

Oboh, Timothy

Article

Direct tax and foreign direct investment

Accounting and taxation review

Provided in Cooperation with:

University of Benin, Benin City, Nigeria

Reference: Oboh, Timothy (2021). Direct tax and foreign direct investment. In: Accounting and taxation review 5 (1), S. 1 - 14.

[https://www.atreview.org/admin/12389900798187/ATR%205\(1\)%201-14%20PDF.pdf](https://www.atreview.org/admin/12389900798187/ATR%205(1)%201-14%20PDF.pdf).

This Version is available at:

<http://hdl.handle.net/11159/6188>

Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics
Düsternbrooker Weg 120
24105 Kiel (Germany)
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)
<https://www.zbw.eu/>

Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte. Alle auf diesem Vorblatt angegebenen Informationen einschließlich der Rechteinformationen (z.B. Nennung einer Creative Commons Lizenz) wurden automatisch generiert und müssen durch Nutzer:innen vor einer Nachnutzung sorgfältig überprüft werden. Die Lizenzangaben stammen aus Publikationsmetadaten und können Fehler oder Ungenauigkeiten enthalten.

Terms of use:

This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence. All information provided on this publication cover sheet, including copyright details (e.g. indication of a Creative Commons license), was automatically generated and must be carefully reviewed by users prior to reuse. The license information is derived from publication metadata and may contain errors or inaccuracies.



<https://savearchive.zbw.eu/terms-of-use>

ISSN: 2635-2966 (Print), ISSN: 2635-2958 (Online).

©International Accounting and Taxation Research Group, Faculty of Management Sciences, University of Benin, Benin City, Nigeria.

Available online at <http://www.atreview.org>

Original Research Article

Direct Tax and Foreign Direct Investment

Timothy Oboh

Department of Accounting, Faculty of Management Sciences, University of Benin, Benin City, Nigeria

For correspondence, email: timothy.oboh@uniben.edu

Received: 12/02/2021

Accepted: 26/03/2021

Abstract

It is critical to have appropriate tax policies to attract foreign direct investment in both developed and developing countries. In light of this, the study investigated the effect of a direct tax on foreign direct investment in Nigeria. The study specifically looked at the impact of direct tax components like petroleum profit tax, corporate income tax, education tax, and personal income tax on foreign direct investment in Nigeria. The study was motivated by the recent advocacy for increased foreign direct investment in Nigeria.

The study covered direct tax and foreign direct investment data from 1981 to 2019, which totalled 38 years. Secondary data on direct taxation and foreign direct investment were sourced from the National Bureau of Statistics (NBS), Statistical bulletins of the Central Bank of Nigeria (CBN), and the Federal Inland Revenue Service (FIRS). The data collected were analysed using the ordinary least squares estimation technique.

The study revealed a positive relationship between petroleum profit tax (PPT), companies' income tax (CIT), and personal income tax (PIT) on foreign direct investment to gross domestic product ratio (FDI_GDP). However, the outcome of the relationship was not statistically significant. Education tax had a negative relationship with FDI_GDP. The outcome was statistically significant. As a result of the above findings, the study recommended that tax policy on direct tax components of PPT, CIT, and PIT be improved to increase foreign direct investment in Nigeria. Meanwhile, education tax revenue should be used wisely to attract foreign direct investment in the Nigerian educational system. The study also suggested that additional research be conducted to determine whether increasing education tax revenue investment in the educational system will eliminate the negative relationship between education tax and foreign direct investment.

Keywords: Direct tax, Petroleum profit tax, Corporate income tax, Education tax, Personal income, and foreign direct investment

JEL Classification Codes: H21, F23, H25, F21, H24 and P33

This is an open access article that uses a funding model which does not charge readers or their institutions for access and is distributed under the terms of the Creative Commons Attribution License. (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided the original work is properly credited.

© 2020. The authors. This work is licensed under the Creative Commons Attribution 4.0 International License

Citation: Oboh, T. (2021). Direct tax and foreign direct investment. *Accounting and Taxation Review*, 5(1): 1-14.

