

Impact of Foreign Direct Investment on Revenue Generation in Nigeria: Mediating on the Role of Company Tax

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Abstract: This study examined foreign direct investment and its impact on revenue generation in Nigeria, with emphases on the role of company income tax as mediating factor. This Study is predicated on the Doctrine of Unbalanced Growth Theory, Solow-Swan growth theory and Romer Growth Model. Secondary data source was explored in presenting the facts of the situation. The secondary data were obtained from relevant literatures, Central Bank of Nigeria Statistical Bulletin and National Bureau of Statistics publications among other. In an attempt to do this, ordinary least square regression technique was employed in which T-test, R-Square, Standard Error Test and Durbin Watson test ADF/PP unit root and co-integration test were used in the data analysis, information concerning foreign direct investment, company income tax, petroleum profit tax and corporate tax from 1990-2020 were extracted. The empirical evidence shows that FDI has positive impact on revenue generation in Nigeria. The result of the finding revealed consistence present of co – integration among the variables which is a clear indication that foreign direct investment has a significant and positive relationship with revenue generation with strong emphasize on company income tax as mediating factor. In conclusion, foreign direct investment increase revenue generation which through company income tax generated to boost economic growth in Nigeria. Therefore, in other boost government revenue generation which will promote growth and development in the economy, government should give priority or pay more attention to policies that could promote FDI inflow into the country and use this avenue to generate more tax to enhance infrastructural development

Keywords: Company Income Tax; Foreign Direct Investment; Petroleum Profit Tax; Corporate Tax; Revenue Generation

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1. Introduction

Foreign direct investment is an ideology that explain the relationship between a country to the other through their efforts to involve in cross-border business. A country has to offer what he has to another country in order to enhance a good business relationship, also to improve their well-being in the society which lead to a common benign relationship for the betterment of their country through the production of goods and offering services (Ayanwale, 2017). Moreover, taking advantage of a country, the performance of this country is dependent on its parts, their relationship, and purpose Furthermore foreign direct investments is an act of creating a bilateral relationship through cross-border business with each other (Bailey, 2018).

To enhance fiscal output is the major concern of all countries across the world, foreign direct investment plays a significant role by fostering good relationship in term of balance of payment. The dramatic increase in investments report, and research analysis has prioritized the value of foreign direct investment in business literature and country can have abundant gains and better skills which will enhance better performance, gear up their productivity, growth, development and same time increase their standard of living (Balasubramanyam, Salism, & Sapsfold, 1999). It is also argued that country continents their social objective with their main targets where foreign direct investment acts as a means of a changing business ideas and strategic mechanism to increase their overall economic performance. It is also well documented that foreign direct investment can be an efficient approach for country to cultivate positive terms with their business if you love this foreign direct investment boots a significant influence on economic growth of every country across the world and is conceited as a purpose of the contribution toward its counterpart thereby including businesses as a major entity which contributes the word growth productivity and development (Barrell, & Pain, 2007).

Therefore, high level of foreign direct investment will have a progressive influence on the economic growth of every nation. A greater number of foreign direct investment increase country productivity and improve their standard of living. In developing countries, the adoption of foreign direct investment is a way to encourage economic growth. The result of this relationship undeniably have an important role in fostering social economic development. Foreign direct investments help address the weakness of the country and reduce unemployment, statistically many countries have successfully industrialized through strong foreign direct investment. However, according to Asimiyu, and Kizito, (2014).most countries realized 50 percent of their national revenue through the company income tax generated through the subsidiary companies in their respective countries.

Growing international linkage through foreign direct investment are an important

features of financial globalization and raise important challenges for policymakers and statisticians in industrial and developing countries alike. With the integration of international capital market, world foreign direct investment flows grew strongly in the 1990s at rates well above those of global economic growth or trade (Blomström, & Wolff, 2004). Base on Aremu, (2005) submission, this has placed the activities of direct investor and direct investment enterprises under increased scrutiny and presented new challenges for statistical recording, balance-of-payments projections, economic surveillance of vulnerability analysis. This reports surveys the recent state of foreign direct investment statistics at the international and national levels.

