Impact of Tax Planning and Tax Incentives on the Profitability of Companies in the Free Trade Zones

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Abstract: This research surveyed the impact of planning for tax incentives, as applicable in Free Trade Zones, on the profitability of companies in the Free Trade Zones (FTZs). The work was based on the influence of exempt company income tax, exempt education tax, exempt urban development tax, exempt import duties, exempt export duties and exempt excise duties on the profitability of companies in the FTZs. Profitability was considered in this research as a function of tax claims investment.

Methodology: The study employed ex-post facto research method where the simple random sampling technique was adopted to draw a representative sample for the study. The multiple linear regression model was used to determine the relationships between tax incentives and profitability.

Results: It was revealed that the incentives granted by the government have not propelled investment because there was little or no growth in earnings of companies in the Zone based on the incentives provided. The study equally revealed that tax incentives have improved corporate performances and thereby increased investments in the Zones. The study therefore recommended that investors should take advantage of the available tax incentives by investing in FTZs.

Conclusion: This research has been able to establish the certainty of corporate profitability in investments in the Free Trade Zones based on the generous tax incentives granted by government. It also proved that the tax incentive policies granted in the zones are reliable means of industrial development.

Keywords: Tax planning, tax incentives, exempt taxes, exempt duties, Company Profitability, Free trade zones.

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I. Introduction

Taxation is one of the major sources of revenue for all levels of government. It therefore requires careful planning to evolve tax policies that will enhance the general economic growth of the nation. While there are tax incentives in areas where government has special interest, there are disincentives where government seems to pay less attention. Tax is viewed as a reduction in profit and investment revenue by taxpayers based on the value of tax paid. But then, it is a statutory obligation the taxpayer must comply with. Tax reduces net returns on investment and also decreases the balance available for private savings. Though taxpayers view tax as being imposed by the government, they in turn benefit from it by means of social amenities such as water, electricity, good roads and other infrastructure supplied by the government, (Effiong, 2004). In developing countries especially, there is need to encourage investors and attract Foreign Direct Investments (FDI) for the purpose of economic development. One way of achieving this goal is by giving tax incentives, (Effiong, 2008). According to Ayua (1996), as far back as 1950, tax incentives had been part of industrial policy to private firms. It is however to be noted that incentives in form of tax credits may not be the sole determinants of investment in any other country. Other factors like market size, expansion of sales into markets, forestallment of major competitions, conducive business environment, good political climate, etc. may be taken into consideration in the choice of the place of investment. The research question here is whether the objective of encouraging investment has been achieved by the incentives, (Effiong, 2008).

According to Obioma (2003), the use of tax incentives as investment instruments is yet to gain prominence in Nigeria, where the Free Trade Zones (FTZs) are still lying fallow. It is an opening for companies/investors to exploit the opportunities given them through tax incentives, (Effiong & Asuquo, 2010). It is observed by Bergsman (1999) that most tax incentive schemes that are encountered in most countries are
simply not effective. They attract very little additional investment. Upon the fact that these incentives are not effective, they drain on the government treasury. He further discovered that these tax incentives are sometimes counterproductive because they make investment procedures too complex, and sometimes lead to significantly greater corruption. Therefore, the government needs to adopt better approaches to tax incentives that will attract investment, ease the cumbersome tax planning processes devoid of corrupt practices, (Effiong & Attah, 2016). Bergsman (1999) further pointed out that tax incentives in less developed regions are often limited to certain sectors and/or regions, or if not strictly limited, they are stronger for certain sectors and regions. The record of both of these is that they are not very effective, but they are very popular around the world, (Effiong, Asuquo & Obi, 2011). Therefore, the problem identified in this research was that there is little or no growth in earnings upon government tax incentive packages to encourage investments. We may deduce from this problem that such incentives do not adequately influence profitability which is a function of the investment decisions of prospective investors. This research attempts to investigate the significance of tax planning based on tax incentives on profitability. Obviously, corporate management takes advantage of tax incentives as provided by the available tax laws to make investment decisions to enhance profitability of the enterprise. In the view of Osuegbu (2007), it is thus in the interest of the taxpayer to exploit the tax laws through good tax planning to reap from tax avoidance. The taxpayer in order to secure his net earnings, devices means of minimizing tax liabilities by exploiting tax incentives as provided by tax laws, (Effiong, Bogo, & Atu, 2017). As part of the efforts to provide enabling environment for growth and development of industries, inflow of Foreign Direct Investment (FDI), shield existing investments from unfair competition and stimulate the expansion of domestic production capacity, the Federal Government of Nigeria (FGN) has developed a package of tax incentives for various sectors of the economy, (Effiong, Akum, Asuquo, & Onyeogaziri, 2018). These incentives, it is believed will help revive the economy, accelerate growth and development and reduce poverty. All these depend on the response of corporate organizations to government’s benevolence by adopting strategies to utilize these incentive opportunities in making investment decisions aimed at enhancing corporate profitability, (Effiong, Nabi, Dada, & Adejonpe, 2018). Free Trade Zones are designed to benefit from some special tax incentives such as exempt company income tax, exempt customs duties, exempt urban development tax, etc. The thrust of this research is to find out the extent to which these tax incentives influence profitability and thus promote investment in the zones. The profitability of a company is so important to the growth of any economy that it should be treated with utmost attention. In the light of this, the government established the Free Trade Zones with the attendant tax incentives aimed at encouraging investments in the zones. However, it is not clearly established if actually, the efforts of the government have paid off. The basis of this research is therefore to know whether these tax incentives have positive or negative impact on profitability of companies in the Free Trade Zones, (Effiong, 2010).