1.0 Introduction

The direct tax depends on a country's policy, which may be imposed to collect revenue or relaxed to attract foreign direct investment. Foreign direct investment (FDI) is defined as a direct investment into a country's business or production by an individual or organisation from another country, either by developing existing operations or purchasing an organisation in the target country (Bénassy-Quéré et al., 2015). Adepeju (2012) described the foreign direct investment as an investment made to obtain a continuing management interest (generally 10% of voting stock) in a venture operating in a country other than the investors' own (describe as showed by residency).

Tax policies are fundamental in the final choice for an investor wishing to invest in another country (Justman et al., 2011). However, if a country's taxes are low, it becomes even more appealing to investors. Furthermore, if there are fiscal incentives for businesses, the size of the economy, its purchasing power, and other market-related factors can be compensated (Bucovetsky 2013). Therefore, each country would act accordingly to attract more foreign investors and to stimulate the inflow of foreign direct

investments. Because it determines after-tax returns from investment, the burden of direct taxes influences the volume and location of foreign direct investment (FDI) (Okoi & Edame, 2013).

There is limited empirical work on testing the impact of direct tax revenue on foreign direct investment. The mechanism through which foreign direct investment impacts are transmitted remains open for further research particularly in developing nations like Nigeria.

Against the above background is what motivated this study to investigate the effect of a direct tax on foreign direct investment in Nigeria. Also, the study considers personal income tax, company income tax, education tax, and petroleum profit tax as components of direct tax. More recent data and the use of the error correction model and unit root test would be carried out to test the hypotheses due to the time frame which makes it different from other previous studies.

2.0 Literature Review

2.1 Concept of Foreign Direct Investment

Foreign investment is defined as the transfer of capital from one country to another in exchange for significant stakes in domestic companies or other domestic assets (Alfaro et al., 2014). Foreign investment typically implies that foreigners take an active role in management as part of their investment. Foreign investment in a country is regarded as a source of future economic growth and a good sign.

According to Ledyaeva and Linden (2016), there are four categories of foreign investment. These are foreign portfolio investment, foreign direct investment, commercial loans, and official flows. The various foreign investment differs basically in who gives the loan and how engaged the investor is with the receiver of the loan.

Foreign portfolio investment occurs when foreign investments are made by a company. They may also be made by an individual who has mutual funds.

When a company invests in a business in another country, this is referred to as a foreign direct investment. For private foreign investment to be considered a foreign direct investment, the company investing must own at least 10% of the shares in the foreign company. In these international business relationships, the company investing is referred to as the parent company, and the foreign company is referred to as a subsidiary of the parent company. Multinational corporations that operate across multiple countries are frequently founded on foreign direct investment (Gorg & Strobl, 2013).

An FPI, as opposed to foreign direct investment, allows the investing company to own shares in the subsidiary company. FPIs are typically used to trade investment instruments such as stocks and bonds. Stocks and bonds are two examples of easily traded investments. A company that owns stocks and bonds issued by a foreign company does not necessarily own a stake in the company in which it is investing. (Gorg & Strobl, 2013).

Foreign direct investment is usually viewed as a channel through which technology can spread from developed countries to developing countries (Le & Suruga, 2015).

2.2 Concept of Direct Tax

A direct tax is paid directly by an individual or an organisation. The ability-to-pay principle governs direct taxes. This is an economic principle that states that those with more resources or a higher income should pay more taxes. The ability to pay taxes is one way for a country's wealth to be redistributed. Direct taxes cannot be passed on to another person or entity; the individual or organisation levied with the tax is responsible for the full tax payment.

A direct tax is the inverse of an indirect tax, in which the tax is imposed on one entity, such as a seller, and paid for by another. In Nigeria, there are several types of direct taxes, including corporate income tax, petroleum profit tax, personal income tax, and education tax. The following section examines the components of direct taxation and foreign direct investment.

2.2 Companies Income Tax and Foreign Direct Investment

A company income tax also called corporate or corporation tax is a direct tax levied by a jurisdiction on the capital or income of

companies or legal entities. It may also be referred to as income tax or capital tax. Essoh (2011) opined that company income tax is an assessment imposed by a government on the profits of a corporation. Company income tax paid by a business differs between countries.