Adenugba and Chike, (2013) opined that tax revenue mobilization is one of the major source for funding government activities in Nigeria. Company income tax is one of the component of tax structure around the world. Taxes are payable as specified upon profits of any company accruing in, derived from, brought into, or received in Nigeria in respect of amongst others, any trade or business for whatever period of time the trade or business may have been carried out.

Therefore, taxation plays a major role in assisting a country to meet its needs and promote self-reliance. The need for tax payments has been a phenomenon of global significance as it affects every economy irrespective of national differences (Abiola & Ehigiamusoe, 2014). Balogun, (2015) Stated that though taxation might not be the most significant source of revenue to the government in terms of the magnitude of revenue desirable from taxation, however; taxation is the most important source of revenue to the government, from the consistent and certain view of taxation. Barro, (1991) further mentioned that taxation is the most important source of revenue to the government. Due to the inherent power of the government to impose taxes, the government assured at all times of its tax revenue not matter the circumstances. In both developed and developing economies, the primary purpose of taxation is mainly to generate revenue for the provision of social amenities and the welfare of the populace. Ekankumo & Braye, (2011) agreed that taxation is used as an instrument of economic regulation for the purpose of discouraging and encouraging certain forms of certain behaviour

The investigation of foreign direct investment and its impact on revenue generation taking company income tax as mediating factor could help in bridging the gap between practice and scholastic theory (Flesher & Flesher, 2007). The current study also contributes toward and insufficiently research area of stakeholders in the aspects that needs to be develop and considering for analysis and for the lead to reveal the actual behavior of stakeholders (freeman et al, 2020). There is no comprehensive study available that strengthen the nexus between foreign direct investment and revenue generation while taking company income tax as a mediating factor. However, based on the argument and study none of the above

study are being used company income tax as mediating factor between foreign direct investment and revenue generation of any country. This is the important and significance of this study that company income tax with its impact on foreign direct investment and revenue generation examined in conjunction within the context of Nigeria. Therefore, the current study will be of great benefit for government who are active participants in tax administration, policy makers and corporate organization as well. This study has strengthened the interest in the province of company income tax and its impact on revenue generation in the country.

2. Literature Review

2.1. Concept of Foreign Direct Investment

Agrawal, (2015) defined foreign direct investment as a category of international investment that reflect the objective of a residence in one country (the direct investors) obtaining a lasting interest in an enterprise resident in another country (the direct investment enterprise).the lasting interest implies the existence of a long-term relationship between the direct investors and the direct investment enterprise and the significant degree of influence by the investor on the management of the enterprise. A direct investment relationship is established when did direct investor has acquired 10% or more of the ordinary share or voting power of an enterprise abroad (Adeolu, 2007).

Direct investment comprises not only the initial transaction establishing the foreign direct investment relationship between the direct investor and the direct investment enterprise but all subsequent capital transaction between DM and among affiliated enterprises resident in different economics the key concept in the measurement of foreign direct investment are elaborated (Chenery, & Stout, 1996).

The concept of direct investment does not necessarily imply control of the direct investment enterprises because according to Hansen and Rand, (2006) and ownership criterion of only 10% of the ordinary of voting shares of the direct investment Enterprise is used to divide or establish a direct investment relationship in practice however a large proportion of foreign direct investment capital involved majority-owned own subsidiary and branches. The last interest in a direct investment enterprises publicly involved in establishment of a manufacturing facilities bank premises warehouses and other permanent or long-term organization abroad but it may also involve the operation of mobile equipment such as drilling ringing and construction activities and explanation on exploration for natural resources, what's a direct investment relationship has been established all subsequent capital transaction between the direct investor and the direct investment Enterprise and among affiliated enterprises resident in different economies are considered to be direct investment (Javorcik, 2004).

Jyun-Yi and Hsu, (2008) posited that the term influence or control and long-term are used to make a distinction between foreign direct investment and portfolio investment because the latter is a short term investment where the investor does not seek to control the firm.

