TAX INCENTIVES AND FOREIGN DIRECT INVESTMENT FLOWS IN NIGERIA

JAMANI NDUBUISI, RUTH OSARETIN URHOGHIDE *

ABSTRACT: *The study examined the effect of tax incentives on FDI flows with particular emphasis on the Pioneer Status Tax holiday scheme. This study is conducted by utilizing ordinary least square regression on time series data to observe the relationship between FDI inflow and a list of explanatory variables particularly tax incentives measured using the PSTH during period 2000Q1 – 2016Q4. Secondary data was sourced from the CBN statistical bulletins, National Bureau of Statistics and the Federal Inland Revenue service. To empirically analyse the long-run relationships, the unit root test was conducted for the variables to ascertain their stationarity status, next, the Engle and Granger procedure for co-integration testing was also applied to ensure the existence of a long run relationship between the variables. Finally, the regression analysis was conducted. The findings showed that PSTH has some effect on FDI flows into sectors. Though, its significance appeared not to be pervasive across majority of the sectors. The results suggest that firstly, it is likely that more economic fundamentals will matter more than simply incentive and the response of FDI flows to tax incentives and secondly, the effect of tax incentives will also be largely moderated by the nature of business or industry characteristics. Given the presence of heterogeneity associated with different sectors, the incentives are unlikely to be similar in their effects. The study concludes that there is the need to ensure thorough coordination of tax incentives.*

KEY WORDS: *tax incentives, pioneer tax policy and foreign direct investment flows.*

JEL CLASSIFICATION: *H25, H87.*

1. INTRODUCTION

According to Easson, (2004), a tax incentive can be defined as a special tax provision granted to qualified investment projects (however determined) that represents a statutory favorable deviation from a corresponding provision applicable to investment projects in general (i.e. projects that receive no special tax provision). An

* *University of Benin, Nigeria, ndubuisi.jamani@gmail.com*
Ph.D., Benson Idahosa University, Nigeria, urhoghideruth@yahoo.co.uk

implication of this definition is that any tax provision that is applicable to all investment projects does not constitute a tax incentive. Tax incentives can take the form of tax holidays for a limited duration, current deductibility for certain types of expenditures, or reduced import tariffs or customs duties. Zee, Stotsky and Ley (2006) also define tax incentives in terms of their effect on reducing the effective tax burden for a specific project. This approach compares the relative tax burden on a project that qualifies for a tax incentive to the tax burden that would be borne in the absence of a special tax provision. This approach is quite useful in comparing the relative effectiveness of different types of tax incentives. Foreign direct investment (FDI) on the other hand has been defined by the OECD (2008), as an investment in destined country (in this case host country) conducted by resident enterprise in the origin country (in this case investing country) which objective is to hold lasting interest. In addition, the World Bank (2012) defined FDI as investment inflow to a country (host country) other than investor's country (home country) to obtain long term interest or management control over companies operating in a host country. The investment inflow could be in the form of equity capital, long term or short term capital or reinvested earnings.

Theoretically, tax incentives affect investment decisions because tax assessment influences the amount of investors' benefits and costs. Tax incentives designed to encourage FDI, including general host country tax relief measures. This view assumes that multinational companies take tax incentives into account when making location decisions. Again theory posits that tax incentives are put in place to correct market failures such as when positive externalities in terms of company's research and development is left uncaptured by market dynamics and thus ignored. Tax incentives can play a positive role by encouraging companies maintain their interest on research and development. Tax incentives have also been advocated to address a range of macro-economic problems, such as cyclical (or structural) unemployment, balance of payments deficits, and high inflation. However, while tax incentives can make investing in a particular country more attractive, they cannot compensate for deficiencies in the design of the tax system or inadequate physical, financial, legal or institutional infrastructure. Similarly, tax incentives are a poor response to the economic or political problems that may exist in a country. For example, if a country has inadequate protection of property rights or a poorly functioning legal system, it is necessary to engage in the difficult and lengthy process of correcting these deficiencies rather than providing investors additional tax benefits.