II. Theoretical framework

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 of the burdens on the domestic treasury (Zee, Stotsky and Ley, 2002). These assertions are backed up by the following theories:

The profits theory of investment

The profits theory of Jhingan (2008), regards undistributed profits as a source of internal funds for financing investment. Investment depends on profits and profits in turn depend on income. It states that if total income and total profits are high, the retained earnings of the firms are also high and vice versa, (Effiong, Udoayang, & Asuquo, 2011). This is the liquidity version of the profits theory. Jhingan (2008), further stated another version of the profits theory of investment which reveals that the optimum capital stock is a function of expected profits – if the aggregate profits in the economy and business are rising, the expected profits are some functions of actual profits in the past, i.e. $K't = f(\lambda t–1)$

Where $K't$ = the optimal capital stock and

$f(\lambda t–1)$ = some function of past actual profits.

This theory was developed by Edward Shapiro which states that total profits vary directly with the income level. That for each level of profits there is an optimal capital stock. The optimal capital stock varies directly with the level of profits. (Jhingan, 2008).

Theories of shareholders wealth maximization

The ultimate goal of the management of a firm is to make the firm as valuable as possible; as such the firm should pick the debt-equity ratio that makes the total value of the firm as big as possible (Ross, Westernfield and Jatta, (1996). In a world of no taxes, the famous proposition I and II of Modigliani and Miller (1958) proves that the value of a firm is unaffected by the debt equity ratio. In other words, financial policy is a
matter of indifference in that world. In studying the tax effects on capital structure, the trade-off theory’s simple distinction between debt and equity, as the only two financing options of companies, is fundamentally incomplete because firms have three, not two, distinct sources of funds; debt, internal equity, and external equity, (Effiong, 2012). In theory, internal equity (retained earnings) is generally less costly than external equity for tax reasons. It follows that, even without information problems or adjustment costs, optimal leverage is a function of internal cash flows, debt ratios can wander around without a specific target and a firm’s cost of capital depends on its mix of internal and external finance not just its mix of debt and equity. (Effiong, 2012). The trade-off between capital debt, retained earnings and external equity depends critically on the tax basis of investors’ shares relative to current price. Debt has tax advantages at the corporate level because interest payments reduce the firm’s taxable income while dividends and share repurchases do not. Unless personal taxes negate this advantage, interest ‘tax shields’ give corporations, that is, shareholders, a powerful incentive to increase leverage. (Effiong, & Oti, 2012).

The trade-off theory of capital structure is largely built upon the tax benefits of debt. In the simplest form, trade-off theory states that firms balance the tax benefits of debt against the costs of financial distress. Tax effects dominate at low leverage, while distress costs dominate at high leverage, (Fama and French, 1998). The firm has an optimal, or target, debt ratio at which the incremental value of tax shields from a small change in leverage exactly offsets the incremental distress costs. This notion of target debt ratio, determined by firm’s characteristics like profitability and asset risk, is the central focus of most empirical tests (Fama and French, 1998). The tax effect of financing is re-considered in a simple yet, realistic model of taxation. The main consideration is that, under general conditions, the tax costs of internal equity (retained earnings) are less than the tax costs of external equity, and in principle may be zero or negative, (Effiong, & Etowa, 2012). As a result, optimal leverage will depend on internal cash flows. Firms with excess cash may not have a tax incentive to leverage up. Further, the firm’s cost of capital depends on its mix of internal and external finance, not just its mix of debt and equity, (Effiong, Inyang, Akum, Asuquo & Onyeogaziri, 2018).

DeAngelo and Masulis (1980) extended Miller’s work and examine the effects of non-debt related tax shields on capital structure. They showed that Millers’ irrelevance (indeterminacy) theory is realistic in situation, such as the modification(s) of tax codes. More specifically, they showed that the existence of non-debt related corporate tax shields, such as depreciations, is sufficient to overturn the leverage irrelevance theorem. They state that optimal capital structure is feasible at individual firm’s level. Hence corporate tax is central to the theory of capital structure. Dammon and Senbet (1988) criticized DeAngelo and Masulis, saying that the model only partially recognizes the interaction between real and financial decision variables of the firm. They stated that De-Angelo and Masulis did not fully incorporate the productive side of the economy and that non-debt tax shields are exogenous in the model. The critiques provided what they claimed to be a more realistic look of the problem and showed that investment and non-debt tax shields are endogenous. Hence the endogenous-exogenous dichotomy adds another dimension to the debate on capital structure, (Effiong, Akpan, & Oti, 2012).