Concept of Company Income Tax

Tax revenue mobilization is one of the major source for funding government activities in Nigeria. Company income tax is one of the component of tax structure around the world. The current rate of companies' income tax is 30% of assessable income. According to Akpotoboro (2016) deemed tax is primarily payable on profit at the company income rate of 30%. However as former companies liable to such that 20 hundred operate in Nigeria and those accounts to the Federal government of Nigeria with full accounts, Kiabel and Nwokah, (2009) reiterated that the law permits federal board of inland to deem a position of the foreign company turnover or gross income as profit. Therefore, the deemed income of the company will be 20% of the turnover. Such the income so assessed will itself be liable to tax at the current company tax rate of 30% which final assessment will amount to 6% of total income. Effectively, the company will be assessed for income tax at 1% of its turnover as 5% would have been withheld according to section 57 CITA 1990 mandates company operating in Nigeria stock exchange to find monthly return with the federal board of inland revenue not less than 7 days and after the end of each calendar month

Revenue Generation

Concept of Revenue Generation

Revenue generations are the income generated by the government through any source either oil revenue, non-oil revenue, tax and non-tax revenue which government used to carry out expected obligation. Kiabel et al, (2001) defined revenue as income generated from tolls, taxes, rates, fees, penalties, rents, forfeitures, dues and other receipts of government from whatever source arising over which legislature has power of appropriation including proceeds of loans raised. Section 160 (9) of the 1989 Federal constitution and section 5, 162 (10) of 1999 constitution defined revenue as any income or returns accruing to, or derived by the government from any property belonging to government, any return by way of interest on loans and dividends in respect of shares or interest held by the government, in any company or statutory body incidental sources resulting from a particular environment, permissive sources from normal operations and statutory sources recognized by the Nigerian constitution. For a successful revenue generation, revenue control is put in place to ensure timely collection of government revenue, and ensuring that amount due are actually collected as well as ensure that revenue generated are paid to the coffers of government (Seiyi, 2003).

Melnyk, Kubatko and Pysarenko, (2014) foreign direct investment is also a good source of generating revenue to the government through tax. The aim of revenue generation as laid down by the Federal Government is income generation through personal and income taxes, adverts or bill-board, business premise registration among others. Due to the wideness of the revenue sources, tactical plans are needed to get grip of harnessing resources to enable collection, and reduction or elimination of tax avoidance and evasion. In order to affect plans for the organization, the area of focus has always been finance in which costs of production, selling and distribution, wages and maintenance have been emphasized especially in the manufacturing and profit making ventures. In the public sector the goal setting focuses on services to be rendered, which will translate to timely completion of individual schedules to converge in the annual financial statement to be produced (Koojaroenprasit, 2012).

The Impact of Foreign Direct Investment on Revenue Generation

Several studies have analyzed the influence of foreign direct investment on revenue generation and have suggested that foreign direct investment have a positive impact on revenue generation (Melnyk et al, 2014; Hansen et al, 2016; khaliq & Nov, 2014; Koojaroenprasit, 2012; Barrell, 2007). It has also been proven that cross boarding investment have a positive relationship with financial performance (Macauley, 2011) However, contrary study are imposing no relationship between cross boarding investment and revenue generation. (Macauley, 2012; Muntah, Khan, Haider & Ahmad, 2015). There are also a researcher opting for a neutral stance when it comes to relationship between revenue generation and foreign direct investment (Nwankwo, Ademola, & Kehinde, 2013). Foreign direct investment are argued to generate favorable result for the country increasing employment opportunity, diverse business ideas, price stability, reduction on inflation and breaking of market monopoly adherence to prestige which collectively improve profitability(Olayiwola, & Okodua, 2017). A recent study using a linear model indicates that foreign direct investment and revenue generation do not have a positive relationship with the non-linear model of foreign direct investment and accounting base performance on economic growth have a positive association in the area for future (Omankhanlen, 2018).

Influence of Company Income Tax on Revenue Generation

Few pieces of research have been conducted to analyzed foreign direct investment influence on company income tax benefits which will increase in the government revenue generation. The tax leveled on this subsidiary companies are reasonable enough to calve a good nerve on infrastructural development. However, it is noteworthy that company income tax is designed to generate income for the government in other fulfill government obligation to its citizen while the subsidiary companies aim at maximizing their profit by enhancing their level of productivity

and also increase their customer base through excellent service delivery (Olaoye, 2018). Companies are mandated to pay their tax at all cost in order to allow them run their business smoothly. Government must generate funds through company income tax to run their day to day affairs. Company income tax are instrumental drive toward economic growth of the country through their income generation as it has great impact and high influence on revenue generation (Pfister, 2009). It was analyzed that company income tax and foreign direct investment have a significant correlation and they both have an impact on the revenue generation. It has also been supported that company income tax has a positive influence on economic growth because the income generated through company income tax is to improve the well-being of general populace (Dixon, 2005).