In Nigeria, the need to encourage the flow of foreign investment into certain critical sectors motivated the Pioneer Status Tax holiday scheme. The aim of the policy is to provide tax holiday incentive to a company in Nigeria aimed at enabling such company operating within the pioneer industry to make significant capital expenditure and a reasonable level of return of profit within its formative years without having to pay companies tax. The enabling legislation as regards Pioneer Status in Nigeria is the Industrial Development (Income Tax Relief) Act 2004 (The Act). The key research issue is that not enough is known beyond anecdotal opinions and casual empiricism about the response of FDI flows to the PSTH policy since inception. There is the need to provide a methodological approach for the evaluation of the PSTH policy especially

in relation to FDI flows into sectors were the policy is applicable. This is sensible for effective policy coordination. The objective of the study therefore is to examine the effect of tax incentives on FDI flows with particular emphasis on the Pioneer Status Tax holiday scheme. The rest of the paper is structured as follows: section 2 deals with the review of literature, section 3 deals with methodology and model specification, in section 4 we present and analyse the results. Finally, section 5 concludes the paper while proffering appropriate policy recommendations.

2. LITERATURE REVIEW

2.1. Foreign Direct investment

OECD (2008), foreign direct investment (FDI) can be categorized as an investment in destined country (in this case host country) conducted by resident enterprise in the origin country (in this case investing country) which objective is to hold lasting interest. Another world wide definition of FDI is offered by World Bank. World Bank (2012) defined FDI as investment inflow to a country (host country) other than investor's country (home country) to obtain long term interest or management control over companies operating in a host country. The investment inflow could be in the form of equity capital, long term or short term capital or reinvested earnings. According to Ridzuan, Khalid, Zarin, Razak, Ridzuan, Ismail and Norizan, (2018), the motivation for increasing the efforts to attract more FDI from this economic bloc stems from the expectation of an overall positive impact of FDI resulting from direct capital financing, generate positive externalities, and consequently stimulate economic growth through technology transfer, spillover effects, productivity gains and the introduction of new processes and managerial skills.

2.2. Tax Incentives

Tax incentives can be defined from two different perspectives. From a statutory perspective, a tax incentive can be defined as a special tax provision granted to qualified investment projects that represents a statutorily favorable deviation from a corresponding provision applicable to investment projects in general. While, in effective terms, a tax incentive can be then defined as a special tax provision granted to qualified investment projects that has the effect of lowering the effective tax burden – measured in some way – on those projects, relative to the effective tax burden that would be borne by the investors in the absence of the special tax provision. Under this definition, all tax incentives are, therefore, necessarily effective **(**OECD, 2001). Tax incentives can be divided into two categories based on the definitions above. These are: direct and indirect. Direct tax incentives, in general, relate directly to a country's corporate income tax (CIT) rate. A good example of direct tax incentives can be CIT rate incentives and investment cost-recovery incentives. On the other side, indirect tax incentives usually target export-oriented industries, by granting them exemption, either fully or partially, from import tariffs, excises, or sales tax. Those incentives can take

forms such as export-oriented incentives, value added tax -related incentives (VAT), or export processing zones (UNCTAD, 2000).

2.3. Policy Arguments for Implementing Tax Incentives in Attracting FDI

Numerous arguments have been brought forward for using tax incentives in attracting FDI. OECD Tax Policy Studies (2001) stated several crucial arguments for using tax incentives which can be classified as follows: first, international competitiveness, second, "market failure" considerations, third, regional development and income distribution, and fourth, macroeconomic considerations. Detail explanations related to those arguments according to OECD Tax Policy Studies (2001) are described below:

i. International competitiveness. Tax incentives designed to encourage FDI, including general host country tax relief measures, those targeted at investment in R&D, and those tied to exports, are often recommended as a means to enhance the "international competitiveness" of a country, by improving its ability to attract internationally mobile capital. This view assumes that multinational companies take tax incentives into account when making location decisions and that tax incentives operate at the margin to swing investment decisions in favour of the host country (Easson & Zolt, 2002).

ii. Correcting for "market failure". Theory posits correcting market failure as tax incentives argument arises from the belief of private market failed in generating appropriate level of investment. Therefore, government should interfere by introducing tax incentives. One example of market failures is positive externalities in terms of company's research and development. Companies, who conduct R&D experiment, usually ignore its positive externalities over other companies. Tax incentives can play a positive role by encouraging companies in maintain their interest on R&D project. This theory can also arise on account of other factors as well, including asymmetric information. Potential foreign direct investors may have incomplete information on investment opportunities in a given host country, for a variety of reasons. This may result in less investment in the host country than if full information were available. In such cases, incentives might be called to promote FDI beyond the level that would otherwise occur (Easson & Zolt, 2002).

