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Original Research Article

Empirical Assessment of Tax Aggressiveness of Listed Firms in Nigeria

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Abstract

This study empirically examined the level of tax aggressiveness of listed firms in Nigeria. The population of the study consists of all the quoted non- financial firms as at 31st December, 2016. A sample of eighty five (85) quoted firms was selected for the period 2012 to 2016. The data analysis was done throughdescriptive analysis method. The results obtained revealed that twenty six (26) out of the eighty five (85) of the companies in the non- financial sector were highly tax aggressive. Thirteen (13) of the listed firms were moderately tax aggressive. Sixteen (16) very of them were tax aggressive at equilibrium while thirty (30) of the firms were not tax aggressive. The study recommends that firm should create a tax department and it should be manned by tax experts / auditors who are deemed to be imbued with wide experience on tax strategies to minimize tax expense payment

Keywords: Tax Aggressiveness, Tax Liability, Taxable Income, Tax Deterrence, earnings after tax, Wealth Maximization

1. INTRODUCTION

Tax expenses are usually part of operating costs to a firm. They are expenses paid for by a firm as tax liabilities. Tax expense generally is a significant cost to firms that reduces cash flow level for a period. The International Accounting Standard number 12 (IAS 12) expressly states that tax expense is the aggregate amount included in the determination of profit or loss for a period which could be in respect of current tax and deferred tax.

***JEL Classification Codes:** M53 M59*

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The tax expenses contribute largely in determining a firm's earnings after tax. To ensure the revenue of the firm is maximized, managers play a critical role by employing strategies to reduce tax expenses. Reduction of tax expenses is all about tax aggressiveness. Tax aggressiveness is interchangeably used as tax avoidance or tax planning or tax minimization, or tax sheltering. Shareholders normally have the preference that managers be involved in more aggressive tax in that through it, revenues accruable to the government are transferred to them; thus promoting wealth maximization goal of the firm. All tax expenses are paid by firms to tax authority. Tax authority is the only body empowered by the Government to collect revenues from taxes in any country. In Nigeria, there exists two types of tax authorities, namely Federal Inland Revenue tax authority, otherwise refers to as Federal tax authority; and the State Inland Revenue tax authority otherwise refers to as state tax authority (Anyaduba, 1994). The state tax authority collects tax on behalf of the State Governments for onward remission to the state treasury. The Federal tax authority collects all revenues from taxes due to the Federal Government.

All companies are expected to pay their taxes to the Federal Inland Revenue periodically, on preceeding year basis and failure to do so attracts a penalty. The computation of taxes is made by managers of companies based on the company income tax laws in Nigeria. Adequate caution is usually exercised by managers when computing for tax expenses to avoid tax evasion. In doing this, proper tax planning strategies are put in place for the purpose of ensuring lower tax expenses are paid to the government. Some of these tax planning strategies include taking advantages of allowable items by tax authority like capital allowances, donations, deduction of subsidiary tax in the case of a parent company, among others. To effectively carry out this, there has to be tax proficiency, audit and experiences on the part of the managers in the company.

According to Chen, Chen, Cheng and Shevlin (2010), for the purpose of tax management, companies do trade – off the marginal benefits of tax savings against the marginal costs of managing taxes. Most often the marginal benefits of tax aggressiveness in form of cash saved accrues largely to resources owners, and marginal costs of managing taxes by way of time, effort and reputation are mostly borne by managers (Chen et al., 2010). In theory, a dollar or naira saved in taxes through tax aggressive practice implies extra dollar for shareholders (Khutrana & William, 2010). Tax aggressiveness is often detected by the use of effective tax rate (ETR). Effective tax rate expresses the relationship between total tax expenses and pre-tax income (Robinson & Sikes, 2010), Dyreng, Hanlon & Maydew (2010), Minnik & Nogg, 2010). Several researchers like Zimmerman (1983), Chadefaux Rossignol (2006), Oyeleke, Erin and Emeni (2016) have empirically measured effective tax rate (ETR) as the most relevant and superior measure of the ability of listed firms to minimize tax liabilities. The basis of accepting that a firm is tax aggressive is that the effective tax rate (ETR) computed must be less than the company income tax rate. In the context of this study, if ETR < 30% corporate tax rate, then quoted firms are said to be tax aggressive, and vice – versa. Though the study of Oyeleke et al (2016) examined influence of female director on tax aggressiveness of listed banks in Nigeria, it however failed to determine the level of the banks tax aggressiveness. Besides this prior research, there are fewer studies that have reported on the empirical fronts the level of tax aggressiveness of listed firms in the Nigerian context to the best of the researcher's knowledge hence, this study is undertaken in this regard. The section two of this study concentrates on literature reviewed; section three is the methodology, section four dwells on data analysis and