Therefore, company income tax being an integral part of taxation and are considered as an important funding tool through which government is derived various apart from the income generate through them in return for the service and loyalty they offered the country, they also expect safety, benefits, earnings and conducive working environment. It is for against this backdrop that this study will be based on the influence of foreign direct investment on company income tax and is beneficial as it points out toward an improvement in revenue generation (McWilliams & Siegel, 2000).

The impact of Foreign Direct Investment on Company Income Tax

Foreign direct investment helps countries to improve the environment and fulfill the need of external perception and impression. Foreign direct investment occupies a strategic role and position which lead to better performance in bilateral relationship through cross bordered business. According to Onu, (2012) they play significant roles in converting input to productive output. Several steps can be taken up to foster business relationship with both countries different business ideas which increase their productivity and this enhance more business opportunities base on the excellent service offer them. It became logical that the country benefit a lot from their subsidiary company through various tax system. The subsidiary company can provide incentive benefit as part of corporate social responsibility include meeting their customer demands and moral suasion, giving out credit facilities with extremely low interest rate, introducing scholarship programme for their children to further their study either local or international, poverty eradication through skill acquisition programme in their community (Osuka, Otiwu & Makwe, 2018) and financial empowerment through sustainable agriculture which will ultimately serve as morale booster and job production (Edman, 2011).

2.2. Theoretical Review

Doctrine of Unbalanced Growth Theory

The theory of unbalanced growth was propounded by Herbert O Hirschman in the year 1958, No less developed countries are sufficient endowment of resources as to enable it invest simultaneously in all sectors of the economy in order to achieve balanced growth. Balance growth is a doctrine previously advanced by Rosenstein Rodan in his 1943 article on a problem of industrialization of Eastern and South-eastern Europe. According to the theory, for a development to take place a deliberate strategy of in balance the economy should be adopted. This is possible by investing either in social overhead or capital. It is advocated not because of its direct effects on final output but because it's permit and in fact invite directly productive activities to come in some social capital investment is required as a prerequisite of directly productive activities in investment (Koutsoyiannis, 1977).

Solow Swan Theory of Growth

Solow theory of growth which expressed what specific production function which is used to show two source of growth output growth which results in an increase in input as well as increase in productivity as a result of improved technology and the high skill level the production function presents a quantitative connection between input and output

the efficiency of government regulation the degree of Monopoly in the economic the degree of human capital in the economy at the educational level of the labour force are only a few factors that affect total productivity in China government regulation are rigorous and complex which create barrier for domestic companies and especially for foreign companies entering the Chinese market the government regulation and law of long constituted a main barrier for multinational by Oldenburg efficient production process. On the other hand, foreign companies are taking advantage of the cheap and skill Chinese label which is one of the main argument for moving their business to China (Keynes, 1936).

Romer Growth Model

One of the men contributor to endogenous growth Theory is romer theory of growth which is particular the relevant for developing this theory deals with technological spillover that are often present in and industrialization process. Romers model start with the assumption that grow process originate from the level of the firm or industry. Because industry has constant returns to scale in production the model does not violate their solution of perfect competition. what then distinguishes romers is that he assumes that the economic white capital stock as a positive effect on output at the industry level ends there is a possibility of increasing returns to scale at the economy level (Gujarati & Sangeetha, 2007).

2.3. Related Empirical Review

Hansen et al, (2016), carried out a research work on FDI and its influence on economic growth making use of regression analysis, the result reflected that FDI not only affects growth directly, but also indirectly but also through its nexus with human capital. Further, the result further revealed a negative coefficient for FDI with the technology gap between the source and subsidiary economy using a large sample, Koojaroenprasit, S (2012) found similar results i.e. that inward FDI has positive impact on growth with high influence, coming through the relationship between FDI and human capital. The result revealed further that FDI is an important drive for technology advancement, will gear up more growth than local investment due to its cross boarding influence. The result revealed further that FDI will have more significant effect by increasing domestic investment.