iii. Regional development (income distribution). Tax incentives may be targeted at investment in regions where unemployment is a serious problem. For example, on account of remoteness from major urban centers, tending to drive up factor costs, or labor immobility or wage rigidities that prevent the labor market from clearing. Operating from a remote area means significantly higher transportation costs in accessing production materials, and in delivering end-products to markets, placing that location at a competitive disadvantage relative to other possible sites (Cleeve, 2008). Certain areas may also suffer from a lack of natural resources, tending to put them at a further cost disadvantage. Moreover, firms may find it difficult to encourage skilled labor to relocate and work in remote areas that do not offer the services and conveniences available in other centers. Workers may demand higher wages to compensate for this, which again implies higher costs for prospective investors. In such

cases, tax incentives may be provided to compensate investors for these additional business costs. Where the incentives are successful in attracting new investment, and/or in forestalling the out migration of foreign capital, they may contribute to an improved income distribution in the country (Easson & Zolt, 2002).

iv. Macro-economic considerations. Tax incentives have also been advocated to address a range of macro-economic problems, such as cyclical (or structural) unemployment, balance of payments deficits, and high inflation. Such incentives would not be specifically targeted on FDI, but on investment in general regardless investor's residence. When tax incentives are used to provide countercyclical stimulation (by encouraging investment and thus aggregate demand in the economy), they are often introduced as temporary measures. Temporary incentives offer the prospect of increased investment in the short-term while permanent incentives play in longer term (Morisset, & Pirnia, 1999).

2.4 Pioneer Status in Nigeria

Pioneer status" is a fiscal incentive offered to companies operating in designated pioneer industries and or producing pioneer products, and can provide an income tax holiday for up to five years. In addition to income tax holiday, pioneer companies enjoy other benefits such as the exemption of dividends paid out of pioneer profits from withholding tax. Pioneer Status is a tax holiday granted to qualified (or eligible) industries anywhere in Nigeria (KPMG, 2017). A five-year tax holiday is granted in respect to companies operating in eligible industries, while a seven-year tax holiday is given in respect of industries located in economically disadvantaged local government area of the Federation. The grant of Pioneer Status to a company in Nigeria is aimed at enabling such company operating within the pioneer industry make significant capital expenditure and a reasonable level of return of profit within its formative years without having to pay companies tax. The enabling legislation as regards Pioneer Status in Nigeria is the Industrial Development (Income Tax Relief) Act 2004 ("The Act"). The Act provides that where the Nigerian government is of the opinion that any sector or industry in the economy is not being undertaken on a scale suitable to the economic advancement of Nigeria or that it is in the public interest to encourage the further development or establishment or advancement of trade in such sector or industry, the President of Nigeria is authorized to publish in a Gazette, a list of such industries to who qualify for pioneer status.

The Nigerian Government approved a new Pioneer Status Incentive policy on 7 August 2017. This came following a meeting of the Federal Executive Council (FEC) in the Federal Capital Territory, Abuja. As part of the new regime, a revised list of 27 industries and products were declared eligible for *pioneer status*, bringing the total number to 71. According to Adeyoju (2017) for a company to qualify, it must make an application in the first year of production/service and must apply for an extension no later than one month after the expiration of the initial tax relief period of 3 years or an extension of one year. An applicant must be engaged in an activity listed as a pioneer industry or pioneer product; and finally, an applicant must demonstrate the

tangible impact its activity (project) will have on Nigeria's economic diversity and growth, industrial and sectoral development, employment, skills and technology transfer, export development, and import substitution. Sectors of the economy where the pioneer status is applied includes; Agriculture, Brewery, Construction, Drilling, Electrical, Information Technology, Oil & Gas, Production, Hotel & Tourism, Telecommunication etc.

2.5 Prior Studies

Zuo (2009) focused on the relationship between tax incentives and FDI composition and an analysis of how tax incentives can affect the composition of FDI in different countries. The result indicates that tax incentives are only effective in affecting FDI composition in high-tech industries as well as capital-intensive sectors such as finance sector. Traditional industries such as agriculture industry are less sensitive to the availability of tax incentives. However, the limitation of this study is that data obtained from China and Indonesia government website was not comprehensive and reliable. In addition, round-tripping activities were excluded to carry out this study.