According to Okoi and Edame (2013), company income tax is seen as a factor that determines the position and inflow of foreign direct investment in a nation. They found that a high company tax rate has an enormous effect on foreign direct investment and gross domestic product in Nigeria. The study however argued that a rise in the company income tax rate would discourage foreign direct investment in the country. A high corporate income tax rate would reduce foreign investors' incentives to invest in both human and physical capital. Furthermore, when the corporate tax rate is high, foreign investors will look for other places to invest, while domestic investors will look for investment projects abroad where taxes are low. As a result, the gross domestic product suffers. Similarly, Ekpung and Wilfred (2014) examined the impact of taxation on investment and economic development in Nigeria. The study revealed a negative relationship between company income tax and investment. This connotes that there was an inverse relationship between company income tax and investment. By implication, the result showed that one percent (1%) increase in company income tax will result in one percent (1%) decrease in the level of investment in Nigeria. They noted that a high company tax is not good for economic growth and it discourages foreign direct investment.

Saidu (2015) investigated the association between corporate taxation and foreign

direct investment in Nigeria from 1970 to 1980. The result revealed a negative significant relationship between corporate taxation and foreign direct investment. The study recommended a reduction in corporate income tax to attract foreign direct investment into the country.

In the same vein, Fakile and Adegbile (2011) asserted that a low company income tax rate is used by governments to grant foreign investors more attractive conditions to invest in their country. In contrast, Morisset (2000) argued that government should impose a high company income tax for the provision of infrastructure and social amenities.

Eyisi et al. (2015) investigate the association of taxation and foreign direct investment in Nigeria. They used 2002 to 2011 data and found a positive and significant relationship between company income taxation and foreign direct investment in Nigeria.

2.3 Petroleum Profit Tax and Foreign Direct Investment

Petroleum profit tax is a tax related to upstream operations in the Nigerian oil industry. It is mostly associated with royalties, rents, margins, and profit-sharing elements related to oil mining, exploration leases, and prospecting (Odusola, 2016). Petroleum profit tax is the utmost tax in Nigeria contributing 70% to 95% of foreign exchange earnings and government revenue, respectively. According to Kyari (2020), recent events in the Nigerian oil and gas industry have called into question the efficacy of Nigerian petroleum tax incentives in attracting foreign direct investment into the country's oil and gas sector. Owing to the volatility of the operating environment, global oil firms have relocated to other countries.

Kyari (2020) examined the impact of petroleum tax incentives on foreign direct investment inflow in Nigeria. A five-point Likert questionnaire was used to collect data, which was then analysed using descriptive statistics and the Kruskal-Wallis technique. The study found that Nigeria's petroleum tax incentive package is sufficient in number and appropriate in the mix for attracting foreign direct investment. Margareta and Asa (2012) found a negative relationship between petroleum profit tax and foreign direct investment using panel data from 25 Organization for Economic Cooperation and Development (OECD) countries from 1970 to 2010.

2.4 Personal Income Tax and Foreign Direct Investment

Personal Income Tax is a tax levied directly on a person's earnings.

Persons include an individual, an ordinary partnership, a non-juristic body of a person, and an undivided estate. A person subject to personal income tax must, in general, compute his or her tax liability and file a tax return. A well-articulated personal income tax, according to Dickson and Presley (2013), will not only promote increased economic activity in the country but will also attract foreign investors, thereby improving revenue productivity and the tax base of Nigeria's tax system. However, Success et al. (2012) conducted a research study using the ordinary least square (OLS) technique and discovered that the relationship between personal income tax and foreign direct investment in Nigeria is significantly positive for the period covered.

Similarly, Osundina and Olanrewaju (2013) confirmed this position using the same method. Ogbonna and Appah (2012) used preliminary descriptive statistics and econometric models such as the Ramsey

RESET test, Johansen test, Jacque Berra test, Augmented Dickey-Fuller test, Breusch Godfrey test, and Granger Causality test in another study. They discovered a significant and inverse relationship between personal income tax and foreign direct investment.

Using the same OLS technique, Akwe (2014) came to a similar positive conclusion that personal income tax is statistically significant and has a positive impact on foreign direct investment. Jibrin et al. (2012) also researched the impact of personal income tax on Nigerian foreign direct investment from 2000 to 2010. Personal income tax has a significant and positive impact on foreign direct investment in Nigeria, according to their findings.