In the work of Macaulay, (2011) on FDI and revenue generation where he ANOVA was used to analysis relationship among the variables. The result revealed a positive co integration among the variable of the study in both developing and developed countries, but concludes that the long-run growth in subsidiary countries is determined by the knowledge and technology acquired from investing countries to subsidiary countries. Moreover, the result of Jacorcik.(2004) on FDI and revenue mobilization reflected a positive support for their hypotheses that the growth effect of FDI is positive exponential for export promoting countries and potentially negative for import-substituting ones. Comparing evidence from developed and developing countries, Barrell et al, (2007) had a contrary result which it was noted that the factors that affect FDI flows are different across the income groups. Interestingly, it was revealed that evidence of beneficial FDI only for developing countries and not for the developed ones, while it the result revealed the crowding-out effect of FDI on domestic investment on wealthy group of nations.

In addition, Aremu (2005) research work opting for a neutral stance on sectoral analysis of foreign direct investment and growth in developed countries with a particular emphasis on the sector influence of FDI on revenue generation, the result revealed that, FDI has no positive effects on economic growth with its relationship labour. Moreover, they found that the effects seem to be very different across countries and economic sectors. Also, using simultaneous equations model, Ayanwale, (2017) examined the relationship between FDI and economic growth in the Romanian economy. While error correction was used to analyze the data. The result of the findings revealed a bi-directional causation between FDI and economic growth.

In Nigeria, comprehensive works have been carried out on the connection between FDI and economic growth. Some of these works include Ayanwale, A. B (2017), Aremu (2005), Ake, (2001) Abiola et al, (2014), Adeolu, (2007) etc. Adenugba (2013), Balogun, (2015) and Olaoye (2018) findings suggest a positive relationship

between FDI and economic growth in Nigeria while Olayiwola et.al, (2017) examine if there is any sort of feed-back relationship between FDI and economic growth in Nigeria using single and simultaneous equation systems. Their find revealed that FDI and economic growth have strong relationship in Nigeria and there is positive feedback from FDI to growth and from growth to FDI. Onu, (2000) investigated the effect of FDI on economic growth with Regression model. The result revealed that FDI negatively related to gross domestic investment. In another paper

Accordingly, studies such as Ayanwale (2007) and Osuka et al, (2004) focused on the oil and non-oil sector and its impact on revenue generation while mediating on impacts of FDI inflows to the extractive industry on Nigeria's economic growth. Akinlo (2004) specifically controlled for the non-oil FDI in Nigeria while error correction model was used to analyze the data, he examined the effect of foreign direct investment (FDI) on economic growth in Nigeria. The result revealed that both private capital and lagged foreign capital have small and not a statistically significant effect on economic growth. Further, his results support the argument that extractive FDI might not be growth enhancing as much as manufacturing FDI.

Ayadi (2009) investigates the relationship between FDI and economic growth in Nigeria and discovered weak correlation and causality between the variables and recommends that infrastructural development, human capital building and strategic policies towards attracting FDI should be intensified. In the same vein, Osinubi and Amaghionye (2010) examined the relationship between foreign private investment (FPI) and economic growth in Nigeria. Their findings suggest that FPI, domestic investment growth, net export growth and the lagged error term were statistically significant in explaining variations in Nigeria economic growth while Ayashagba and Abachi (2002) evidenced a significant impact on economic growth. Generally, as evidenced above, majority of the available empirical evidence were centered on foreign direct investment and economic growth majorly with focus on expenditure side which appear to be one sided

There is relatively little empirical literature and applied studies carried out in the past on this subject. But the review of previous empirical literature revealed a lack of consensus in the research findings of past researchers which indicates the existence of a research gap. It appears no research has been conducted on the foreign direct investment and its impact on revenue generation in Nigeria as a country. In view of this, the researcher is interested to undertake a study which hinged on the intent to examine foreign direct investment and its impact on revenue generation in Nigeria mediating on the role of company income tax