Fahmi (2012) examined the impact of tax holiday on foreign direct investment (FDI) in the case of Indonesia for the period from 1981 to 2010. Ordinary Least Square regression technique is applied by employing foreign direct investment inflow as dependent variable, along with tax holiday as independent variable and gross domestic product growth, gross fixed capital formation, inflation, openness, tax rate as controlled variables. In addition, this study also attempts to analyze historical tax holiday regulation and its effect on foreign direct investment. The empirical estimation on four variables has shown significant impact on FDI inflow. Those variables are gross fixed capital formation, inflation, openness and tax rate. Tax holiday as the main focused independent variable is proven to be not significant in attracting FDI inflow.

According to Morisset & Pirnia (1999), when other factors such as infrastructure, cost of production, economic and political stability are more or less equal, tax regulation may have a significant effect on investors' choices. This effect varies, however, depending on the tax instrument used, the characteristics of the multinational company, and the relationship between the tax systems of the home and recipient countries.

Alexander and Stefan (2009) considers two empirical questions about tax incentives: (1) are incentives used as tools of tax competition and (2) how effective are incentives in attracting investment? To answer these, a dataset of tax incentives in over 40 Latin American, Caribbean and African countries for the period 1985–2004 was gathered. Using spatial econometrics techniques for panel data to answer the first question, the study found evidence for strategic interaction in tax holidays, in addition to the well-known competition over the corporate income tax rate. There was no evidence, however, for competition over investment allowances and tax credits. Using dynamic panel data econometrics to answer the second question, the study find evidence that lower corporate income tax rates and longer tax holidays are effective in attracting FDI, but not in boosting gross private fixed capital formation or growth.

Null Hypothesis: Tax incentive has no significant positive impact on FDI flows into Nigeria.

3. THEORETICAL FRAMEWORK

3.1 The Eclectic Theory

A popular conceptualization of, and theoretical framework for, FDI determinants is the "eclectic paradigm" attributed to Dunning (1993). It provides a framework that group's micro- and macro-level determinants in order to analyse why and where multinational companies (MNCs) invest abroad. The framework posits that firms invest abroad to look for three types of advantages: Ownership (O), Location (L), and Internalization (I) advantages; hence it is called the OLI framework. The ownership-specific advantages (of property rights/patents, expertise and other intangible assets) allow a firm to compete with others in the markets it serves regardless of the disadvantages of being foreign because it is able to have access to, and exploit and export natural resources and resource-based products that are available to it. The location advantages are those that make the chosen foreign country a more attractive site such as labor advantages, natural resources etc. Internalization advantages arise from exploiting imperfections in external markets, including reduction of uncertainty and transaction costs such as tariffs, foreign exchange controls, and subsidies. The influence of tax incentives such as the pioneer status tax holiday scheme falls within the internalization advantage.

4. METHODOLOGY

This study is conducted by utilizing ordinary least square regression on time series data to observe the relationship between FDI inflow and a list of explanatory variables particularly tax incentives measured using the pioneer status tax holiday (PSTH) during period 2000Q1 – 2016Q4. Secondary data was sourced from the CBN statistical bulletins, National Bureau of Statistics and the Federal Inland Revenue service. The data was collected and used in the empirical estimation. Further analysis of the relationship was conducted in the form of descriptive analysis, correlation analysis and regression analysis. To empirically analyse the long-run relationships, the model was estimated by using a series of econometric techniques. First, the unit root test is conducted for the variables to ascertain their stationarity status. The Augmented Dickey-Fuller (ADF) statistics was adopted in this regards. Next, the Engle and Granger (1991) procedure for co-integration testing was also applied to ensure the existence of a long run relationship between the variables. Finally, the regression analysis is conducted.

