The Impact of Tax Policy and Incentives on Foreign Direct Investment (FDI) and Economic Growth: Evident from Export Processing Zones (EPZs) in Nigeria

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Abstract - This study focuses on the impact of tax policy and incentives on Foreign Direct Investment (FDI) and economic growth: Evident from Export Processing Zones (EPZs) in Nigeria. Many state governments face pressure to sweeten investment tax incentives programs to compete with tax breaks offered elsewhere. At the same time, they are pressed to strengthen revenues, to finance essential public goods and services. The challenges are to understand the conditions and the policy design features that determine whether tax incentives are likely to deliver substantial and sustainable net benefits. Data were collected through questionnaire and analyzed using ordinary least square techniques. The study revealed that tax rates have a significant relationship to FDI and economic growth. The study therefore recommended that there should be an abolition of exonerations, despite finding a determinant role of the fiscal and financial incentives on the development and growth of private investment, particularly in the export processing sector.

Index Terms — Export processing zones, Foreign country, Foreign direct investment, Home country, Tax incentives, Tax policy, Tax rate

1. INTRODUCTION

Contemporary fiscal theory lays its emphasis on compensatory expenditures required to obtain and retain a competent labour force, achieve full employment and sustain high level of economic activities, Oman (2000). This theory tends to de-emphasize the traditional problems of shift in the allocation of resource arising from taxation to a shift from the incidence of individual loses and benefits to aggregate or sectors of economic activity (Hauffer & Gutorm, 2000).

Corroborating the above assertion, Tanzi and Zee (2000) state that the theory of tax burden should recognize that the determination of public budget is a political process and not a market process. Still in support of the Tanzi and Zee (2000); Blomstrom & Kokko (2003),explain that fiscal theories and tax policies are shaped by political realities of the state. This means that the public or private use of resources as well as the tax benefits relationship for any economy depends on the decisions of the responsible organs of government and not upon the market process.

Basically, taxation is designed to support government in carrying out its obligation for the overall socio-economic well being of the citizenry. But circumstances usually arise that require taxation to be selectively applied when the economic concern in tax administration focuses on improved economic growth and increase in employment. Thus, consideration on how tax policy can be geared toward attracting foreign investors to a host country in a developing economy like Nigeria had taken the center stage within the past three decades (Ronald, 2003).

In recent years, the globalization process has led to companies not only tending to become more mobile, but governments have also dealt with this new dimension in the design of their national tax policy, Lent (2004). The gradual elimination of barriers to capital movement has stimulated governments to compete for FDI in global markets as well as reinforced the role of tax policy in this regard (Gugl & Zodrow, 2006).
According to Klemm (2004), taxes affect the net return on capital and should at least, in the mind of numerous policy makers, influence the capital movements between countries. In support of the assertion, Kaldor & Hume (2004), agree that, this is why attitude towards inward FDI should be modified especially when most countries have liberalized their policies to attract investment from companies outside their domain. This yarning becomes a first choice priority because of the expectation that investment from foreign multinational company will raise employment, exports or tax revenue, or that some of the knowledge brought in by the foreign companies may spill over to the host country’s domestic firms.

Consequent upon the above conception, an increasing number of host governments have provided various forms of investment incentives to encourage foreign owned corporations to invest in their jurisdiction, Philips (2004). These include fiscal incentive, such as tax holidays and lower taxes for foreign investors, financial incentives such as grants and preferential loans to multinational companies and other investors, as well as measures such as market preferences, infrastructure and sometimes even monopoly rights.

In a cautionary note, Shua (2005) without mincing words states that some FDI promotion efforts are probably motivated by temporary macro-economic problems such as low growth rates and rising unemployment. More substantial argument in favor of public support for FDI is based on the prospect for knowledge spillover (Wilson, 1999). This is because the technology and the skill employed by foreign firms are to some extent public goods and results in benefits for their host countries even if the MNCs carryout their foreign operations in wholly-owned affiliates.