Studies that estimate the tax benefit of leverage followed the spirit of Modigliani and Miller (1963). Kane, Marcus and McDonald (2003), Titman and Wessels (1988) and Fama and French (1998) estimate the value of the firm and the size of the tax shield from leverage assuming that the value function is linear; \( V_L = V_{L^*} + T_e B_l \). where \( V_L \) and \( V_{L^*} \) respectively are the valued levered and unlevered firms, \( T_e \) is marginal corporate tax rate and \( B_l \) is the market value of corporate debt. This, over a perpetual period \( TCB \) is the gain from leverage. The magnitude of \( T_e \), the type of tax regime/tax rate change becomes key factors for choice of capital structure. In practice, how one defines and measures \( T_e \) (Statutory, effective or marginal) is very crucial. More importantly, for the theory to hold, a positive association between \( T_e \) and \( B^* \) must be observed.

Corporate and personal taxes together with non-debt tax shields are the most important tax related explanatory factors of corporate financing decisions, (Oti, Effiong, & Arzizzeh, 2012). Considering non-debt tax related explanations, the capital structure choices of a firm can be affected by bankruptcy costs, agency costs/ investment inefficiencies, asymmetric information and signaling costs. Empirical evidences show that there is a relationship between profitability and debt usage. Strulz (1990) argues that managers can best reach their personal objectives by controlling corporate profits instead of committing to pay out excess cash flows as debt payments. Myers (1993) notes that the most pervasive empirical evidences about capital structure decisions is the inverse relationship between debt financing and profitability.

The theory and empirical findings of corporate capital structure models have been discussed in several recent surveys (Prasad, Green and Murinde, 2001). The modern theory has four main strands, which can be summarized as follows. First are theories base on asymmetric information as between shareholders in the firm, a similar contribution being Myers (1994) pecking order theory; second are agency theories such as that of Jensen and Meckling (1976), third are transaction cost theories of the firm advocated particularly by Williamson (1988) and fourth are tax based theories which following Modigliani and Miller (1963), argued that differential taxation of corporations and their stakeholders set up incentives for firms to finance their activities in particular ways.
Unfortunately, these theories have mostly delivered a host of special cases which, while adding to the researcher’s understanding of firm financial decisions often do not lend themselves to direct testing with a neat closed – form regression model.

**Nature of tax planning and tax incentives on profitability**

Tax incentive is seen as the fiscal measure among others to promote innovation. It has assumed much importance in current discussions in public organizations, according to the Organization for Economic Co-operation and Development, innovation policies (OECD) (1996). This means that the essence of tax incentives is to encourage investment. And by implication, such investments are essentially profitable in order to achieve this goal. This is because increasingly, developing countries such as India are showing signs of replacing direct support to R & D with that of indirect subsidies like tax concessions (Mani, 1999). Mani (1999) in survey of tax treatment of R & D expenditure across twenty developed and developing countries came up with the following findings.

That majority of the countries allow almost the entire revenue and capital expenditure on R & D to be deducted from the taxable income during a year. In some 10% of the countries, an amount even greater than what is spent is allowed to be deducted and much of the revenue expenditure deductions are admissible in the first year itself while much of the capital expenditure deductions are admissible in the first five years. He further made findings that among 100 countries studied, about 10 only have production enterprises which invest in industrial R & D, while others are encouraged by some form of tax credits for investment in some specific industries, (Akpan, Effiong, & Ele, 2012).

As explained by ICAN (2009), tax planning involves taking conscious efforts to consider the tax that will be payable by a taxpayer at a future date and how such tax can be minimized. In relationship to profit or income, the tax to be paid can be minimized by reducing the assessable profit of the taxpayer. The available laws regulating tax administration, assessment and collection give the taxpayer grounds to manipulate his income within the limits of the tax laws to pay less tax, (Effiong & Beredugo, 2015). If the taxpayer pays less tax, it means, he will be reporting higher profit after tax (PAT), as a basis of calculating profitability growth ratios. It then means that as far as the law provides, a taxpayer can plan his tax in such a way as to report good profitability ratios. The various methods of achieving this tax planning are through tax incentives. Tax incentives are the provisions of the tax that enable the taxpayer to minimize his tax liabilities as far as possible. Therefore, tax planning is based on tax incentives and knowledge of the tax laws by the taxpayer. The available tax incentives are as follows according to ICAN (2009).

**Capital allowance – timing of assets:**

Particularly initial allowance and investment allowance are allowed once in the first year in full regardless of the time in the accounting basis period that the asset is put to use. Example, a company that purchases an asset in December will claim the same amount of initial and investment allowance as the one in January under the same circumstances. In this case, the company that purchased in December will claim more allowance proportionately as compared application to the one acquired on a later date than on an earlier date, (Fadenipo, Effiong, Okobe, & Ahonkhai, 2016).

**Industry Allowance**

According to tax laws, companies in the agricultural, agro-allied and manufacturing industries are given no restrictions to the percentage of assessable profit that capital allowance must not exceed. But for others, it is limited to 66 2/3%. In tax planning, a company can decide to invest in these industries in order to enjoy the benefit. Also, there are rural allowances, industry allowances, etc; the knowledge of which can inform a taxpayer to lessen his tax burden by investing in these industries rather than in others, (Oti, Effiong, Egbe, Iniobong, & Agbon, 2016).