discussion of findings while section five is conclusion and recommendations.

2. LITERATURE REVIEW

2.1. Conceptual Review

The tax aggressive activities refer to legal activities which are usually provided by the auditor or tax agent and can be classified as gray area activities as well as illegal activities (Chen et al., 2010). Tax aggressiveness may also be regarded as the minimization of tax payment through tax planning activities. Tax aggressiveness is interchangeably used as tax avoidance (Desai &Dharmapala, 2004), as tax sheltering (Yeung, 2010) and tax cheating (Hanlon &Slemrod, 2009). Tax planning is an action framework by management in the organization toreduce tax expenses without falling prey of the danger of tax evasion. Naturally, the goal of tax aggressiveness is to minimize tax burden, increase revenue and maximize the wealth of the shareholders. According to Nwaobia and Jayeoba (2016), tax aggressiveness aims at reducing tax liability which results in a positive impact on a firm's cash flow and increase it after tax rate of return. Desai and Dharmapala (2007) stressed that tax aggressiveness are quite beneficial to shareholders through tax liability reduction, tax savings, and by extension increase in per share earnings as well as market price of the shares. The purpose of tax aggressiveness is tax management and reduction of taxable expenses.

Frank, Lynch and Rego (2009) opined that tax aggressiveness is concerned with the manipulation to reduce tax liability through tax management. Boussaidi and Hamed (2015) note that the concept of tax aggressiveness may have multiple conceptualization, references and even different ways to measure, but most of them appear to have the same meaning and the same purpose that differ in their repercussions on the health of the company. Bruce, Deskins and Fox (2007) assert that tax aggressiveness are a set of fervent action taken by companies to reduce their public debts. Tax aggressiveness is strategy deployed by managers, a set of processes, practices, resources and choices whose objective is to maximize income after all company's liabilities owed to the state and other stakeholders (Boussaidi & Hamed, 2015). Tax aggressiveness steps / actions taken by management to reduce tax expense may be legal or illegal, depend on the extent the manipulation of tax expense is done within the ambit of tax law. Tax aggressiveness is seen as the legal use of the tax regime to own advantage, to reduce the amount of tax that is payable by means that are within the tax law, whereas, tax evasion on the other hand is concerned with the general term which is an effort of companies, management to evade tax with illegal meaning (Koanantachai, 2013). So, the aim of tax aggressiveness is meant for tax savings method in order to be able to ensure transference of wealth from the government to shareholders of a firm. Tax aggressiveness according to Frank et al. (2009) is the action designed to reduce taxable income with appropriate tax plan which could be classified or unclassified as a tax evasion. Although not all of the actions committed can be against the rules, but the more a firm uses them, then it would be considered as more tax aggressive (Sari & Martani, 2003).Hite and McGill (1992) and Murphy (2004) stressed that an aggressiveness of tax reporting is a situation when a firm conducts particular tax policy and one day it might be a possibility that tax policy will not be audited or disputed by law; but however, this action still has risks potential of uncertain final resolution of law obedience or disobedience. According to Lee, Dobiyanski and Minton (2015), since the boundary between legal and illegal acts is not lucid, the legality of a company's tax position is determined by the authoritative bodies after the fact, however, there is no clear ex ante distinction between legal tax aggressiveness and illegal tax evasion. In the context of this study, tax aggressiveness is simply the transference of government

wealth to shareholders through the employment of strategic and tactical policies within the ambit of existing tax laws.