2.5 Education Tax and Foreign Direct Investment

The education tax was implemented in 1993 to fund the worsening education system, and it is levied on all registered companies in Nigeria that are required to pay tax under the petroleum profits tax acts and companies income tax. The Federal Inland Revenue Service is responsible for administering this tax under the Education Tax Act No 7 LFN 1993. It is levied at a rate of 2% on a company's assessable profit, but a company that has an adjusted loss is not required to pay education tax in that year. Nevertheless, a company that fails to pay the education tax within 60 days of receiving the notice of assessment faces a fine of 5% plus interest at the commercial rate for noncompliance (Eiya & Okaiwele 2019).

However, Oyeabo et al. (2019) found that education taxes have an inverse relationship with foreign direct investment. In the same vein, Eiya and Okaiwele (2019) discovered a negative and significant relationship between education tax and foreign direct investment. Similarly, Akinwunmi et al.

(2017) revealed a negative and insignificant relationship between education tax and foreign direct investment for the period studied.

3.0 METHODOLOGY

The longitudinal research design was used for this study. It was adopted due to its suitability for a study of this nature which examines economic variables over a long period. Data was sourced from the National Bureau of Statistics (NBS), Statistical bulletins of the Central Bank of Nigeria (CBN), and the Federal Inland Revenue Service (FIRS). The study covered direct tax data from 1981 to 2019 which sum up to 38 years.

3.1 Theoretical Framework and Model Specification

The theory underpinning this study is the eclectic theory. Professor Dunning's eclectic theory is a synthesis of three different theories of direct foreign investments (O-L-I): "O" from Ownership advantages; "L" from Location; and "I" from Internalisation. The eclectic theory demonstrates that OLI parameters differ from one company to another and it depends on the host country's economic, political, and social characteristics to attract foreign direct investment (Denisia, 2010). As a result, this theory suggests that to attract enough foreign direct investments, governments must ensure that their economic policies which include taxes from foreign investments are favourable.

Drawing from the eclectic theory and adapting the model of Eiya and Okaiwele (2019), the relationship between direct tax and foreign direct investment in Nigeria is captured in its functional form as:

$$FDI_t = f(\text{Direct Tax}) \quad (1)$$

Expressing the model as an implicit function by decomposing equation 1 into the various forms of direct tax.

$$FDI_t = f(CIT_t, PPT_t, PIT_t, EDT_t) \quad (2)$$

where:

FDI = Foreign Direct Investment

CIT = Companies Income Tax

PPT = Petroleum Profits Tax

PIT = Personal Income Tax

EDT = Education Tax

t = Time

Equation 2 is expressed in its econometric form as:

$$FDI_t = \alpha_0 + \alpha_1 CIT_t + \alpha_2 PPT_t + \alpha_3 PIT_t + \alpha_4 EDT_t + \mu_t \quad (3)$$

α_0 is the intercept while α_1 , α_2 , α_3 , and α_4 are the coefficients of Companies Income Tax (CIT), Petroleum Profits Tax (PPT), Personal Income Tax (PIT), and Education Tax (EDT).

3.2 Method of Data Analysis

The Ordinary Least Squares (OLS) data estimation technique was used in this study. Some diagnostic tests were performed before the regression, to ensure the accuracy of the model. First, normality was determined using Jarque-Bera statistics, heteroskedasticity was determined using the Breusch-Pagan-Godfrey test, the serial correlation was determined using the Breusch Godfrey test, and model specification was determined using the Ramsey RESET test.

3.3 Operationalization of Variables

Table 1: Operationalization of Variables

Variable	Description	Types	Measurement	Apriori expectation	Source
FDI	Foreign Direct Investment	Dependent	Foreign direct investment net inflow (% of GDP)		Akinwunmi et al. (2017)
PPT	Petroleum profit tax	Independent	Petroleum Profit Tax from 1981 to 2019	+	Eiya and Okaiwele (2019),
CIT	Company income tax	Independent	Company income tax from 1981 to 2019	+	tAkinwunmi et al. (2017)
PIT	Personal income tax	Independent	Company income tax from 1981 to 2019	+	-
EDT	Education tax	Independent	Education tax from 1981 to 2019	+	Akinwunmi et al. (2017)

Source: Researcher's compilation (2021)