3. Methodology

The researcher adopted the Ordinary Least Square OLS method of estimation in order to derive the parameter of the model. In order to avoid news on the problem of spurious regression The time-series property of data series employed in the estimation equation is tested for stationary using augmented dickey Fuller (ADF), Philip Perron unit Root test.to investigate whether there is no relationship among the variables in estimation we employ the Johansen test for cointegration. The taste test is based on the comparison of the null hypothesis, $H_0(r=0)$ against the alternative, $H_1(r>0)$, where r stands for the number of co integrating vectors. If the alternative is accepted, it implies cointegration amount the variable as suggested longer or relationship among the variables. The functional form, on which are econometric model was based employed a multiple regression equation model in this work. However, to investigate this study, the researcher obtained the data of the above stated variable from Central Bank of Nigeria (CBN) statistical bulletin from 1990- 2020. The study employee time series Annual Data for the period of 31 years. Meanwhile, having stated the above objective, Hypothesis and models, the researcher employed computer application while estimating the model for desirable result

3.1. Model Specification

The following mathematical model was developed to analyze the relationship between foreign Direct Investment and revenue generation mediating on the role of company income tax in Nigeria by specifying Company Income Tax (CIT), Corporate Tax (COT), Petroleum Profit Tax (PPT), Value Added Tax (VAT), Exchange Rate (EHT) being the proxies for Revenue Generation as explanatory variable, while Foreign Direct Investment as dependent variable in the discourse of how foreign direct investment influences revenue generation . Thus, the model of this study was specified in functional and linear forms as shown below:

where:

Y=Represent Foreign Direct Investment

β_1 - β_5 = Partial regression coefficient attached to variable X_1, X_2, X_3, X_4, X_5

X_1 - X_5 = Independent variables that significantly contributed to the variance of total government revenue.

α = the constant term

FDI=Foreign Direct Investment

CIT= Company Income Tax

PPT= Petroleum Profit Tax

COT=Corporate Tax

β = the coefficient of the function

e = error term.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \quad 3.1$$

$$Y_{it} = \alpha_{it} + \beta_1 CIT_{it} + \beta_2 PPT_{it} + \beta_3 COT_{it} + \varepsilon_{it} \quad 3.2$$

$$FDI_{it} = f(CIT_{it}, PPT, COT_{it},) \quad 3.3$$

A Priori Assumptions

The a priori assumptions of this model suggested that foreign direct investment had a positive sign and coefficients, which implied a positive relationship between the variables. Thus the following is the a priori expectation of the model: $\beta_1, \beta_2, \beta_3, >0$; $\mu=0$.

3.2. Presentations and Analysis of Empirical Results

For proper Examination of the impact of foreign direct investment on revenue generation mediating on the role of company income tax in Nigeria, the researcher employed some macroeconomic variables that determine the relationship of foreign direct investment in Nigeria economy using company income tax as mediating factor

The augmented Dickey-fuller (ADF) and Phillips-Perron (PP) unit root tests at constant level were employed in this study in order to eliminate the spurious content in those variables. Thus, below are the figure and value of ADF-statistic at 5 and 10 percent critical value.

Table 1. Augmented Dickey Fuller and Phillips-Perron Unit Root Test

Series	ADF Test Statistic	5% critical value	10% critical values	Order	Remarks
FDI	6.349291	3.3678	3.1678	1(1)	Stationary
CIT	6.349564	3.3678	3.1678	1(1)	Stationary
PPT	6.432940	3.3678	3.1678	1(1)	Stationary
COT	5.678764	3.3678	3.1678	1(1)	Stationary

Sources: E-view Regression Output (2020)

Table 2. Phillips-Perron Unit Root Test

Series	PP Test Statistic	5% critical values	10% critical values	Order	Remarks
FDI	12.3758	3.3678	3.1678	I(1)	Stationary
CIT	6.35678	3.3678	3.1678	I(1)	Stationary
PPT	6.68719	3.3678	3.1678	I(1)	Stationary
COT	6, 56934	3.3678	3.1678	I(1)	Stationary

Sources: E-view Regression Output (2020)

The above empirical test shows that FDI, CIT, PPT and COT are integrated of the same order one I(1). From the above tables (i.e. table1 and table2), it was found that both ADF and PP Test with trend and intercept indicated that time series are integrated of the same order (i.e. ADF and PP t-statistic in absolute values terms 6.349291FDI, 6.349564COT, 6.432940PPT, 6.56934COT for ADF, and 12.3758FDI, 6.35678CIT, 6.68719PPT and 6.56934COT respectively, are greater than their ADF and PP critical values at 5% (3.3678) and 10% (3.1678) percent significance level. The result reflect linear combination of series integrated of the same order are said to be perfectly co-integrated. The integrations indicate the number of time series have been differenced once before their stationarity is induced. Thus, the series were stationary at that first level.