2.2. Theoretical Framework

Some of the theories that readily explain tax aggressive behaviour of firms are agency theory and tax deterrence theory. Desai and Dharmapala (2006) stress that the analysis of a tax aggressiveness embedded in an agency framework is one in which managers can enjoy private benefits of control at the expense of other shareholders. Albeit, inspired by the role of taxes in diffusion property in the American economy, Berle and Means (1932) conduct the study on agency problem (Aliani & Zarai, 2013). Berle and Means (1932) thesis focused on the implication of operating a corporation where the owners are separrated from the day to day management. Their point of emphsise is that directors named or appointed by shareholdersdo pursue their own interests to the detriment of the owners.This pursuit of self interest by the corporate board of directors arose due to the separation of ownership and consequently engenders agency costs. Jensen and Meckling later propound the agency theory in 1976. They stressed that agency conflict commonly arise between owners and managers of corporation. Managers may pursue project with negative net present values or seek rent extraction therefrom. Seidman and Stemberg (2011) posit that tax aggressiveness is a framework of evaluation of agency conflicts. They emphasized further that the minimization of payment of the fiscal burdens improves the shareholders value, but however, the strategy of tax aggressiveness is quite expensive for the managers. Managers may incure reputational costs arising from tax evasion penalty. The latter most time devote a part of the corporate resources to pay remuneration of the consultants; and moreover, they invest their time to implement tax strategies and often want to benefit more from such tax aggressive strategies by way of managerial opportunism to the detreiment of shareolders. Lee et al. (2015) concluded that the agency theory is an appropriate theoretical basis to explain how multiple parties within a corporate board tend to reduce tax liabilities.

The tax deterrence theory concentrates on the cost of implication of tax aggressiveness of which is tax evasion. The theory was developed by Allingham and Sandmo (1972) and it serves as the underpinning for carryout researches on tax aggressiveness (Lee, Dobiyemski& Minton, 2015).Desai et al. (2006) hold the view that the deterrence model of Allingham and Sandmo (1972) is very germane to explaining agency theory in the context of corporate governance studies. According to Lee et al. (2015), agency theory conjectures that tax evasion that could arise from tax aggressiveness is a firm’s strategic choice defined by an employment contract (actual or implied) between shareholders and tax managers. This employment contract (actual or implied) occasioned by the agency theory is not farther from the fact that managers may presumed that ex ante their effort to reduce tax liability is not compensated for adequately. Additionally, managers may hold the perception that their effort to reduce a company’s tax liability in a clandestine manner may lead to the tendency to be vulnerable to tax evasion which affects them adversely and the very integrity of the firm’s internal control system. The aforementioned reasons tend to influence them to engage in rent seeking or extraction. In other words, they take advantage of the system to optimize their personal gains to the detriment of the resources owners (shareholders). The essence of the deterrence theory is it that places emphasizes on penalty for tax evasion due to tax aggressive behaviour by managers. This penalty then serves as deterrent to managers to act in the interest of existing tax laws in attempt to engage in tax aggressive behavior in corporate