**Avoidance of penalty**

Knowledge of due date for tax payment and prompt payment helps the taxpayer to avoid the penalty of late payment. Such penalties are avoidable expenses that infringe on the profit and hence profitability index, (Effiong, Chinenyenwa, Ogar, & Grace, 2016).

**Exemption from capital gains tax (CGT)**

Stocks and shares investments are exempted from capital gain tax (CGT). A taxpayer’s knowledge of this will inform his decision to invest in stocks and shares rather than buildings that attract CGT. This exemption will boost the profit and profitability growth ratios, (Oti, Effiong, & Ferdinand, 2017).
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Pioneer companies and rural investment allowances

Pioneer companies are granted qualifying capital expenditure on application by issuing them the pioneer company certificate. This benefit may elude any company that lacks the knowledge. Tax planning by consulting with professional accountants will earn the taxpayer such benefits, (Effiong, Oro, Ogar, Imong, Jacob, & Orim, 2017). A tax holiday of say three years is usually stated on the pioneer certificate granted and thereafter can be extended on application of the taxpayer, to five years. Rural investment allowances are granted to companies who qualify and have applied on the bases of lack of electricity, bad roads, no water supply etc.,(Effiong, Akpan, & Egbe, 2017).

Other forms of tax incentives are export processing zone allowance, export free zone allowance, exemption profit of solid minerals, mining etc. This is to encourage investment in these areas. Companies in these industries can take advantage of the provisions of the tax laws, (Oti, Effiong, & Akpan, 2017).

The various tax incentives provide bases in the tax laws for corporations to plan for taxes in a manner that ensure that the amount of tax due is minimized and the profitability of the firm maximized. The importance of tax planning is reveal by Kumarasingam (2010) as: Tax work accounts for almost 40% of revenue of CPA firms in the USA, rank of the revenue is as follows-tax compliance form of consulting and tax planning, and representing clients before government; Large firms generally generate more revenue from planning as clients place more reliance on them. In the light of these, firms derive growth in profitability and therefore engage professional tax consultants to maximize tax advantages of the various tax incentives available to them.

Ways of Improving Tax Planning and Tax Incentives for the Effective Determination of Profitability

Here, effectiveness is taken to mean the extent to which investment tax incentives stimulate investment. This definition focuses on the amount of investment, yet the quality of investment is at least as important as the quantity. The quality implies efficiency. According to House and Shapiro (2006), incentives that foster unsound and unsustainable investments impede economic development, just as driving faster in the wrong direction only leads you farther from your destination. Such investments should not be counted as a sign that the incentives are effective. Effectiveness therefore, should mean the extent to which the investment tax incentives stimulate additional productive investment, Effiong, Okare, & Udama, 2017).

If tax incentives are effective in this sense, a sound policy analysis must also take into account the associated costs. For example, an incentive that stimulates ₦1m of investment at a cost of ₦1.5m to the economy is a losing formula. Focusing on the gain of ₦1m yields poor decisions and ultimately adverse outcome. For this reason, Zee, Stotsky and Ley (2002), emphasized the criterion of cost-effectiveness. In their view, the central issue is whether the benefits to the economy that can be expected from an increase (if any) in the incentive-favoured activities would actually outweigh the total costs of the tax incentives granted. The concept of cost-effectiveness addresses consequences beyond the additional investment as such. Impact however, refers to the broader fiscal, economic and social implications of investment tax incentives. Thus the analysis must examine both the effectiveness of various tax incentives in stimulating productive investment and their impact on government revenue, tax administration, economic efficiency, social-equity and ultimately, on the country’s prospects for economic growth.

In the case of infant industries, the expectation is that they will not initially be productive and competitive, but will become so within a reasonable time frame so that the present value of future net benefits is expected to exceed the short-term efficiency costs.

Shah (1995) used the term cost-effectiveness more narrowly to refer to per dollar of revenue loss. A ratio of less than one indicates poor cost-effectiveness. This is not a logical gauge of cost-effectiveness. The numerator should measure the present value of benefits to the domestic economy, not the gross amount of investment, and the denominator should include the present value of future revenue losses, not just the annual cost. Even when redefined this way, the ratio is still over simplified because it neglects indirect costs and benefits.

Tools for analyzing tax incentives

Three important tools for analyzing tax incentive polices are the marginal effective tax rate (METR) model, tax expenditure budgeting and the specification of screening criteria for applying selective incentives (Morisset and Pirnia, 2001). The METR model provides a gauge for evaluating the extent to which various tax incentive packages improve the rate of return for representative investment projects (Morisset and Pirnia, 2001; Oman, 2000).

According to Morisset and Pirnia (2001), tax expenditure budgeting is a valuable method for monitoring the amount of foregone revenue from tax incentives. According to them, every country or state should take steps to adopt these tools for policy analysis.

In screening projects that will benefit from selective incentives, the goal should be to avoid foregoing tax revenue for investments that would be undertaken anyway. In general, projects that are efficient and
sustainable are likely to materialize even without special tax breaks. The exception is “footloose” investment than can easily be located in other countries or states. Incentives can also be effective in stimulating investments that are not viable without tax break (Masters, 2006). He identified that these as projects with low productivity. He posits that, the criteria used to target investment incentives often fail to pick projects that will deliver large benefits relative to the revenue cost. Furthermore, any selective, screening process can be subverted by political maneuvering.

