Tax Concession and Investment Decisions of Small Scale Businesses in Calabar Free Trade Zone – Nigeria

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Abstract
This study sought to ascertain the influence of investment tax incentives on operations and overall performance of small business firms operating in Calabar Free Trade Zone. The purpose was to determine how policy makers, tax administrators, investors and other stakeholders in the State could meet the challenge when considering tax concessions and investment decisions amongst small scale businesses operating in Calabar Free Trade Zone. Data were collected using survey research techniques. The ordinary least square regression method was used in the estimation and validation of data in the study. The study revealed that investment tax incentives positively influenced the return on investment’s rate, economic growth rate and employment generation rate by firms who enjoy investment tax incentives. The study concluded that States granting investment tax incentives enjoy heavy flow of investments; rapid economic growth, and conducive investment climate which is a strong requirement for the flow of sustainable physical investment into the economy. Based on findings of the study,

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it was recommended that tax policies should be designed to eliminate double taxation; tax incentives should be effectively implemented while investment climate in the country should be made conducive through effective policy formulation, implementation and provision of adequate functional physical infrastructure.

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**Keywords:** Tax incentives, investment, tax rate, tax break, taxable income, tax liability, and tax based income policy.

### 1 Introduction

Increasing investment spending has remained one of the most important policy goals in Nigeria since the end of the civil war. Particularly, the need to increase foreign direct investment has been a consistent topic of policy debate. However, investment remains elusive and political pressure to improve the investment climate is growing.

The use of tax incentives in developing countries has been very popular and very controversial for decades. Although such incentives undoubtedly affect investment decisions in some circumstances, it is not all clear that the overall benefits outweigh the costs (Nathan, 2004). Despite the controversy, every country offers investment tax incentives in one form or another. Many governments in the world face pressure to sweeten these programmes, to compete with tax breaks offered elsewhere. Two fundamental premises underpin the case for tax incentive programmes in developing counties: firstly, additional investment is needed to foster rapid economic growth; and secondly, tax breaks can be effective in stimulating investment. Both propositions may seem self-evident, yet subject to important qualifications that are highly pertinent in understanding the effectiveness and impact of investment tax incentives.

On the first proposition, the key issue is that investment productivity is at least as important as the quality of investment in determining growth. Even if tax incentives do stimulate investment, their net impact on growth could be adverse if the incentives reduce productivity (Blomstrom, 2001). Regarding the second proposition, taxation undoubtedly affects some investments, particularly “footloose” projects that are far more important in determining most investment decisions. Moreover, if tax breaks cause fiscal problems that worsen other elements of the investment climate, the net effect of incentives on the volume of investment can be negative rather than positive (Blomstrom, 2001). Investment incentives can further be classified as a means for correcting market failure. These are various objectives that government may pursue within these realms namely: regional, sectoral, performance enhancement and transfer of technology.

The major challenge is to understand the conditions and the policy design feature that determine whether tax incentives in the state are likely to deliver substantial and sustainable net benefits in a particular context.
1.1 The purpose of the study

The purpose of this study was to determine how policy makers, tax administrators, investors and other stakeholders in the state meet the challenge when considering tax concessions and investment decisions amongst small scale businesses in Calabar Free Trade Zone.

1.2 Research questions

The following research questions were formulated for the study:
(1) To what extent do tax incentives affect return on investment rate?
(2) To what extent do tax incentives affect the mobilization of investment capital?
(3) In what ways does investment climate stimulate the flow of investment?
(4) To what extent do investment tax incentives affect a state economic growth?
(5) In what ways do investment tax incentives stimulate employment generation?

2 Review of Related Literature

The use of tax incentives to attract investment is widespread and their use is increasing (Tanzi and Zee, 2000; Zee, Stotsky and Ley, 2002). Tax incentives can be granted in a variety of ways with differing implications for the burden on the domestic treasury (Zee, Stotsky and Ley, 2002). This is backed up by the theory of Temporary Investment Tax Incentives.