organizations. Additionally, penalties for tax evasion can be imposed on either tax managers or a company but the higher deterrence of tax evasion can be achieved through penalizing tax managers instead of the corporation. Lee et al.(2015) noted that the penalty onthe firm reduces the wealth of its shareholders while the penalties on tax managers who attempted to reduce tax liabilities via illegal tax method should be reimbursed and hence increased uncertainty in determining the optimal level of employment contracts. Similarly, the deterrence theory of tax evasion propounded by Allingham and Sandmo (1972) demonstrates that individual tax payers endeavour to minimize the consequences of tax evasion by taking into consideration three basic aspects which include the chance of being caught, the size of penalty and of course the intensity of their risk aversion. The deterrence model presumes that individual tax payers neither have moral judgment nor civic duties for tax payments. What they do is to choose the best level of tax evasion to maximize their expected satisfaction. In the deterrence theory, tax evasion has a trade – off. The trade off is that a high payoff is offset by penalties imposable by the tax authorities. It is the stiff penalties that do serve as deterrent to individual / corporate tax payers to avoid tax evasion under aggressive tax behaviour. According to Slemrod (2004) the deterrence theory may not be applicable to individual tax payers in particular, it is however peculiar to large publicly traded companies which are owned by shareholders but operated by managers.

2.3. Strategies for tax aggressiveness

Strategies for tax aggressiveness may be regarded as those steps taken by tax experts to take advantage of those loopholes in the tax laws. These strategies are effectuated through several deductions permitted in existing tax laws. These tax aggressiveness strategies can only be designed through meticulous approach at understanding loopholes in the tax laws so as to avoid tax evasion temptation. The ability of firm to successfully employ these strategies to reduce tax expenses is borne out of tax management expertise and wizardry. Strategies used to effectuate tax aggressiveness are meant to transfer wealth from the government to the shareholders (Oyeleke et al. 2016). Some of these strategies for tax aggressiveness are robustly examined in this sub-section of the study. First, to take advantage of the loopholes in the tax laws to minimize tax expenses, all allowable expenses stipulated by the tax authorities need to be taken into consideration. Some of these allowable expenses are bad debt written off. Sometimes, bad debt written off could be fictitious. Some other allowable expenses include provision of doubtful debts of a specific nature; legal expenses limited to general legal advisory services, renewal for – short lease, retain fees, any legal cost incurred in protecting or defending the business, contribution to pension fund approved by the join tax board, rent and premium in respect of land and buildings occupied for the purpose of the business, rent of accommodation of employees provided it does not exceed the basic salaries of the employees, interest on loan for the purpose of trade / business, interest on loan for the purpose of trade / business, expenses that are wholly, reasonably, exclusively and necessarily incurred, for the purpose of the business, directors' fees not exceeding N10,000 per annum for a maximum of 3 directors and donations that must be made out of profit, not exceeding 10% of chargeable profit, made to bodies listed in schedule 5 of the company income tax number 4 and of course, it must not be capital in nature.

Inaddition to the aforementioned allowable tax expenses, companies can reduce tax expenses through other strategies like incentive stock options, interest on second mortgage, delaying certain deductions, deferring deductions, investing in certain tax – exempt bond and other securities (Oyeleke

et al. 2016). The depth of tax expenses reduction in firms is a function of the tax experts the managers/ board of directors employ to influence the net income from time to time. In attempt to achieve this, the board of directors may be required to carve a unit/section in the corporate organization whose core function among others is to positively influence reduction of tax expenses significantly with every radical strategy at their disposal but within the ambit of the existing tax laws, such as company income tax laws and personal income tax laws in the context of Nigeria.