**Design of tax incentives**

Common incentives include low overall tax rates, preferential tax rates for investments, tax holidays, capital recovery allowances, investment tax credits, 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).

The use of tax incentives to attract investment is widespread and their use is increasing (Tanzi and Zee, 2000; Blomstrom and Kokko, 2003). 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).

**Table 1: Popular tax incentives**

<table>
<thead>
<tr>
<th>S/No</th>
<th>Type</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tax Holidays</td>
<td>Exemptions from corporate taxes for a set period.</td>
</tr>
<tr>
<td>2.</td>
<td>Preferential tax rates</td>
<td>Reduced corporate tax rates for a set period.</td>
</tr>
<tr>
<td>3.</td>
<td>Investment Allowances</td>
<td>Additional immediate expensing of a set percentage of the cost of capital investments.</td>
</tr>
<tr>
<td>4.</td>
<td>Tax credits</td>
<td>Additional immediate write-off of a set percentage of the cost of capital investment against tax liabilities.</td>
</tr>
<tr>
<td>5.</td>
<td>Accelerated Depreciation</td>
<td>Allows faster depreciation, for tax purposes, of capital assets.</td>
</tr>
<tr>
<td>6.</td>
<td>VAT/Sale tax exemptions</td>
<td>Exemptions from indirect taxes such as VAT, sales taxes.</td>
</tr>
<tr>
<td>7.</td>
<td>Import/Export tax incentives</td>
<td>Exemption/protection of certain firms through the use of import/export tariffs.</td>
</tr>
</tbody>
</table>

**Source:** Zee, Stotsky and Ley (2002).

**Tax holidays**

Tax holidays are the most popular tax incentive among developing countries, but interestingly these are rare, and becoming more among developed countries. Blomstrom and Kokko (2003) point to the fact that these incentives do not require any outlay of public funds as an explanation for their wide spread popularity within developing countries, where public funds are particularly scarce. There is a further advantage since by excluding these firms from the tax base, monitoring and administration costs are avoided by the host country treasury (UNCTAD, 2000). Investing firms are also relieved of the burden of tax administration costs, (Effiong & Akpan, 2019).

However, the disincentives of tax holidays are substantial. Besides the difficulty of determining which investments are incrementally generated by the incentive, with the firm removed from the tax base, there is no record of how much tax revenue is foregone (Zee, Stotsky and Ley, 2002). Furthermore, the existence of tax neutral entities increases the opportunities for tax avoidance through transfer pricing and restructuring (McLure, 1999). There also exists a significant danger of another type of rent seeking behaviour through restructuring projects or lobbing for policy extensions to increase the duration of incentive benefits (Wells and Allen, 2001). Even where none of these adverse outcomes emerges, this type of incentive is extremely costly, in terms of taxes foregone.

**Preferential tax rates**

This is effectively a weakened form of tax holidays. To a large extent they maintain the same advantages and disadvantages, but the differences on aggregate appear to be more position. Integrating firms into the tax base from the beginning ensures that at least some tax revenue will be received from any profit made. The disadvantage is that the treasury and the firm must go through the usual process compliance monitoring and tax returns respectively. However, since these firms are part of the tax base, foregone tax revenues can be explicitly calculated, improving the transparency of the policy (Zee, Stotsky and Ley, 2002).

Policies based on preferential tax rates reduce the problems associated with tax holidays. Nevertheless, these incentives still maintain, at least in part, most of the same problems as the tax holidays and as such, despite exceeding the usefulness of tax holidays, remain problematic policy instruments (Farrell, Remes and Schulz, 2004).
**Tariff and duty incentives**

Exemptions from import and/or export tariffs are common worldwide. UNCTAD (2000) observes that there are several ways in which these can be used to incentivize investment. Governments can grant protective import tariffs on final goods that protects an investor’s local markets. Another option is to give exemptions to import tariff on capital goods, reducing the cost of investment to firms. The third option is to grant firms exemptions from taxes for their inputs and/or exemptions from export taxes for their output products. Export processing zones are a popular means of applying these types of trade based tax incentives (Zee, Stotsky and Ley, 2002). This particular version of incentives strays into the region of trade reform. This is essentially a protectionist policy since it gives advantages to domestic firms. The evidence on these policies is that they promote efficiency and market distortions are avoided (UNCTAD, 2000). General reforms to trade policy avoid the distortions caused by protectionism. Also, where incentives are offered for “export only” producers, there are often problems with corruption and/or lack of enforcements, resulting in leakages into the domestic market. These types of policies also risk violating World Trade Organization (WTO) rules (Blomstrom and Kokko, 2003).

**Tax incentives in Nigeria**

The Nigerian Government has put in place a number of investment 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, (Effiong, Oti, & Akpan, 2019). These incentives include:

- **Companies’ income tax**
  
The Companies Income Tax Act has been amended in order to encourage potential and existing investors and entrepreneurs. The current rate in all sectors, except for petroleum, is 30 percent.