Foreign Direct Investment (FDI) usually brings to mind a significant contribution of foreign Direct Investment to domestic investment. The development of an economy is one of the macro-economic goals of every nation (Udoka, Tapang & Anyingang, 2012).

Several empirical studies have been carried out on the subject matter and others are still ongoing. The studies cover very early period when governments and companies started to initiate actions towards mobilizing skilled labour outside their home country either on request of host country or on exploratory assignments to discover hidden treasures.

Most of these discussions are listed from a review by Morisset & Pirina (2001) in their paper “How tax policy and incentives affects FDI”.

A. Statement of the Problem

A robust tax structure can impact on the movement of man, money and materials to invest in host country anywhere in the world. Again, several stakeholders believe that a flexible tax policy and incentives encourage investment from abroad thus helping the host nation to stem the tide of unemployment engender economic growth. Analysts however, have some reservations in this proposition as some host countries implement fiscal policy resulting in high tax rates coupled with poor infrastructure. The situation becomes unabated where insecurity and political upheaval becloud other considerations.

The highlights above become serious impediment to compete for FDI and a drawback to economic growth. This forms the gap which necessitates this research. The study deems it quite timely and apt to empirically substantiate the impact of tax policy and incentives on foreign direct investment and economic growth.

The objectives of the study are: to examine the extent to which tax rates encourage Foreign Direct Investment (FDI) to host countries and also to examine the relationship between FDI and economic growth.

II. LITERATURE REVIEW

A. Survey of Investors

One of the earliest empirical submissions credited to Barlow and Wender in 1955 involved the interview of 247 US Companies on their strategies to invest abroad. One of the questions asked was about the conditions that were required before companies proceed with foreign investment. Only 10 percent of the companies listed favourable foreign taxes as a condition for FDI, while another 11 percent mentioned “host government encouragement to companies”.

Those findings were confirmed by the Surveys of 205 companies conducted by Robinson in 1961. Their conclusions were that tax concessions headed the list of government responses, while they were omitted from the list of private investor responses.

B. Economic Analysis

A selective sample of studies was concluded on the same subject matter; Root and Ahmed (1978), Agodo (1978), Shah and Toye (1978), and Lim (1983). In 1978, Root and Ahmed performed an econometric study with data for 41 developing countries for the period 1966-1970. They classified countries in three categories of unattractive, moderately attractive, and highly attractive according to their average annual per capita inflow of FDI.

Forty-four variables were chosen as potentially significant discriminators of the three country groups. Among the six policies related discriminators were three relating to tax levels. Of these, corporate tax rates proved to be an effective discriminator of the three defined country groups; however tax
Incentives laws and liberality were not found to be effective discriminators.

Again, Forsyth in his 1972 study provided support for the view that inducements and incentives may often not play a key role in influencing the decision to undertake a particular foreign investment.

By mid-1980s, understanding the exact role of incentives in attracting FDI became a new research agenda. One direction has been to explore the reaction of multinational companies to changes in tax policy when they differ in their activities, motivations, market structure and/or financing. Others have searched to examine which tax instruments may have the greater effect on the behavior of international investors.

The impact and the nature of incentive schemes may also differ if they apply to new or existing companies. For example, Rolfe (1993) shows, using a survey of managers of US firms, that start-up company will prefer incentives that reduce their initial expenses (equipment and material exemption), while expanding firms will prefer tax incentives that target profit. He also reports that manufacturing industries will prefer incentives related to depreciable assets because they utilize more fixed assets than service industries.

In an interesting study, Coyne (1994) suggests that small investors are generally more responsive to tax incentives than large ones. Taxes may play a more important role in the cost structure of small companies because they do not have the financial and human capacity to develop sophisticated tax avoidance strategies. Large multinational companies are also more likely to receive special tax treatments, whatever the tax laws applied by the host country.