2.4. Measurement of Tax Aggressiveness

Prior studies such as Oyeleke et al. (2016); Bousaidi and Hamed (2015); Chen et al. (2010), Zemzem and Flouhi (2013); Aliani and Zarai (2012); Desai and Dharmpala (2008); amongst others have examined tax aggressiveness with varying measures. The commonly used measure of tax aggressiveness is effective tax rate (ETR). Effective tax rate is further proxy with income tax expense divided by operating cash flow, ratio of cash taxes paid by operating cash flow effective tax rate (ETR) differentials, current reported tax divided by profit before tax. According to Lee et al. (2015), multiple proxies for tax aggressiveness or avoidance are quite available; researchers tend to choose proxies that are relevant to their research topic. According to Chen et al. (2010), the commonly used measure of tax aggressiveness include effective tax rate (ETR), the cash effective tax rate (CETR) measure developed by Dyreng, Hanlon and Maydew (2008), the book – tax difference measure developed by Manzon and Plesko (2001) and the residual book – tax difference measure based on Desai and Dharmapala (2006). Effective tax rate (ETR) is the relationship between total tax expenses to pre-tax income (Aliani & Zarai, 2012). The implication of using effective tax rate is that it reveals the aggressive tax planning of firms through permanent book – tax – difference. The effective tax rate may also be referred to as the generally Accepted Accounting principles effective tax rate (ETR). It is commonly determined by dividing the aggregate income tax expense by the aggregate pretax accounting income so as to measure an average tax rate per dollar of income (Chen et al., 2010); Dyreng et al. (2010). The computed Generally Accepted Accounting (GAAP) effective tax rate (ETR) is compared to a corporate statutory rate or the rate of a control group to gauge a degree of tax aggressiveness (Lee et al., 2015). The Generally Accepted Accounting (GAAP) effective tax rate (ETR) reveals permanent differences between book and taxable incomes with statutory adjustments in that the total income tax expenses includes both current and deferred tax expenses (Lee et al., 2015). Based on this, a firm's tax strategy to defer tax payments do not actually change the Generally Accepted Accounting (GAAP) effective tax rate (ETR). With the use of Generally Accepted Accounting (GAAP) effective tax rate (ETR), the aggregate income tax necessarily does not mean a tax liability. With the use of Generally Accepted Accounting (GAAP) effective tax rate (ETR), some accrual adjustments like alteration in the accounts valuation do affect book income but not the taxable income. Hanlon and Shevlin (2002) posit that the Generally Accepted Accounting (GAAP) effective tax rate (ETR) can be converted into the current ETR through the inclusion of the current tax expense only in the numerator. This inclusivity of the current tax expense only in the numerator helps to control the effect of the deferred tax strategy. This is none of the less the drawbacks of the current ETR which include certain accrual adjustments, the non – qualified stock options, below the – line items and amongst others (Lee et al., 2015).

On the flipside, the cash effective tax rate is computed by dividing cash taxes paid by total pre – taxable income; and it reveals the taxes paid rate per dollar of income earned (Chen et al., 2010) and by extension per

naira of income earned in the context of Nigeria. The peculiarity of cash ETR is that it is not easily affected by accrual adjustments except with only the tax deferred strategies. In the same vein, time periods connected with taxes paid particularly the numerator and the pre – tax book income in this case the denominator do not necessarily need to be consistent – the tax expenses paid for may arise due to income earned in present year as well as prior years; however book income should be earned in the present year. Therefore, the cash ETR appears flexible, conforming to the aim of capturing tax aggressiveness of listed firms compared with to Generally Accepted Accounting (GAAP) effective tax rate (ETR) despite its short coming which mainly arises from timing differences between the years in which income was earned and related taxes paid (Aliani & Zarai, 2012). The goal of the long – run cash ETR is to reduce the shortcoming of cash ETR by combing cash tax paid over a number of years, perhaps up to 5 to ten years respectively. Long cash ETR is determined by dividing a total of cash taxes paid over some years by an aggregate amount of pre-taxable income during the same periods despite the fact that the summation of cash taxes paid over some years may increase the effect of accrual management on pre – taxable income.

Total book to tax difference is another commonly used measure of tax aggressiveness in quoted companies. Total book to tax difference is simply computed as the difference between book and taxable incomes (Manzon & Plesko, 2001, Wilson, 2009). Book income is pretax book income less minority interest while taxable income is determined by adding up the total income tax expense minus a variation in net operating loss carry forward (Lee et al., 2015). The total BTD indicates tax reporting aggressiveness of firms with confounding effects. One major impediment to computing total book to tax difference is the unavailability of a firm's taxable income in public records (Lee et al., 2015). Another error connected with estimating the taxable income stems from two main areas which are the current tax expense and the statutory tax rate in the process of trying to gross up. For instance, firms are not permitted to claim tax credits for items like research and development (R & D) costs, foreign earnings, alternative minimum taxes, etc (Lee et al., 2015). As firms reduce the tax expense by the amount of tax credit, adding up the current tax expenses tend to reduce the taxable income. The temporary book to tax difference is equal to the differed tax expenses grossed – up by an applicable statutory rate (Blaylock,