- **Pioneer status**
  
The grant of pioneer status to an industry is aimed at enabling the industry concerned to make a reasonable level of profit within its formative years. The profit so made is expected to be ploughed back into the business (Carmichael, 2006). According to Ola (2000), Pioneer status is a tax holiday granted to qualified or (eligible) industries anywhere in the Federation and seven year tax holiday in respect of industries located in economically disadvantaged local government area of the Federation. The Industrial Development Income Tax Act (IDITA), (1971), as amended identified that to qualify, a joint venture company or a wholly foreign-owned company must have incurred a capital expenditure of not less than five million naira whilst that of qualified indigenous company should not be less than N150,000. In addition, an application in respect of pioneer status must be submitted within one year the applicant company starts commercial production otherwise the application will be time-barred.

- **Empirical literature**
  
Tax incentives may be a rational policy tool but the costs and benefits of such incentives need to be measured to determine if they pay-off. Even if there is a case in principle for tax incentives, this will not help a policy maker unless the costs and benefits of practicable incentive schemes are known. That is even if there is a general case for tax incentives, one may decide against their use, if none of the available incentives can achieve their aims, or if their costs are too high. Moreover, the costs of tax incentives are wide-range and go beyond any immediate revenue loss. These costs include distortions to the economy as a result of preferential treatment of investment qualitative for incentives, administrative costs for running and preventing fraudulent use of incentives schemes, and social costs of rent-seeking behavior, including possibly, an increase in corruption. All these variables of cost are difficult to quantify in order to compare the benefits of the incentives. Even the pure revenue costs of incentives are difficult to quantify. According to Tanzi and Zee (2001), at one extreme if incentives apply only to investment that would not have taken place otherwise, the cost of direct revenue forgone would be nil. At the other extreme, if incentives are purely redundant and have no effect on investment, then the entire tax revenue waived makes up the direct revenue cost, (Effiong, Asuquo, & Ejabu, 2020).

The benefits of tax incentives, on the other hand, are also difficult to assess. Tax incentives are often used to achieve medium term development objectives, which will be affected by any factors other than tax incentives. Hence, in the typical case of tax incentives, which aimed at boosting investment and thus economic growth, it will be difficult to know what the growth performance in the absence of the incentives would have been.

Costs benefits studies of tax incentives are difficult to make and may be misleading if they systemically exclude general equilibrium effects as asserted by Tanzi and Zee (2001). They observed that typically, such studies count the direct financial costs from tax revenue given up and compare them to the benefits in terms of

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higher employment and activity, and resulting tax revenue. Crowding-out of other investments is usually not quantified, as this would be very difficult to do. Equally, such studies cannot reveal whether investment was just relocated within the country or from one sector to another, or is genuinely additional.

Furthermore, according to Klemm (2009), it is difficult to create an efficient tax administration without a well-trained and well-educated staff due to lack of funds and also to computerize the operations. Moreover, where taxpayers lack the ability to keep accounts, informal structure of the economy, financial limitations, statistical and tax offices will have difficulties in generating reliable statistics for estimation of tax incentives impact on the economy, (Effiong & Ejabu, 2020).

III. Methodology

The researchers used the ex-post facto design in this research. This choice was based on the fact that the independent variables-exempt company income tax, education tax, state urban development tax, import duties, export duties and excise duties of companies in the Free Trade Zones (FTZs) already exist and the researchers had no control over them. The fact is that the independent variables under study already exerted their influence on the profitability of the companies before the conception of this research. The population studied in this research comprised 54 companies operating in Free Trade Zones. Primary data were collected basically through personal interviews with various executives of tax authorities, Nigerian Port Authority, Free Trade Zone Authorities, other relevant government establishments and the various company executives. Some of these sources enabled the researchers find appropriate direction for the study.

Research hypotheses

The following broad hypotheses guided the study:

Ho1: There is no significant relationship between exempt taxes and the profitability of companies in Free Trade Zones (FTZs).

Ho2: There is no significant relationship between exempt duties and the profitability of companies in Free Trade Zones (FTZs).

In hypothesis one, exempt taxes were operationally identified as the exempt company income tax, exempt education tax, and exempt state urban development tax of the companies while profitability was mirrored by the reported profits of the studied companies. In hypothesis two, exempt custom duties were the exempt import duties, exempt export duties and exempt excise duties and the dependent variable was profitability.

Model specification

Based on the theoretical expectations, the multiple regression analysis was adopted to estimate the determinants of profitability of companies in the Free Trade Zones (FTZs). The models are presented as follows:

\[ Y_1 = b_0 + b_1 \text{CIT} + b_2 \text{EDT} + b_3 \text{UDT} + e_1 \]  \hspace{1cm} (1)

\[ Y_1 = b_0 + b_1 \text{ID} + b_2 \text{EDa} + b_3 \text{EDb} + e_1 \]  \hspace{1cm} (2)

Where:

- \( Y_1 \) = Profitability,
- CIT = Company income tax,
- EDT = Education tax,
- UDT = Urban Development tax,
- \( b_0 \) = The intercept of the regression line,
- \( b_1 \) - \( b_3 \) = Coefficients of the independent variables and
- \( e_1 \) = Error term of the equation.
- ID = Import duties
- EDa = Export duties
- EDb = Excise duties