There is a long run relationship between the FDI and the explanatory variables;CIT, PPT, and COT. Firstly, the summary of the Johansen Co-integration Test is shown in the Table below. The model with lag 1 was chosen with the linear deterministic test assumption.

Johansen co-integration test for the series; FDI, CIT, PPT, and COT

Series: D(FDI,) D(CIT, 1) D(PPT, 1)(COT)

Lags interval: 1 to 1

	Likelihood Ratio	5 Percent Critical Value	1 Percent Critical Value	Hypothesized No. of CE(s)
3.239750	127.3342	22.13	22.83	None **
2.430597	43.56745	18.22	12.15	At most 1 **
1.345679	12.23094	12.42	7.56	At most 2 **
1.204434	13.45367	1.34	4.34	At most 3**

Source: Researchers Computation (2020)

The condition for significant long-run relationship (co-integration) among the variables such as (FDI, CIT, PPT, and COT) is that the likelihood ratio (L.R), must be greater than the 5 and 1 percent critical value. Second is that the eigenvalue coefficient of these variables must be different from zero. Viewing these results from these conditions stated above, shows that our eigenvalue coefficients of these

variables in their absolute term (i.e. 3.239750FDI, 2.430597CIT, 1.34579PPT and 1.204434COT) respectively, are different from zero, and the (L.R), on its own, are all greater than the 5 and 1 percent critical values. We therefore, conclude that there exists a long-run relationship co-integration among these variables (i.e. C/FDI, CIT, PPT and COT). Having tested and observed that there is log-run relationship in the model, the next to observe is the nature of this relation between the independent variables and (FDI) the dependent which the eigenvalue coefficient did to indicate, will be determined using the “normalize co-integrating coefficient” (1) to analyze the nature of log-run relationship.

3.3. The Long-Run Equation

$$3553554, 10 (\text{FDI}) = -0.131361 (\text{COT}) + 0.345867(\text{PPT}) + 0.2321334 (\text{COT})$$

The log-run equation above reported that there is a positive log-run relationship between foreign direct investment and revenue generation. The implication is that, in the log-run, a unit increase

(change) in foreign direct investment will increase the revenue generated through Company Income Tax (CIT), Petroleum Profit Tax (PPT), Corporate Tax (COT) in Nigeria by 13 percent which will result to an increase change to the FDI, and also increase revenue generation in the log-run in Nigeria during the period under review. Finally, in this section, the constant variables (FDI) appeared negative; it means that holding these independent variables constant, the value of (FDI) in Nigeria will stand at 23%.

3.4. Regression Results by (OLS) Distribution lag Method.

$$1.301523(\text{FDI}) = 0.533712(\text{COT}) + 0.716891(\text{PPT}_{t-1}) + 0.435372(\text{COT})$$

$$T\text{-Statistic} = (-1.301523) (2.349511) (3.443223)$$

$$\text{Std. Error} = (0.633472) (0.239568) (0.443282)$$

$$R^2 = 0.673348$$

t- Critical value at 5% = $\alpha / 2 t_{0.025} = 3.012$ with reference to n-k, where n is the number of observation = 17 and k is the number of parameters = 3, 25 - 3 = 22. f-Statistic = 234.9123, f- critical = k-1 and n-k value. Where k = 4-1 = 3 and k-n = 25: (3, 25) $F_{0.05} = 3.25$, Durbin – Watson stat = 1.654732.

The results of the estimated equation are discussed in terms of the significance and signs on the parameters. Evidence from the results model as contained in equation above, shows that the Company Income Tax (CIT), Petroleum Profit Tax (PPT), and Corporate Tax (COT) independent variables, has a positive linear relationship

with Foreign Direct Product (FDI) the dependent variable. The implication of this positive sign is that 1% change (increase) in (CIT), (PPT) and (COT) the independent variables will bring an increase in revenue generation through foreign direct investment (FDI) thereby increase economic growth in Nigeria by 0.203473 and 0.871619 percent respectively, during the period under review. Thus the probability of (COT) influence on the (FDI) in Nigeria is 41% while the (PPT) is 0.87%. These variables are in line with their a-prior expectation.