C. Home Country Tax Policy

In the presence of international capital mobility, home-country corporate income tax rates and rules about how taxes paid in the host country are considered at home should influence FDI. In fact, such influence was recognized a long time ago by the bilateral agreements that were signed to avoid double taxation of income between countries (UNCTAD, 1995). The current literature has emphasized two additional effects:

1) The influence of the home country’s tax system on the efficacy of the tax incentives granted by the host country.
2) It impact on the way multinational do business abroad.

D. Measurement of Economic Growth

Economic growth measurement is very essential in determining the parameter occasioned by a variable (Bondoline & Greenbaum, 2007). In this study, while other factors remain constant, the determinant here is the Gross Domestic Product (GDP) which foreign direct investment is expected to contribute its quota. This contribution of course should be a function of the tax policy and incentives offered by the host country, Nigeria (for example) to the home country (foreign country). This aspect is captured in the analysis of data.

III. METHODOLOGY

The study adopted the ex-post facto research design. This was because of the fact that it helped the researchers to find out, describe and explain existing phenomena and draw generalization on the population based on the data collected from the sample.

The population of the study consisted of all the companies operating in the export processing zones of Nigeria. From this population a sample size was drawn using the Taro Yamane formula of sample size determination.

The method used in collecting data for the study was questionnaire survey. The data collected from the questionnaires were summarized and tabulated. These were picked in line with the hypothesis variables of the study. Both primary and secondary sources of data were used in the course of this research study. The primary sources include face to face interview and the scoring and coding of each of the received questionnaire.

Foremost, each copy of the questionnaire was numbered for easy identification. Then each item of the questionnaire was individually assigned a score based on the response options provided for each item.

The items were scored based on the five point Likert scale, beginning with all positive worded items. Strongly Agree (SA) scored 5 points, Agree (A) 4 points, Undecided (U) 3 points, Disagree (D) 2 points and Strongly Disagree (SD) 1 point. This order was reversed for all negatively worded items. That is Strongly Agree (SA) scored 1 points, Agree (A) 2 points, Undecided (U) 3 points, Disagree (D) 4 points and Strongly Disagree (SD) 5 points.

The Ordinary Least Square (OLS) regression analysis, percentages and correlation coefficient statistical tools were used in testing the degree of relationship existing between the various variables in the research hypotheses and relevant questions raised in the study. The OLS was used in estimating the models because it exhibits the characteristics of the best linear unbiased estimator.
IV. ANALYSIS AND INTERPRETATION

A. Presentation of Results

Table 1

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
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</thead>
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<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
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<tr>
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<td>(Constant)</td>
<td>-2401.253</td>
<td>6786.214</td>
<td>-.354</td>
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<td>TR</td>
<td>4.726</td>
<td>.707</td>
<td>.921</td>
<td>6.688</td>
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</table>

a. Dependent Variable: FDI
Source: Researcher estimation, 2013

Table 2

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
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<td></td>
<td></td>
<td>R Square Change</td>
<td>F Change</td>
<td>df1</td>
</tr>
<tr>
<td>1</td>
<td>.921*</td>
<td>.848</td>
<td>.829</td>
<td>9961.62020</td>
<td>.848</td>
<td>44.735</td>
</tr>
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</table>

a. Predictors: (Constant), TR
b. Dependent Variable: FDI
Source: Researcher estimation, 2013

Table 3

Model Summary

<table>
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<tr>
<th>Model</th>
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<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
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<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
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a. Dependent Variable: GDP
Source: Researcher estimation, 2013

Table 4

Model Summary

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<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
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<td></td>
<td>R Square Change</td>
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<td>.996</td>
<td>35.247</td>
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</table>

a. Predictors: (Constant), FDI
b. Dependent Variable: GDP
Source: Researcher estimation, 2013
B. Interpretation of Results