4. ESTIMATION RESULTS AND DISCUSSION OF FINDINGS

Table 1: Results of the Descriptive Analysis

	FDI_GDP	PPT	CIT	EDT	PIT
Mean	1.553011	12.14710	10.51728	6.610117	8.126379
Median	1.159070	12.93922	11.06211	8.995512	8.864888
Maximum	5.790847	15.71835	14.30140	12.31768	11.58694
Minimum	0.257422	8.235933	5.763277	0.000000	3.292870
Std. Dev.	1.233527	2.428492	2.718784	5.185959	2.403530
Skewness	1.738206	-0.244475	-0.297223	-0.401620	-0.528676
Kurtosis	6.070248	1.545219	1.724501	1.354038	2.200527
Jarque-Bera	34.95678	3.827622	3.217926	5.450873	2.855366
Probability	0.000000	0.147517	0.200095	0.065518	0.239864
Sum	60.56744	473.7369	410.1738	257.7946	316.9288
Sum Sq. Dev.	57.82038	224.1078	280.8878	1021.978	219.5244
Observations	39	39	39	39	39

Table 1 presents the results of the descriptive analysis. The mean foreign direct investment as a percentage of gross domestic product is about 1.6%, the mean revenue from petroleum profit tax is about #12Billion, the mean revenue from companies' income tax is about #10Billion, the mean revenue from education tax is about #6Billion, and the mean revenue from personal income tax is about #8Billion. The maximum value of the dependent variable of FDI_GDP is about 6%, with a minimum value of about 0.3%. The maximum value

of petroleum profit tax revenue is about #16Billion, with a minimum value of about #8Billion. Companies income tax reported a maximum value of about #14Billion and a minimum value of #6Billion, and personal income tax reported a maximum value of #12Billion and a Minimum value of #3.3Billion. The standard deviations are relatively small which indicates small dispersion from their mean values. The results of the descriptive analysis are complemented by the results of the histogram normality test.

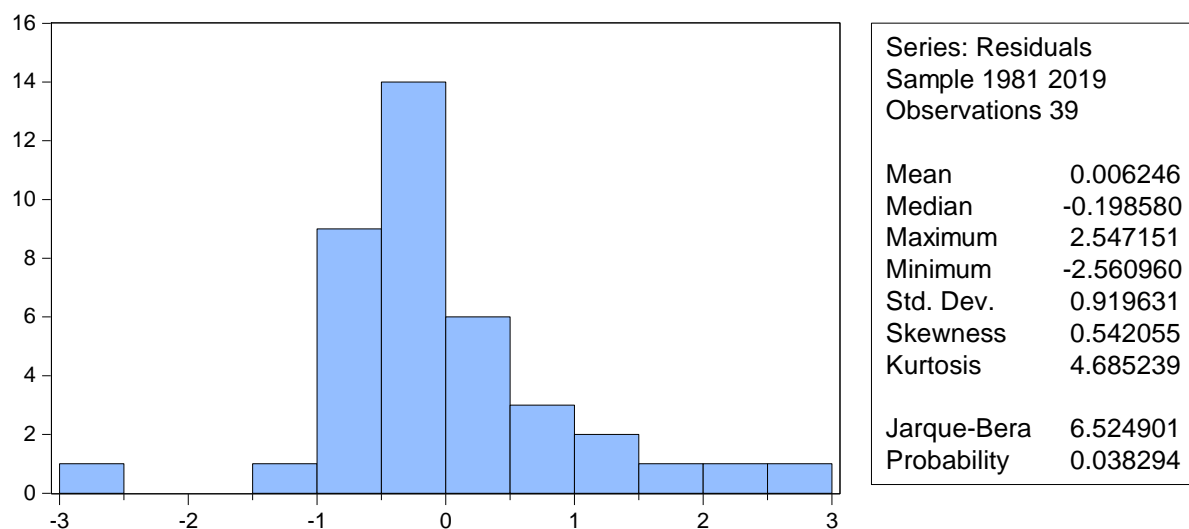


Figure 1: Results of the Histogram Normality Test

The result of the histogram normality test shows a mean Jarque-Bera statistic of 6.524901 and a probability value of 0.038294, which negates the null hypothesis that the data do not follow the normal Gaussian distribution. The mean kurtosis of 4.685239 is more than the 3.0 benchmark

and indicative of the presence of leptokurtic distribution, with a longer tail and more peaked than a normal distribution. The mean skewness of 0.542055 shows a rightward skewed histogram as seen in Figure 1.