IV. Results

Table II: Regression results of exempt taxes on profitability

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-20249351.4</td>
<td>1678872.3</td>
<td>8.120614</td>
<td>.0000</td>
</tr>
<tr>
<td>CIT</td>
<td>-0.760123</td>
<td>0.422197</td>
<td>6.797845</td>
<td>.0000</td>
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<tr>
<td>EDT</td>
<td>-0.323243</td>
<td>1.342313</td>
<td>3.478242</td>
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</tr>
<tr>
<td>UDT</td>
<td>-0.822170</td>
<td>0.110048</td>
<td>6.927538</td>
<td>.0000</td>
</tr>
</tbody>
</table>

| R-squared | Mean dependent va. | 2338588 |
| Adjusted R-squared | S.D. dependent var. | 5319027 |
| S.E. of regression | Akaike info criterion | 33.71768 |
| Sum squared resid | Schwarz criterion | 33.86704 |
| Log likelihood | F-statistic | 13.47201 |
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<table>
<thead>
<tr>
<th>Durbin-Watson stat</th>
<th>1.793972</th>
<th>Prob. (F-statistic)</th>
<th>0.000000</th>
</tr>
</thead>
</table>

**Table iii:** Regression results of exempt custom duties on profitability

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-51.10563.85</td>
<td>850.2083</td>
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</tr>
<tr>
<td>ID</td>
<td>-0.890655</td>
<td>9.654329</td>
<td>7.342178</td>
<td>.0000</td>
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<tr>
<td>EXP.Eda</td>
<td>-0.241358</td>
<td>2.124587</td>
<td>5.012455</td>
<td>.0000</td>
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<tr>
<td>EXC.Edb</td>
<td>-0.147283</td>
<td>1.001245</td>
<td>5.000124</td>
<td>.0000</td>
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<tr>
<td>R-squared</td>
<td>.940904</td>
<td>Mean dependent var</td>
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</tr>
<tr>
<td>Adjusted R-squared</td>
<td>.933951</td>
<td>S.D. dependent var</td>
<td>253559.6</td>
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<tr>
<td>S.E. of regression</td>
<td>202061.0</td>
<td>Akaike info criterion</td>
<td>27.40801</td>
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</tr>
<tr>
<td>Sum squared resid</td>
<td>6.94E+11</td>
<td>Schwarz criterion</td>
<td>27.55737</td>
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</tr>
<tr>
<td>Log likelihood</td>
<td>-271.0801</td>
<td>F-statistic</td>
<td>69.43596</td>
<td></td>
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<tr>
<td>Durbin-Watson stat</td>
<td>2.076354</td>
<td>Prob. (F-statistic)</td>
<td>.000000</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Research SPSS estimation

**Variable**

- Dependent Variable: PROF
- Method: Least Squares
- Sample (adjusted): Included observations: 54 after adjusting endpoints

### V. Discussion

The regression results in table ii show that the estimated coefficients of the regression parameters have negative signals and thus conform to the a-priori expectation. The implication of this negative signs is that the dependent variable (profitability) is negatively influenced by CIT, EDT and UDT. This means that an increase in the independent variables (CIT, EDT and UDT) will bring about a decrease in profitability. The co-efficient of determination ($R^2$) of 0.790 implies that 79% of the sample variation in profitability (PROF) is explained or caused by the explanatory variables while 21% could be caused by other factors or variables not built into the model. This high value of $R^2$ of 79% is an indication of a good relationship between CIT, EDT, UDT and profitability. More so, the adjusted $R^2$ of 0.706 is also high. This proves that the model has a better goodness of fit, meaning that the model has captured about 70.6% of the systematic variations in the profitability caused by the explanatory variables. The computed t-statistic for the three independent variables of 6.798, 5.872 and 6.928 were greater than the critical t-statistic table value and therefore significant. This shows that the independent variables, company income tax (CIT), education tax (EDT) and Urban development tax (UDT) are statistically significant in the prediction of the profitability of companies operating in FTZs.

Testing the statistical significance of the overall model, the F-statistic was used. At 5% significant level with degree of freedom (df$_1$=3 & df$_2$=50) the F-statistic value as shown in the table ii results is 13.472.

The model is said to be statistically significant because the calculated F-statistic value of 13.472 is greater than the F-statistic table value of 2.76 at 5% level of significance. This shows that the combined effect of the independent variables (CIT, EDT, and UDT) on profitability is significant. The Durbin Watson statistic tests for the existence of auto or serial correlation among the regression random variables. From the result, the Durbin Watson statistic value is 1.794. From the table DW reading, the researcher used the following information: K=4 variables at 5% level: du=1.771, 4-du=2.229, df=1.335 and 4-df=2.665. By inspection, the DW value of 1.794 falls between du and 4du region (i.e. 1.771 and 2.229 in this case); it therefore implies that there exists no degree of auto correlation among the regression random variables. Since the value of the computed t-statistic of 8.121 is greater than the table value of 1.66, the null hypothesis is rejected and the alternative accepted. This implies that there is a significant relationship between exempt taxes and the profitability of companies in Free Trade Zones.