Sherlin & Wilson, 2012). The deferred tax expense usually emanates from managerial discretion with regard to accruals. The implication of this is that it tends to affect the temporary book to tax difference. Discretionary total and permanent book to tax differences are also a commonly measure of tax aggressiveness. Desai and Dharmapala (2006) first applied it to the measurement of tax aggressiveness and were later improved upon by Frank et al. (2009) and Chen et al. (2010). The fact about discretionary total and permanent book to tax difference is that they are only theoretically sound to determine managerial discretion over book and taxable income measurements after controlling over the known determinants of both incomes (Lee et al., 2015). One of the drawbacks of this tax aggressiveness measurement approach is that it does fails to account for tax shelters. A tax shelter is any method tax payers create to minimize their taxable income without valid business purposes (Lee et al. (2015). Tax shelter is seen as the most aggressive strategy to reduce tax expense and draws close scrutiny from the Inland Revenue Service (TRS) for its legitimacy (TREASURY, 1999). According to Graham and Tucker (2006), mechanics of tax shelters firms use to reduce taxable expenses are lease – in – lease out, accelerated transfer of contested liability,

corporate – owned life insurance, transfer pricing, cross – border dividend capture, contingent – payment installment sales, liquidation and re-contribution as well as offshore intellectual property havens. Basically, tax shelter activities cannot be observed by outsiders except by managers. That is why they often take advantage of it to reduce tax expenses. The cash effective tax rate (CETR) is adopted to capture the tax aggressiveness of the newly quoted companies in the Nigerian context. This measure is advanced for this study in that it enables management to assess how much tax expenses are being consumed out of the total pre – taxable income. Through this managers are able to know how much the tax paid rate per naira of income earned by the firm. It is then compared with the statutory tax rate to determine the tax aggressiveness. The rule for decision making is that ETR > company income tax rate. The cash effective tax rate (CETR) is expressed as cash taxes paid divided by total pre – taxable income.

2.5. Implication of Tax Aggressiveness

Given the implication of using tax aggressiveness to minimize tax expenses, there is no doubt that company benefits a lot from it. Managers usually take into serious consideration the implication of engaging in tax aggressive behaviour in firms. They consider first the merits and then the demerits. One of the merits of tax aggressiveness is that it causes the cash benefits for shareholders (owners) to become longer. It is directly or indirectly beneficial to managers for obtaining compensations from owners and shareholders for their tax aggressive behaviour (Sari &Martani, 2010). It affords managers to take advantages of opportunities to perform rent extraction (Chen et al., 2010). On the other hand, one of the demerits of tax aggressive attitude of managers encompasses the possibilities to get sanction or penalties from tax officials and decline of company's stock price, (Sari & Martani, 2010). The probability of stock price going down is caused by other stakeholders to recognize that tax aggressive actions organized by managers is meant for rent extraction (Desai & Dharmapala, 2006).