Table 2: Results of the Correlation Analysis

Covariance Analysis: Ordinary

Date: 05/29/21 Time: 10:33

Sample: 1981 2019

Included observations: 39

Balanced sample (listwise missing value deletion)

Correlation t-Statistic Probability	FDI_GDP	PPT	CIT	EDT	PIT
FDI_GDP	1.000000 ----- -----				
PPT	0.154789 0.953033 0.3468	1.000000 ----- -----			
CIT	0.102634 0.627615 0.5341	0.675517 26.98138 0.0000	1.000000 ----- -----		
EDT	-0.060354 -0.367791 0.7151	0.731223 15.54239 0.0000	0.949976 18.50155 0.0000	1.000000 ----- -----	
PIT	0.120888 0.740764 0.4635	0.936276 16.21327 0.0000	0.965816 22.66276 0.0000	0.900770 12.61621 0.0000	1.000000 ----- -----

The results of the correlation analysis are presented in Table 2. The regression variables reported mixed correlation coefficients. The variable of education tax reported a negative coefficient of -0.060354, while the other independent variables are

positively correlated with the dependent variable. The coefficient of correlation between PPT and FDI_GDP is 0.154789, CIT and FDI_GDP are 0.102634, and PIT and FDI_GDP is 0.120888 respectively.

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	4.381216	Prob. F(4,34)	0.0058
Obs*R-squared	13.26485	Prob. Chi-Square(4)	0.0101
Scaled explained SS	16.52131	Prob. Chi-Square(4)	0.0024

Table three presents the result of the usual regression assumption tests. The test of the residual diagnostics of heteroskedasticity using the Breusch-Pagan-Godfrey test reported a probability value of

0.0058>P=0.005 and negates the null hypothesis of heteroskedastic residuals. The result shows that the residuals are homoscedastic.

Ramsey RESET Test

Equation: UNTITLED

Specification: FDI_GDP C PPT CIT EDT PIT AR(1)

Omitted Variables: Squares of fitted values

	Value	df	Probability
t-statistic	0.341434	31	0.7351
F-statistic	0.116577	(1, 31)	0.7351
Likelihood ratio	0.340953	1	0.5593

F-test summary:

	Sum of Sq.	df	Mean Squares
Test SSR	0.120408	1	0.120408
Restricted SSR	32.13889	32	1.004340
Unrestricted SSR	32.01849	31	1.032854

LR test summary:

	Value	df
Restricted LogL	-51.66348	32
Unrestricted LogL	-51.49301	31

The result of the stability diagnostic using the Ramsey RESET test of model specification error reported a t-statistic of

0.341434 and a probability value of 0.7351 which rejects the null hypothesis of model misspecification.

Dependent Variable: FDI_GDP

Method: ARMA Maximum Likelihood (OPG - BHHH)

Date: 05/29/21 Time: 10:37

Sample: 1981 2019

Included observations: 39

Convergence achieved after 39 iterations

Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.889594	4.308112	-1.367094	0.1811
PPT	0.425877	0.475596	0.895461	0.3772
CIT	0.448148	0.619686	0.723186	0.4748
EDT	-0.469927	0.157821	-2.977599	0.0055

Obboh. Direct Tax and Foreign Direct Investment

PIT	0.077969	0.573172	0.136031	0.8926
AR(1)	0.421943	0.190270	2.217596	0.0338
SIGMASQ	0.824074	0.236223	3.488546	0.0014
R-squared	0.444160	Mean dependent var		1.553011
Adjusted R-squared	0.339940	S.D. dependent var		1.233527
S.E. of regression	1.002168	Akaike info criterion		3.008384
Sum squared resid	32.13889	Schwarz criterion		3.306972
Log likelihood	-51.66348	Hannan-Quinn criter.		3.115515
F-statistic	4.261750	Durbin-Watson stat		1.933772
Prob(F-statistic)	0.002901			
Inverted AR Roots	.42			

The result of the regression analysis is presented in Table 4. The preliminary analysis of the regression result reported a coefficient of multiple determination of 0.444160 with an adjusted value of 0.339940 which shows that about thirty-four per cent systematic variation in the dependent variable of FDI_GDP is accounted for by the explanatory variables of PPT, CIT, EDT, and PIT. The f-Statistic of 4.261750 and the associated probability value of 0.002901 < P=0.05 is significant and indicates a linear relationship between the dependent and the explanatory variables. The results are also indicative of a very high predictive power of the model of regression. The Durbin-Watson statistic of 1.933772 is not substantially different from the 2.0 benchmark and indicative of the absence of autocorrelation.