Table iii shows the regression results of custom duties and profitability. The regression results showed that the estimated coefficients of the regression parameters have negative signals and thus conform to our a-priori expectation. The implication of this negative signs is that the dependent variable (profitability) is negatively influenced by ID, EXP.Eda and EXC.Edb. This means that an increase in the independent variables (ID, EXP.Da and EXC.Db) will bring about a decrease in profitability of companies operating in FTZs. The coefficient of determination ($R^2$) of 0.941 implies that 94.1% of the sample variation in profitability (PROF) is explained or caused by the explanatory variable while only 5.9% is caused by other factors or variables not built into the model. This high value of $R^2$ of 94.1% is an indication of a good predictive power of ID, EXP.Da and...
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EXC.Db. on profitability. More so, the adjusted R² of 0.934 constituting 93.4% is also high. This proves that the model has a better goodness of fit, meaning that the model has captured about 93.4% of the systematic variations in the profitability caused by the explanatory variables. The computed t-statistics for the three independent variables of 7.342, 5.012 and 5.000 are greater than the critical t-statistic table value of 1.66. This tells us that the independent variables import duties (ID), export duties (EXP.Da) and excise duties (EXC.Db) are statistically significant in the prediction of profitability. Testing the statistical significance of the overall model, the F-statistic was used. At 5% significant level with degree of freedom (df₁=3 & df₂=50), the F-statistic value as shown in table iii result is 69.436. The model is said to be statistically significant because the calculated F-statistic value of 69.436 is greater than the F-statistic table value of 2.76 at 5% level of significance. This shows that the combined effect of the independent variables (ID, EXP.Da, and EXC.Db) on profitability is significant. The Durbin Watson statistic tests for the existence of auto or serial correlation among the regression random variables. From the results, the Durbin Watson statistic value is 2.076. From the table DW reading, we made use of the following information: K=4 variables at 5% level: du=1.771, 4-du=2.229, dl=1.335 and 4-dl=2.665. By inspection, the DW value of 2.076 falls between du and 4du region (i.e. 1.771 and 2.229 in this case); it therefore implies that there exists no degree of auto correlation among the regression random variables. Since the value of the computed t-statistics of 5.011 is greater than the table value of 1.66, the null hypothesis is rejected and the alternative accepted. This implies that there is a significant relationship between exempt custom duties and the profitability of companies in Free Trade Zones.

Our analysis and empirical results have shaded some insight on tax planning and incentives on profitability. The study revealed that there exist a significant relationship between exempt profit taxes and the profitability of companies in Free Trade Zones. The study further revealed that there also exist a significant relationship between exempt custom duties and profitability. The result of this study has provided strong support for tax planning, based on available tax incentives, by companies operating in FTZs as these incentives significantly affect their profitability. At a general level, this result is largely consistent with results obtained by Zee, Stotsky and Ley (2002); House and Shapiro (2006); Mintz and Smart (2003); Effiong and Attah, (2016); Lacuss and Barro (1988); and Barro (1990) in their studies on tax incentives and firms performance conducted in other geographical settings. They separately found out that tax concessions have an economically and statistically significant influence on firms’ performance. Also in line with the findings of this study is the finding arrived at by Morisset and Pirnia (2001) who found out that exempt taxes and exempt custom duties have negative influence on profitability.

VI. Conclusion And Recommendations

The study aim was to determine the extent to which tax planning based on available tax incentives impact performances of companies operating in Free Trade Zones (FTZs) in Nigeria. The study infers 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 influence on performance could be adverse if the incentive reduce productivity. Accumulation of physical capital through investment spending is, according to orthodox economic growth theory, an important means of increasing living standards. An increase in the stock of physical capital can increase employment, increase per capital income, expand the variety of goods available to consumers and by consequence of these factors drive living standards. The study therefore concludes that tax incentives do have a significant influence on firms’ profitability in the FTZs and thus supporting the need for effective tax planning. This study has established that the various tax incentives granted companies operating in the Free Trade Zones in Nigeria have propelled growth in corporate earnings. This was substantiated by the fact that the exempt taxes and exempt customs duties have positively influenced corporate profitability of companies in Free Trade Zones (FTZs). Therefore, tax incentive policies for companies operating in the Free Trade Zones can achieve the expected objectives by government which included aggressive drive of growth and earnings of companies and hence, increase investments in the zones.

Based on the findings of this research, investors are encouraged to take advantage of the tax incentives available to them and invest in Free Trade Zones (FTZs). This will go a long way to improve their corporate performance. This opportunity if exploited will also enhance industrial growth in the zones, increase productivity, create employment and hence improved standard of living and the general economy of the nation in a long run. It is also recommended that the government should sustain tax incentives in order to maintain industrial and economic development growth potentials of the zones and that of the nation as a whole. If these incentives are sustained, the government on the other hand, tends to recover revenue lost to tax incentives from personal income tax of employees and sales taxes of products generated by the industrial growth of the zones. Moreover, the improved economy will increase the per capita income of the nation and as well shift the nation’s dependence on foreign goods to home-made goods and even to become an exporter of such products. In effect, the national economy has the prospect of moving from mono economy (oil revenue) dependence to a diversified economy.
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**References**


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