4.1 Model Specification

Following the IMF study by Alexander and Stefan (2009), the model then examines the influence of the exogenous variables; PSTH in particular on FDI flows

into sectors of the economy where pioneer tax incentive is applicable. The models are presented below,

$FDI_{AGRIC} = \beta_0 + \beta_1 PSTH + \beta_2 RGDP + \beta_3 CIT + \beta_4 EXCHR + \beta_5 ROI + \mu$-----(1)

$FDI_{BREW} = \varphi_0 + \varphi_1 PSTH + \varphi_2 RGDP + \varphi_3 CIT + \varphi_4 EXCHR + \varphi_5 ROI + \mu$--(2)

$FDI_{CONSTR} = \delta_0 + \delta_1 PSTH + \delta_2 RGDP + \delta_3 CIT + \delta_4 EXCHR + \delta_5 ROI + \mu$---(3)

$FDI_{DRILL} = \gamma_0 + \gamma_1 PSTH + \gamma_2 RGDP + \gamma_3 CIT + \gamma_4 EXCHR + \gamma_5 ROI + \mu$----- (4)

$FDI_{ELEC} = \omega_0 + \beta_1 PSTH + \omega_2 RGDP + \omega_3 CIT + \omega_4 EXCHR + \omega_5 ROI + \mu$-- (5)

$FDI_{IT} = \theta_0 + \theta_1 PSTH + \theta_2 RGDP + \theta_3 CIT + \theta_4 EXCHR + \theta_5 ROI + \mu$--------- (6)

$FDI_{OIL\&GAS} = \emptyset_0 + \emptyset_1 PSTH + \emptyset_2 RGDP + \emptyset_3 CIT + \delta_4 EXCHR + \delta_5 ROI + \mu$ (7)

$FDI_{PROD} = \alpha_0 + \alpha_1 PSTH + \alpha_2 GDP + \alpha_3 CIT + \alpha_4 EXCHR + \alpha_5 ROI + \mu$------ (8)

$FDI_{HOTELS} = \partial_0 + \partial_1 PSTH + \partial_2 RGDP + \delta_3 CIT + \delta_4 EXCHR + \delta_5 ROI + \mu$-- (9)

$FDI_{TELCOMS} = \propto_0 + \propto_1 PSTH + \propto_2 RGDP + \gamma_3 CIT + \gamma_4 EXCHR + \gamma_5 ROI + \mu$ (10)

Where;

PSTH= Pioneer tax holiday measured as dummy variable of "1" for periods after 2004 when the act was established and "0" for periods before the act. FDI_{AGRIC} = FDI flows into Agriculture, FDI_{BREW} = FDI flows into Brewery, FDI_{CONSTR} = FDI flows into Construction, FDI_{DRILL} = FDI flows into Drilling, FDI_{ELEC} = FDI flows into Electrical , FDI_{IT} = FDI flows into Information Technology, $FDI_{OIL\&GAS}$ = FDI flows into Oil & Gas, FDI_{PROD} = FDI flows into Production , FDI_{HOTELS} = FDI flows into Hotel & Tourism, $FDI_{TELCOMS}$ = FDI flows into Telecommunication, RGDP = Real Gross domestic Product, EXCHR= Real exchange rate, CIT= Company income tax, ROI= Return on Investment

$\beta, \varphi, \delta, \gamma, \omega, \theta, \emptyset, \alpha, \partial,$ and $\propto$ are slope coefficients

μ= error term

4. DATA PRESENTATION AND ANALYSIS

In this section, the empirical analysis of the data is conducted. Several econometric procedures are applied in the process. The unit root test to ascertain the stationarity status of the data was first conducted. After that, the co-integration test is carried out to ascertain the existence of a long run relationship between the variables. Next, the Regression analysis using the Ordinary Least Square Regression (OLS) Technique. The results are presented and analysed below (table 1).

The result indicates that apart from RGDP and EXRT, all of the variables at levels, have ADF values that are greater than the 95% critical ADF value of 2.96. The implication of this is that the time series for these variables are stationary in their levels. Moving forward, we take the first differences of the variables and perform the unit root test on each of the resultant time series. The rationale behind this procedure is that Box and Jenkins (1976) have argued that differencing non-stationary time series will make it attain stationarity. The result of the unit root test on these variables in first

differencing shows that the ADF values in absolute terms is greater than the 95% critical ADF values. With this result, all the variables are adjudged to be stationary. Thus we accept the hypothesis that the variables possess unit roots. Indeed, the variables are integrated of order one i.e. I(1).