The Table 1 and 2 showed the summary of the regression results of Tax Rates (TR) on Foreign Direct Investment (FDI). From the result, it could be seen that the independent variable is positive. The explanatory power of the model as informed by the adjusted R-square is 0.829 or 82.9%. The model demonstrates a good fit given that about 82.9% of the variations in the dependent variable Foreign Direct Investment (FDI) is jointly explained by changes in the observed behaviour of Tax Rate (TR). The relatively high adjusted R-square value of 0.829 (82.9%), shows that the model fits the data well. About 17.1% variations in FDI can be explained by other unknown variables not captured in the present model. The high significant F-statistic value (df1=1 and df2=8) of 44.735 p(0.00) confirms that the high adjusted R-square did not arise by chance [N/B: F0.05 (df1=1& df2=8) = 5.32]. Therefore, the model is robust. The test of significance shows that Tax Rate (TR) is significant as can be seen in Table 4.1. The test for autocorrelation, the calculated D/W is 1.217. From the table D/W reading, one makes use of the following information: K=2 variables, n=10 and at 5% level: du=1.001, 4-du=1.779, dl=1.995 and 4-dl=2.665. By inspection, the D/W value of 1.217 falls between du and 4du region (i.e. 1.001 and 1.779 in this case); it therefore implies that there exists no degree of autocorrelation.

Table 3 and 4 also showed the summary of the regression results of Foreign Direct Investment (FDI) on Gross Domestic Product (GDP). The results showed that the explanatory power of the model as informed by the adjusted R-square is 0.991 or 99.1%. The model demonstrates a good fit given that about 99.1% of the variations in the dependent variable Gross Domestic Product (GDP) is jointly explained by changes in the observed behaviour of Foreign Direct Investment (FDI). The relatively high adjusted R-square value of 0.991 or 99.1%, shows that the model fits the data well. About 0.9% variations in GDP is explained by other unknown variables not captured in the present model. The high significant F-statistic value (df1=1 and df2=13) of 35.247 p(0.00) confirms that the high adjusted R-square did not arise by chance [N/B: F0.05 (df1=1& df2=13) = 4.67]. Therefore, the model is robust. The test of significance shows that Foreign Direct Investment (FDI) is significant as can be seen in Table 3. The test for autocorrelation, the calculated D/W is 1.588. From the table D/W reading, one makes use of the following information: K=2 variables, n=15 and at 5% level: du=1.001, 4-du=1.779, dl=1.995 and 4-dl=2.665. By inspection, the D/W value of 1.588 falls between du and 4du region (i.e. 1.001 and 1.779 in this case); it therefore implies that there exists no degree of autocorrelation.

V. FINDINGS OF THE STUDY

Our analysis and empirical results has shed some insight on tax policy and incentives on FDI and economic growth. The result of this study has provided relatively strong support for the existence of a positive relationship between tax rate and FDI. At a general level, the result is largely consistent with results obtained by Morisset & Pirina (2001) in their work title “How tax policy and incentives affects FDI”. The study also revealed that there is a significant relationship between Foreign Direct Investment (FDI) and Gross Domestic Product (GDP). This result is in line with findings arrived at by Udoka, Tapang & Anyingang (2012); Zee, Stotsky and Ley (2002); Root and Ahmed (1978); Agodo (1978); Shah and Toye (1978); and Lim (1983)in their studies on Foreign Direct Investment (FDI) and economic growth conducted separately found out that FDI have a positive significant on economic growth.

VI. IMPLEMENTATION OF THE STUDY

This study recommends the abolition of exonerations, despite of finding a determinant role of the fiscal and financial incentives on the development and growth of private investment, particularly in the export sector. Nigerian tax system is not simple and creates distortions. By calculating effective tax rates across sectors and assets, the study identifies 3 main sources of distortions: in the access to incentives (small and medium enterprises versus multinationals); among types of assets used by the enterprises and among sectors.

VII. CONCLUSION

Based on the findings, the study concluded that there should be a comprehensive tax reform, including amending Nigeria’s tax incentives, since it will eliminate tax distortions, remove unnecessary administrative and compliance costs and improve government’s capacity to generate revenue.

REFERENCES

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