The relationship between petroleum profit tax and FDI_GDP is positive with a robust coefficient of 0.425877, the probability value of 0.3772 > P=0.05. and a t-value of 0.895461 at the 5% level of significance. The result implies that PPT increases FDI_GDP but the increment is not statistically significant. The result is at variance with the negative relationship

reported by Margareta and Asa (2012). The relationship between companies income tax and FDI_GDP is positive, with a coefficient of 0.448148, a probability value of 0.4748 > P=0.05, and a t-value of 0.7231886 at the 5% level of significance. The result conforms with our apriori expectation of positive relationship which shows that a one unit increase in companies income tax increases FDI_GDP by 45%. However, the result of the relationship was not statistically significant. The result is in tandem with Eyisi et al. (2015) who found a positive relationship between companies income tax FDI_GDP but deviates sharply from the negative relationships reported by Ekpung and Wilfred (2014) and Saidu (2015).

The relationship between education tax and FDI_GDP reported a negative coefficient of -0.469927, a probability value of 0.0055 > p=0.05, and t-value of -2.977599 at the 5% level of significance. The result contradicts our apriori expectation of a positive relationship. The result is statistically significant and shows that a unit increase in education tax will reduce FDI_GDP by 47%. The result of the study is consistent with the predominant negative relationship reported in extant literature by: Akinwunmi

et al. (2017); Eiya and Okaiwele (2019); Oyeabo et al. (2019). The relationship between personal income tax and FDI_GDP is positive, with a coefficient of 0.077969, a probability value of 0.8926 > P=0.05, and a t-value of 0.136031 at the 5% level of significance. The result shows that increase in PIT will increase FDI_GDP. But the increase is statistically insignificant. The result of the analysis is consistent with the positive relationship reported by Akwe (2014), Jibrin et al. (2012) Success et al. (2012), Osundina and Olanrewaju (2013), but at variance with the negative and significant relationship reported by Ogbonna and Appah (2012).

5. CONCLUSION AND RECOMMENDATIONS

This study observes the relationship between direct tax and foreign direct investment. Several diagnostic tests were performed on the data that indicated a linear relationship between the dependent and the explanatory variables. According to the findings, PPT increases FDI_GDP, but the increase is not statistically significant. There was a positive relationship between companies' income tax and FDI_GDP. However, the relationship's outcome was not statistically significant.

Education tax had a negative relationship with FDI_GDP. The outcome is statistically significant, demonstrating that a unit increase in education tax reduces FDI_GDP. Personal income tax had a positive relationship with FDI_GDP. The findings indicated that increasing PIT will increase FDI_GDP. The increase, however, was statistically insignificant.

As a result of the above findings, the study recommended that tax policy on direct tax components of PPT, CIT, and PIT be

improved to increase foreign direct investment in Nigeria. Meanwhile, education tax revenue should be used wisely to attract foreign direct investment in the Nigerian educational system. The study also suggested that additional research be conducted to determine whether increasing the level of education tax revenue investment in the educational system will eliminate the negative relationship between education tax and foreign direct investment.

REFERENCES

- Adepeju, B. S. (2012). The impact of tax incentives on foreign direct investment in the oil and gas sector in Nigeria. *Journal of Business and Management*, 6(1), 1-15.
- Akinwunmi, A. J., Olotu, A. E., & Adegbe, F. F. (2017). Multiplicity of taxes and foreign direct investment: A relational analysis of Nigerian environment. *Social Sciences*, 6(4), 91-101.
- Akwe, J. A. (2014). Impact of non-oil tax revenue on economic growth: The Nigerian perspective. *International Journal of Finance and Accounting*, 3(5), 303-309.
- Alfaro, L., Chanda, A., Kalemli-Ozcan, S., & Sayek, S. (2014). FDI and economic growth. The role of local financial markets. *Journal of International Economics*, 64, 89-112.
- Bénassy-Quéré A., Fontagné L., & Lahrèche-Révil, A. (2015). How does FDI react to corporate taxation? *International Tax Public Finance*, 12(5), 583-603.