Table 1. Unit root status of the variables

	Unit root test at levels			Unit root test at 1st difference		
Variable	ADF-Test Statistic	95% Critical ADF Value	Remark	ADF-Test Statistic	95% Critical ADF Value	Remark
FDI_{AGRIC}	-1.710	-2.96	stationary	-7.090	-2.96	stationary
FDI_{BREW}	-4.054	-2.96	stationary	10.002	-2.96	stationary
FDI_{CONSTR}	-4.055	-2.96	stationary	-3.857	-2.96	stationary
FDI_{DRILL}	-5.4052	-2.96	stationary	-9.2638	-2.96	stationary
FDI_{ELEC}	-6.322	-2.96	stationary	-7.090	-2.96	stationary
FDI_{IT}	-5.020	-2.96	stationary	-6.2901	-2.96	stationary
FDI_{OILGAS}	-4.102	-2.96	stationary	-7.594	-2.96	stationary
FDI_{PROD}	-5.438	-2.96	stationary	9.407	-2.96	stationary
FDI_{HOTELS}	4.9403	-2.96	stationary	6.411	-2.96	stationary
$FDI_{TELCOMS}$	-5.065	-2.96	stationary	-6.469	-2.96	stationary
CIT	-5.938	-2.96	stationary	-9.487	-2.96	stationary
RGDP	-1.842	-2.96	Non-stationary	-3.771	-2.96	stationary
EXRT	1.905	-2.96	Non-stationary	-5.918	-2.96	stationary
PSTH	-5.596	-2.96	Stationary	-5.922	-2.96	stationary
ROI	-3.771	-2.96	‘’	-3.771	-2.96	Stationary

Source: Eviews 7.0 Output (2018)

4.1 Co-integration status of the variables in the equations

The co-integration status of the variables is ascertained using the Engle and Granger (1991) two-stage methodology. This has become necessary because of the spurious regression trap associated with non-stationary and non-cointegrated series. Estimates from co-integrated series appear to be more reliable fit for describing steady-state relationships between the variables.

According to Engle and Granger if the residuals from the first stage regression is stationary at levels, the variables are co-integrated i.e. 1(i) and we expect that there is a long-term equilibrium relationship between the variables (Engle & Granger 1991). The Engle and Granger procedure confirms that the residual from the first stage regression is stationary at level and hence the variables are co-integrated.

Table 2. Result from Engle and Granger two–stage procedure

Dependent variable	ADF-Test Statistic	95% Critical ADF Value	Remark
Residual from equation 1	-5.414	2.97	Cointegrated
Residual from equation 2	-5.236	"	"
Residual from equation 3	-5.1143	"	"
Residual from equation 4	-5.759	"	"
Residual from equation 5	4.011	"	"
Residual from equation 6	6.41	"	"
Residual from equation 7	-4.982	"	"
Residual from equation 8	6.201	"	"
Residual from equation 9	-5.221	"	"
Residual from equation 10	-4.777	"	"

Source: Researchers Compilation (2018)

Table 3. Regression analysis

	FDI_{AGRIC}	FDI_{BREW}	FDI_{CONSTR}	FDI_{DRILL}	FDI_{IT}	FDI_{ELECT}	FDI_{OILGAS}	FDI_{PROD}	FDI_{HOTELS}	$FDI_{TELCOMS}$
C	134.259	38.461	1188.468	82.374	694.96	92.388	6600.178	1166.66	38.461	5314.67
	0.3286	{0.588}	{0.002}	{0.284}	{0.183}	{0.126}	{0.052}**	{0.499}	{0.588}	{0.007}*
PSTH	**57.593**	**8.686**	**86.952**	**19.598**	**36.329**	**1.266**	**133.956**	**167.787**	**8.686**	**-306.602**
	0.099	**{0.368}**	**{0.015}***	**{0.125}**	**{0.547}**	**{0.853}**	**{0.665}**	**{0.498}**	**{0.368}**	**{0.377}**
RGDP	-0.0011	3.8605	0.002	-0.002	0.0003	-0.004	-0.002	-0.004	3.860	0.007
	{0.786}	{0.852}	{0.018}*	{0.236}	{0.663}	{0.853}	{0.767}	{0.441}	{0.852}	{0.362}
EXRT	-0.65752	-0.2663	-6.983	-0.11	-5.043	-0.709	-50.206	-3.182	-0.266	-54.853
	0.6656	{0.6143}	{0.013}*	{0.887}	{0.203}	{0.096}**	{0.048}*	{0.812}	{0.614}	{0.000}*
ROI	-19.784	-4.1365	-8.102	-7.216	-19.726	1.426	-18.321	73.851	-4.136	171.656
	{0.002}*	{0.312}	{0.295}	{0.166}	{-0.356}	{0.228}	{0.694}	{0.440}	{0.312}	{0.043}*
CIT	-0.29255	-0.0299	7.043	0.058	2.082	0.131	17.898	13.499	-0.029	41.921
	0.8427	{0.927}	{0.252}	{0.949}	{0.479}	{-0.851}	{0.651}	{0.523}	{0.927}	{0.036}*
AR(1)	-0.30161	0.359	-0.210	-0.005	-0.042	-0.236	0.031	-0.1149	0.359	-0.025
	0.1998	{0.905}	{0.452}	{0.984}	{-0.628}	{0.222}	{0.879}	{0.267}	{0.167}	{0.846}
AR(2)			-0.2104			-0.289	0.0798			-0.347
			{0.452}			{0.301}	{0.672}			{0.112}
R^2	0.286	0.388	0.435	0.183	0.389	0.244	0.336	0.126	0.388	0.333
ADJ R^2	0.122	0.247	0.270	0.05	0.210	0.023	0.141	0.042	0.247	0.137
D.W	1.96	1.90	1.893	2.08	2.027	2.164	1.95	1.99	1.90	2.14