2.1 Temporary Investment Tax Incentives Theory

This theory analyses how temporary changes in taxes affect the incentive to invest (House and Shapiro, 2006). According to them, “Bonus depreciation appears to have had a powerful effect on the composition of investment”. Capital that benefited substantially from the policy – namely equipment with long tax lives – saw sharp increases in investment. Small changes in the timing of a firm’s purchases of long-lived pieces of equipment have little effect on their value to the firm. For example, how much a machine produces over the next twenty-years will be essentially the same whether the machine is installed in late December or early January. On the other hand if a tax subsidy is available in December but expires in January, then the firm has a strong incentive to install it in December. As a result, powerful incentives exist to alter the timing of investment in response to temporary tax subsidies (House and Shapiro, 2004). These incentives are so strong that, for a sufficiently temporary tax change or a sufficiently long-lived capital good, firms will bid up the purchase price of investment goods by exactly the amount of the subsidy. House and Shapiro use this insight into the effect of temporary investment subsides to estimate how responsive the quantity of investment is to investment tax subsidies.
The theory indicates that even modest reduction in the after tax-cost of capital purchases provide strong incentives for increased investment. Accordingly, for temporary investment tax subsidies that apply to long-lived capital goods the incentive to invest is essentially infinite. An insight into this theory leads to several results. First, if the supply of investment goods is highly elastic in the short-run, the quantity of investment will react dramatically to such policies. Second, temporary tax changes are necessarily accompanied by offsetting changes in the pretax shadow price of investment goods. In equilibrium the pre-tax shadow price of investment goods must move one-for-one with the tax subsidy regardless of the elasticity of investment supply. Observed price increases following a temporary tax incentive do not therefore constitute evidence that the supply of investment is relatively inelastic. Of course, the elasticity of investment supply does matter for the equilibrium determination of quantity. Because economic theory dictates that the underlying shadow price of investment moves one-for-one with a temporary tax subsidy, the elasticity of supply can be inferred from quantity alone.

### 2.2 Income Shifting, Investment and Tax Competition Theory

This theory opines that firms operating in multiple jurisdictions can shift corporate income taxation using tax planning strategy. Because income of corporate groups is not consolidated for tax purposes, firms may use financial techniques such as lending among affiliates, to reduce sub national corporate taxes. According to Master (2006), a simple theoretical model shows how income shifting affects real investment, government revenues, and tax base elasticity, depending on whether firms must use the statutory allocation formula to determine their taxable income in each state. The evidence suggests that income shifting has pronounced effects on state tax bases. According to their preferred estimate, the elasticity of taxable income with respect to tax rates for “income shifting” firms is 4.9, compared with 2.3 for other, comparable firms.

### 2.3 Growth Theory

This is the theory of the “Big Push.” It suggests that countries needed to jump from one stage of development to another through a virtuous cycle in which large investments, in infrastructure and education coupled to private investment would move the economy to a more productive stage, breaking free from economic paradigms appropriate to a lower productivity stage Bond and Samuelson (1986). Barro (1990) developed the endogenous growth theory that explains the concept of technological advancement. This model also incorporated a new concept of human capital, the skills and knowledge that make workers productive. Unlike physical capital, human capital has increasing rate of return. Therefore, in the overall there are constant returns on capital, and economies never reach a steady
state. Growth does not slow as capital accumulates, but the rate of growth depends on the types of capital a country invests in. This on its part depends on the nature of investment incentive provided for capital investors.

### 2.4 Growth theory II: The Public Sector Theory

Technological differences and differences in preferences can explain cross-country differences in growth. Economic policy can also easily be imaged to have an impact on long-run growth. This theory attempts to analyze the growth effects of economic policy, such as investment tax incentives. (Barro, 1990; Easterly, 2001). According to Barro (1990), the technology used for producing consumption and investment goods is characterized by a total factor productivity that depends on the provision of a rivalry public good which is the outcome of public policy, and this was also the view of Asuquo, 2012.