Firm decision to engage in tax aggressiveness is never without some benefits and costs also. The benefits of tax aggressiveness include increased cash and liquidity (Saveedra, 2014); increased profit after tax which is often analyzed with a firm's financial performance metrics such as earnings per share (Hanlon & Slemrod, 2009); it leads to reduction of tax liability (Hanlon & Slemrod, 2009); and it leads to a decrease in effective tax rate that can send a positive signal to investors, and by so doing reduces the cost of equity capital (Chi, Pincus & Teeh, 2014; McGuire, Omer & Wilde, 2014; Inger, 2014). Some of the costs of tax aggressiveness are transaction costs incurred in setting up the tax planning strategy like registration and legal fees to establish off-shore subsidiaries; the risk of detection if the activities are illegal or in the "grey" area (Ross et al., 2016); increased ability of managers to use the opaqueness required to disguise some transactions so as to extract rents for themselves (Desair & Dharmapala, 2009); and the incentives need to encourage the tax manager or director to engage in these activities as they face personnel costs if detected (Crocker & Slemrod, 2005; Chen & Chu, 2005). According to Ross et al. (2016), some of the further costs involved if the activity is detected and disallowed include the unpaid tax liability and back taxes; tax benefits that may be disallowed; interest on the tax deficiency; penalties imposed on both managers and the firm as well as staff and managers time along with disruptions from normal activities in order to comply with a tax audit. Gallermore, Maydew and Thornock (2014) added that other cost of tax aggressiveness include political costs and reputational costs for the firms. Boussaidi and Hamed (2015) posit that management actions designed solely to

reduce taxes by setting up tax – aggressive activities are becoming more common in all companies world – wide. Tax aggressiveness though has its benefits for management and a reduction in cash flows available to the company and shareholders, however attracts significant costs (Desai & Dharmapala, 2008). One of the significant costs of the deployment of tax aggressiveness by managers is the temptation of having entering point into tax evasion which often attracts stiffer penalties within the ambit of tax laws.

3. METHODOLOGY

This study uses the longitudinal research design. The population of the study is the entire listed companies in the Nigerian non-financial sector in Nigeria. As at 31st December 2016, a total number of one hundred and sixteen (116) non- financial companies were listed on the floor of the Nigerian Stock Exchange (NSE fact book, 2016). The breakdowns of the constituents of these companies are as follows: Agricultural sector (5); Conglomerate (6); Construction and Real Estate (9); Consumer Goods Sector (22); Health Care Sector (11); ICT sector (7); Industrial goods sector (16); Natural Resources sector (4); Oil and Gas sector(12) and Services sector (24). The sample size of this study is determined using the Taro Yamani (1967) sample selection technique. The formula for the Taro Yamani (1967) sample selection technique is: $n = \frac{N}{1+N(e)2}$ = Where N represents the total elements in the population, one (1) is a constant, n is the sample size; e is margin of error denoted at 5.6%.The Yamani formula for sample selection is used when the number of elements in a study population is finite. Based on thenumber of the listed firms in this sector under this period, a sample of eighty five (85) companies out of the aggregate (116) is selected for the period 2012 to 2016. Thus, the Taro Yamani formula was used to derived sample size from each sector as follows: Agricultural sector (3); Conglomerate (4); Construction and Real Estate (6); Consumer Goods Sector (17); Health Care Sector (8); ICT sector (5); Industrial goods sector (12); Natural Resources sector (3); Oil and Gas sector(9) and Services sector (18). Data were sourced from the secondary source, basically from .the annual financial statements of the listed companies in the Nigerian non- financial sector under the reference period.

4. EMPIRICAL ANALYSIS

This part of the study analyzed and report how tax aggressive the sample firms are on individual basis in the non-financial sector of Nigeria. To examine the level of tax aggressiveness of the firms, four (4) modes of classification or group is used. These include ≤10% category, ≤20% category; ≤30% category and > 30% category. ≤10% categories are those firms which are regarded as highly tax aggressive. ≤20% groups are those companies which may be seen as moderately tax aggressive. ≤30% categories are firms whose tax aggressiveness level is at equilibrium with the statutory tax rate of 30%. > 30% categories are companies that are not tax aggressive at all. So, the categories on the other hand may be labeled as categories A, B, C and D. This may be summarized in the table below.

TABLE A - CATEGORY OF FIRMS BASED ON TAX AGGRESSIVENESS LEVEL

S/N	Categories	Percentage	Remark
1.	A	>0≤10%	Highly tax aggressive
2.	B	>10% ≤20%	Moderately tax aggressive
3.	C	>20%	Tax aggressive at equilibrium with the

		≤30%	statutory tax rate
4.	D	>30%	Note tax aggressive

Source: Researcher's Illustration, 2018.