Source: Researchers Compilation (2018)
*N.B: { } p- values, * denotes sig@ 5%, ** denotes sig @ 10%*

The regression estimations in table 3 above have was conducted to examine the influence of the PSTH on FDI flows into various industries. In conducting the estimations, the Ordinary Least Squares regression was utilized conducted using Eviews 7.0. The white heteroskedasticity-consistent standard error is used to control

for possible heteroskedasticity in the model. Autoregressive terms {AR (1) & AR (2)} were also used to control for possible first and second order serial correlation. In relation to the effect of PSTH on FDI flows, the effect appears not to be significant (5% level) for most of the FDI flows into industries except for flows into construction where surprisingly the effect is observed to be negative and hence we accept the null hypothesis that tax incentive has no significant positive impact on FDI flows into Nigeria. Looking at the other variables, it is observed that market size as measured by Real GDP and exchange rate are significant (5% level) determinants of FDI flows into construction sector. ROI is significant for flows into Agric. sector with the expected sign. Exchange is significant (10% level) in explaining FDI flows into electrical industry and also significant (5% level) in explaining FDI flows into oil and gas. Exchange rate, ROI and CIT are observed to be significant (5% level) determinants of FDI flows into telecoms sector. The absence of serial correlation in all the models is likely as indicated by the estimates for the durbin-watson (D.W) statistics. The findings suggest that no doubt a combination of different economic factors influences foreign investment decisions. It is unlikely that with the manner in which the PSTH is structured, it may not appear to play a very significant role in driving FDI inflows into certain sectors/business type. It is likely that more economic fundamentals will matter more than simply incentives.

The finding is similar to that of Zuo, (2009) which found that for countries such as Singapore, Malaysia and India tax incentives had no strong correlation with FDI flows into certain sectors. Another important implication of the result is that tax incentives may not have similar effects on investment flows into all sectors or business types. This implies that that the response of FDI flows to tax incentives such as the PSTH, will also be largely moderated by the nature of business or industry characteristics. Given the presence of heterogeneity associated with different sectors, the incentives are unlikely to be similar in their effects. Importantly also is the fact that tax incentives can make investing in a particular country more attractive, they cannot compensate for deficiencies in the design of the tax system or inadequate physical, financial, legal or institutional infrastructure. Similarly, tax incentives are likely a poor response to the economic or political problems that may exist in a country.

5. CONCLUSION

In this research, an attempt has been made to examine the effect of the Nigerian PSTH on FDI flows into certain sectors where the policy is applicable. The findings of the study showed that PSTH still has some effect on FDI flows into sectors. Though its significance appeared not to be very pervasive across majority of the sectors. As stated earlier, the results suggest that it is likely that more economic fundamentals will matter more than simply incentives. Also the response of FDI flows to tax incentives such as the PSTH, will also be largely moderated by the nature of business or industry characteristics. Given the presence of heterogeneity associated with different sectors, the incentives are unlikely to be similar in their effects. Finally, tax incentives are likely a poor response to the economic or political problems that may exist in a country. However, it suffices to note that time series variation in tax

incentives may not be adequate to identify tax effect, since tax rate or rebate associated with the incentive policy is rarely changed. Nevertheless, these results will hopefully add to the debate about tax incentives.

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