### 2.5 Design of Tax Incentives

Common incentives include low overall tax rates, preferential tax rates for investments, tax holidays, capital recovery allowances, investment tax credits, and the treatment of dividends, excess deductions for designated expenses, special export incentives, reduced import duties on capital and raw materials, and protective tariffs (Bond and Samuelson, 1986). Fletchar (2002) opined that the advantages and disadvantages of the various incentives could be analyzed in terms of four criteria:

I. Effectiveness in stimulating investment;  
II. Impact on revenue;  
III. Economic efficiency; and  
IV. Impact on tax administration.

The use of tax incentives to attract investment is widespread and their use is increasing (Tanzi and Zee). Tax incentives can be granted in a variety of ways, with differing implications for the burden of the domestic treasury (Zee, Stotsky and Ley, 2002, and Asuquo, 2012).

### 2.6 Investment tax incentives in Nigeria

The Nigerian government has put in place a number of investment tax incentives for the stimulation of private sector investment from within and outside the country. While some of these incentives cover all the sectors, others are limited to some specific sectors. The nature and application of these incentives have been considerably simplified. The incentives include: companies income tax, pioneer status tax, tax relief for research and development, in-plant training tax, export incentive tax, etc.(Asuquo, 2012).
3 Research Methodology

The survey design, supported by selected case studies was adopted in this study. This design was considered the most appropriate structure to apply in the study because under it permitted the use of, a wide array of written and verbal responses obtained from the respondents through the use of observation, questionnaire and interview techniques. The study area was Calabar Free Trade Zone, where most of the firms enjoying investment tax incentives are located.

3.1 Population of the study

The key research respondents involved in the study were staff and management of firms in the Calabar Free Trade Zone who enjoyed investment tax incentives. They were drawn from manufacturing, service, agro-based and integrated business sectors. Other elements of research were government agencies involved in the formulation and implementation of tax policies and programmes.

3.1.1 Sample size

For the study, sixteen out of thirty-two operational firms in Calabar Free Trade Zone were randomly chosen for the survey. This translated to 50 percent of the population. From these sampled firms, a total of 234 respondents were randomly selected.

3.1.2 Instrumentation

A questionnaire which was developed and validated for the study contained structured questions and required the respondents to choose from range of options. Each of the options had a rating from five to one point in the order presented below:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very high extent</td>
<td>5</td>
</tr>
<tr>
<td>High extent</td>
<td>4</td>
</tr>
<tr>
<td>Average extent</td>
<td>3</td>
</tr>
<tr>
<td>Low extent</td>
<td>2</td>
</tr>
<tr>
<td>Very low extent</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1: Rating of responses used for the analyses

<table>
<thead>
<tr>
<th>RESPONSE CODE</th>
<th>AITI RATING</th>
<th>SAGR RATING</th>
<th>AROI RATING</th>
<th>AEGR RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
The information above is as described below:
(a) AITI = Average Investment Tax Incentive Ratings.
(b) SAGR = State Average Growth Ratings.
(c) AROI = Average Return on investment Ratings.
(d) EGR = Average Employment Generation Rate.

4 Results

4.1 Data analyses yielded the following results

Table 2: Multiple regression result of ROI

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimated Coefficient</th>
<th>Standard Error</th>
<th>T-Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constance term</td>
<td>0.940</td>
<td>0.108</td>
<td>8.711</td>
<td>0.000</td>
</tr>
<tr>
<td>ROI</td>
<td>0.729</td>
<td>0.270</td>
<td>26.616</td>
<td>0.000</td>
</tr>
<tr>
<td>R</td>
<td>0.887</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.787</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.786</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistics</td>
<td>0.708</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Regression result to measure the impact of tax incentives (TI) on return on investment (ROI) as derived from table 2 above:
ROI = 0.940 + 0.729 TI
T-value (8.711)(26.616)
R = 0.887, R^2 = 0.787
Adjusted R^2 = 0.786, F – statistics = 70.84
*Significant at 5% level where t – value tabulated = 1.645
Table 3: Multiple regression result of economic growth equation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimated Coefficient</th>
<th>Standard Error</th>
<th>T-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant term</td>
<td>1.608</td>
<td>0.082</td>
<td>19.657</td>
<td>0.000</td>
</tr>
<tr>
<td>EGR</td>
<td>0.685</td>
<td>0.021</td>
<td>33.025</td>
<td>0.000</td>
</tr>
<tr>
<td>R</td>
<td>0.922</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.850</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.850</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>0.1090</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Regression result to measure the influence of tax incentives (TI) on the economic growth rate (EGT) as obtained from table 3 above:
   EGR = 1.608 + 0.685 TI
   T-value (19.657) (33.025)
   R = 0.922 R² = 0.850
   Adjusted R² = 0.850, F-statistics = 109.6
   * Significant at 5% level where the tabulated value of t=1.645.