- Bucovetsky, S. (2013). Asymmetric tax competition. *Journal of Urban Economy*, 2(6), 167-181.
- Denisia, V. (2010). Foreign direct investment theories: An overview of the main FDI theories. *European Journal of Interdisciplinary Studies*, 2(2), 104-110.
- Dickson, E. O., & Presley, K. O. (2013). Tax incentives and revenue productivity of the Nigerian tax system. *International Journal of Development and Economic Sustainability*, 1(1), 33-44.
- Eiya, O., & Okaiwele, I. (2019). Taxes and foreign direct investment (FDI) in Nigeria. *Journal of Applied Business and Economics*, 21(3), 16-30.
- Ekpong, G. E., & Wilfred, W. O. (2014). The impact of taxation on investment and economic development in Nigeria. *Academic Journal of Interdisciplinary Studies*, 3(4), 209-218.
- Essoh, F. (2011). Effects of corporate taxes on economic growth: The case of Sweden. *Jonkoping International Business School*.
- Eyisi, A. S, Oleka, D. O., & Nwaorgu, I. A. (2015). The effect of taxation on microeconomic growth in Nigeria. *International Journal of Economics, Commerce & Management*, 3(4), 1-11.
- Fakile, A. S., & Adegbile, F. F. (2013). Tax incentives: tool for attracting foreign direct investment in Nigerian economy. *International Journal of Research in Commerce and Management*, 2(2), 87-105.
- Gorg, H., & Strobl, E. (2003). Foreign direct investment and local economic development: Beyond Productivity. *Spillovers*, 137-157
- Jibrin, S. M., Blessing, S. E., & Ifurueze, M. S. K. (2012). Impact of petroleum profit tax on economic development of Nigeria. *British Journal of Economics, Finance and Management Sciences* 5(2), 21 – 29.
- Justman, M., Thisse, J. F., & Ypersele, V. T. (2011). Fiscal competition and regional differentiation. *International Tax Public Finance*, 2(7), 2 - 6.
- Kyari, K. A. (2020). The impact of petroleum tax incentives on foreign direct investment inflow: Evidence from Nigeria. *International Journal of Energy Economics and Policy*, 10(4), 516-524.
- Le, M. V., & Suruga, T., (2015). Foreign direct investment, public expenditure and economic growth: The empirical evidence for the period 1970 – 2001. *Applied Economics Letters*, 12, 45-49.
- Ledyaeva, S., & Linden, M. (2016). Foreign direct investment and economic growth: Empirical evidence from Russian regions. *BOFIT Discussion Papers* 17, 1-38.
- Margareta, D., & Åsa, H. (2012). Taxation of income and economic growth: An empirical analysis of 25 rich OECD countries. *Department of Economics Lund University*, 6, 1-31.
- Morisset, J. (2003). Using tax incentives to attract foreign direct investment. <http://www.rru.worldbank.org.document> S.
- Odusola, A. (2006). Tax policy reforms in Nigeria. *World Institute for Development Economics and Research, Research Paper*. <http://www.widerunu.edu>

- Ogbonna, G. N., & Appah, E. (2012). Effect of petroleum revenue and the economy of Nigeria. *Current Research Journal of Economic Theory*, 4(2), 11-17.
- Okoi, W. W., & Edame, E. (2013). The impact of taxation on economic development in Nigeria: A case of small-scale businesses in Calabar Metropolis (1980-2010). Calabar: Department of Economics, Unpublished PGD Economics Thesis.
- Saidu, A. S. (2015). Corporate taxation and foreign direct investment in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 3(8), 17 – 24.
- Osundina, C. K., & Olanrewaju, G. O. (2013). Welfare effects of taxation on the Nigerian economy. *International Journal of Humanities and Social Science Invention*, 8(2), 76-82.
- Oyeabo, P., Azubuike, J. U. B., & Ebieri, J. (2019). Corporate taxes and foreign direct investment in Nigeria. *Accounting and Taxation Review*, 3(3), 58-68.
- Success, M. J., Success, E. B., & Ifurueze, M.S.K. (2012). Impact of petroleum profit tax on economic development of Nigeria. *British Journal of Economics, Finance and Management Sciences*, 2(5), 60-71.