The foreign direct investment (FDI) coefficient stood at 1.301523 percent. This means that holding other factors including (CIT), (PPT) and (COT) constant, foreign direct investment (FDI) will be held at 1.3% percent during the period of observation (1991 – 2020).

The coefficient of determination R^2 of this model stood at 0.673348. The implication of the R^2 to this study is that “67% total variation of foreign direct investment (FDI) during the period of observation, is explain by the change in Company Income Tax (CIT), Petroleum Profit Tax (PPT) and Corporate Tax (COT) while 5% influence out of 100% is as a result of other factor or variables that were not included in the model but was captured by the error terms of the model. Another implication of this high level of R^2 is that, “it shows that the model specified, used has a good fit to the sample regression line.

However, the F- statistic coefficient of this study ranked 234.9123 very high; this is the group or overall influence of the independent variables to dependent. The high ratio of f-statistic means that it is significant since it is greater than F-critical value (3.37) at 5% level of significance.

3.5. Evaluation of the Working Hypotheses using the individual test of significance and co-integration test from the models.

Decision Rule: if $T_{Cal} > T_{Tab}$ – reject H_0 and accept H_1

If $T_{Cal} < T_{Tab}$ - accept H_0 and reject

Critical Value @ $T_{0.25}$ (0.05 %) =3.012.

The T-statistic for all the explanatory variables (CBCA), and (ACGSF) are (3.491943) (7.685423) respectively, this appears to be relatively high compared to the critical values at .05 % (3.012), and hence we evaluate the hypothesis below.

Restatement of Hypothesis

H_0 : Foreign direct investment has not significantly impacted positively on the revenue generation mediating through company income tax in Nigeria.

Considering the t-value results above, shows that the (CIT, PPT and COT)

independent variables used in did pass the test of individual significance at 5 % level of significance. The result shows that 1% change (increase) in (CIT, PPT and COT) as mediating factors for revenue generation, will lead to a increase in (FDI) in Nigeria's by 3.49% and 7.68%. However, the values appear to be significant. We therefore reject the null hypothesis of this study and accept the alternative hypothesis. In other words, foreign direct investment has significantly impacted positively on the company income tax, petroleum profit tax and corporate tax, as mediating factors for revenue generation in Nigeria during the period under review.

4. Result of the Findings

This study analyzed foreign direct investment and its impact on revenue generation in Nigeria while taking company income tax as mediating factor. The dataset covered a 30 year period from 1990-2020. The ordinary least square regression technique was employed in which T-test, R-Square, Standard Error Test and Durbin Watson test, Augmented Dickey Fuller and Phillips-Perron unit root and co-integration test were used in the data analysis on FDI yields the following key findings:

- There was a positive and significant impact between the current values of foreign direct investment and revenue generation which was mediated under the influence of company income tax . It suggested an increase in the foreign direct investment will create more opportunity to generate more company income tax which would automatically increase revenue generated This agreed with Egwu (2016); Friday *et al* (2016) and Ibe (2014). This conformed to the a priori expectation.
- Foreign direct investment has positive and significant influence on the company income tax in Nigerian economy, hence suggesting the need for strong tax administration and ensure all those people involve in cross boarding business must not evade from paying their tax, custom and excise duties as this will assist in boosting revenue generated
- Foreign direct investment have positive and significant influences on profit petroleum tax being an oil tax revenue, the inflow of the proceed generated through foreign direct investment into Nigeria vis-a-vis signifying the importance of friendly business environment in the country.

5. Conclusion

In conclusion, foreign direct investment increase revenue generation which through company income tax generated to boost economic growth in Nigeria. Therefore, in other boost government revenue generation which will promote growth and development in the economy, government should give priority or pay more attention to policies that could promote FDI inflow into the country and use this avenue to generate more tax to enhance infrastructural development, consistent power supply and protection against external aggression to address the issues of Boko Haram and their incessant killing in some part of the country, kidnapping, Militancy and civil unrest. This will encourage developed countries to establish more subsidiary company in the countries which will create more job opportunities for the unemployed youth and which will curb crime rate, poverty in the country and improve the economic growth of the country

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