Table 4: Multiple regression result of employment generation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimated Coefficient</th>
<th>Standard Error</th>
<th>T-Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant term</td>
<td>0.189</td>
<td>0.81</td>
<td>2.326</td>
<td>0.021</td>
</tr>
<tr>
<td>EG</td>
<td>0.912</td>
<td>0.21</td>
<td>42.487</td>
<td>0.000</td>
</tr>
<tr>
<td>R</td>
<td>0.956</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.914</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted-R-squared</td>
<td>0.913</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistics</td>
<td>0.1805</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Regression result to determine the effect of tax incentives on employment generation (EG). As derived from table 4 above:
   EG = 0.189 + 0.912 TI
\[ T-\text{value} = (2.326) \quad (42.487) \]
\[ R = 0.956, \quad R^2 = 0.914, \quad \text{Adjusted } R^2 = 0.913 \]
\[ F-\text{statistics} = 180.5 \]

*Significant at 5% level where t-value tabulated = 1.645

### 4.2 Discussion of findings

**Return on investment:** The regression result to measure the impact of tax incentives on return on investment shows that the constant term has a positive sign which is consistent with economy theory, and the same also is that of the coefficient of tax incentive. These by implication mean that firms enjoying investment tax incentives would attain high return on investment level. The t-values of the estimated coefficients were high, positive and significant at 5% level. High t-values are indicators of power of high reliability of the predictive power of the coefficient. The adjusted $R^2$ of 78.6 percent which measures the goodness of fit was good and statistical significant. This implies that return on investment has strong linear relationship with investment tax incentives.

**Economic growth rate:** The linear regression result shows that the constant term has a positive sign which is consistent with economic theory. The estimated coefficient of the state’s average growth is significant and positive. The important implication of this result is that holding other explanatory variables constant, an increase in one unit of investment tax incentives may lead on average, to an increase of 68.5 unit in economic growth. The t-value is high and is statistically significant at 5% level.

**Employment generation rate:** The result shows a positive sign for the constant term which is in line with economic expectation. The t-value of 42.487 is high and indicates statistical significant at 5 percent level. The $R^2$ (91.4) that is coefficient of determination), is high and statistically significant, meaning that 91.4 percent of the variation in employment generation in the Calabar Free Trade Zone is explained by the explanatory variable included in the regression.

### 5 Conclusions

On the bases of the findings of this study, the following conclusions may be drawn:

1. Investment incentives significantly influence the return on investment of firms.
2. Firms’ enjoying tax incentives will generate more employment opportunities than firms in highly taxed regions.
3. Tax incentives promote economic growth.
4. Conductive investment climate is a crucial requirement for the flow of sustainable physical investment in an economy.
(5) Tax incentives improve living standards and per capita income and expand variety of goods available to consumers. The above were in support of the findings made by Asuquo(2012) in his study.

5.1 Recommendations

On the bases of findings and their discussions, the following recommendations may be proffered:

(1) Tax policies should be designed to eliminate double taxation
(2) Tax incentives should be effectively implemented and efforts should be made by relevant tax authorities to ensure that benefiting firms are adequately granted these incentives.
(3) Investment climate in the country and state should be made conducive through effective policy formulation, implementation and the provision of adequate functional physical infrastructure.

References


