the burden of these taxes fell on the final consumers which did not influence of affect FDI influx into the country

Value-added tax and Custom and excise duties have a positive significant impact on economic services both in the short run and in the long run because the income garnered from these taxes are being utilized effectively for economic services improvement in term of investment in agriculture, transportation, and communication for the betterment of populace. Also, company income tax, capital gain tax, and education tax enhance economic services positively both in the short run and long run in Nigeria. These taxes directly affected ECS positively and significantly because the income garnered from these taxes has been judiciously expended on the infrastructural and human development for better outputs in Nigeria.

5. Conclusions

This study assessed nonoil taxation effects on FDI and economic services from 1994 to 2019 in Nigeria. This study further evaluated the causality bearing amid FDI, ECS, VATTAX, COMTAX, CGTAX, CEDTAX and EDU, by devotedly hiring Units root, VECM, Johansen co-integration, and Granger causality tests. Outcomes uncovered that VATTAX has a positive significant effect on economic services but a negative influence on FDI. Furthermore, VATTAX granger- cause FDI and ECS. It is also exposed that COMTAX and capital gain tax possessed short-run and long-run negative significant influence on FDI but positive significant influence on ECS. More so, CEDTAX and EDU upsurge ECS positively and significantly in Nigeria.

Conclusively, taxation has negative significant impacts on foreign direct investment but upsurge economic services positively and significantly in Nigeria. It is recommended that since company income tax impacted FDI negatively both in the long run and short run, the government should lessen company income tax rate and upsurge capital allowance bestowed on FDI in order to improve and attract FDI investment influx which will perpetually decrease the poverty rate in Nigeria. Also government should employ taxation to realize more improvement on economic services and minimize all barriers to FDI influx such as import duties and other levies to inspire investors which will create a favorable atmosphere for the investment from abroad to sprout.

Acknowledgments
We give thanks to the Central Bank of Nigeria (CBN), and the Federal Inland Revenue Service (FIRS) for their regular publication of data, which enhanced and paved way for this study. We also thank the anonymous reviewers and editors of Studia Universitatis "Vasile Goldis" Arad, Economic Series for their valuable contributions.

Funding
This research received no specific grant from any funding agency in the public, commercial, or not–for–profit sectors.

Author Contributions
The first author (Adegbite Tajudeen A.) ignited the study, carried out the literature review section and was also responsible for the model specification and design, data analysis and interpretation while the second author (Olaoye Clement) was responsible for data collection and proofreading

Disclosure Statement
The author does not have any competing financial, professional, or personal interests from other parties.

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