For the purpose of this empirical research, category A firms are those that maintain highly tax aggressive policy. This kind of policy tends to encourage increase in net income and increase in shareholders' wealth for a period. However, these categories of firms may suffer the implication of tax evasion and by extension of manager rent extraction. Similarly, these categories of firms employ tax experts and consultants with very effective tax strategies to drastically reduce the amount of tax expenses payable to the state (government). It implies the managers/board of directors have the necessary tax management/audit experience to manipulate the loopholes in the tax law to minimize tax expense payment to the government. Category B firms are firms that are deemed to maintain moderate tax aggressive policy. These categories of companies do not employ effective tax aggressive policy to drastically reduce the amount of tax expenses payable to the government. They may be so if they engage less the services of tax consultants/practitioners to control tax expense payment. These categories of firms may not suffer from the adverse effect of tax evasion as well as manager and organization reputation risks. Categories C firms are firms whose tax aggressive policy is at equilibrium with the statutory companyincome tax rate of 30%. They contribute less to tax expense minimization and as such may not be enhancing shareholder wealth from tax expense management. We may regard these categories of firms as being risk averse. Category D firms are those not within the perimeter of tax aggressiveness. They are not mindful of the implication of tax expense to the revenue and the wealth of the shareholders.

TABLE B - TAX AGGRESSIVENESS ON FIRM BASIS

	Company	Industry	Average ETR	Statutory Tax Ratio (STR)	Signs of Direction	Report
1.	Fincocoa processor Plc	Agriculture	0 *	30%	ETR < STR	Tax aggressive
2.	Livestock feeds Plc	Agriculture	11.50% **	30%	ETR < STR	Tax aggressive
3.	Okomu oil palm plc	Agriculture	11.87% **	30%	ETR < STR	Tax aggressive
4.	A.G leventis Nig. Plc	Conglomerate	30.04% ****	30%	ETR > STR	Tax aggressive
5.	Chellarams Nig. Plc	Conglomerate	19.60% **	30%	ETR < STR	Tax aggressive
6.	John Holt Nig. Plc	Conglomerate	3.85% *	30%	ETR < STR	Tax aggressive
7.	Scoa Nig. Plc	Conglomerate	24.03% **	30%	ETR < STR	Tax aggressive
8.	Transcorp Nig. Plc	Conglomerate	22.50% ***	30%	ETR < STR	Tax aggressive
9.	Arbico Nig. Plc	Construction & Real Estate	5.35% *	30%	ETR < STR	Tax aggressive
10.	Julius Berger Nig. Plc	Construction & Real Estate	10.77% **	30%	ETR < STR	Tax aggressive

	Company	Industry	Average ETR	Statutory Tax Ratio (STR)	Signs of Direction	Report
11.	Roads construction Plc	Construction & Real Estate	4.55% *	30%	ETR < STR	Tax aggressive
12.	Smart product Plc	Construction & Real Estate	5.04% *	30%	ETR < STR	Tax aggressive
13.	Upd C property Plc	Construction & Real Estate	68.27% ****	30%	ETR > STR	Not Tax aggressive
14.	7up Nig. Plc	Consumer	17.75% **	30%	ETR < STR	Tax aggressive
15.	Cadbury Nig. Plc	Consumer	0.00% *	30%	ETR < STR	Tax aggressive
16.	Champion Breweries Plc	Consumer	1.10% *	30%	ETR < STR	Tax aggressive
17.	Dangote Sugar Plc	Consumer	28.93% ***	30%	ETR < STR	Tax aggressive
18.	Flour mills of Nig. Plc	Consumer	31.11% ****	30%	ETR > STR	Tax aggressive
19.	Guinness Nig. Plc	Consumer	6.31% *	30%	ETR < STR	Tax aggressive
20.	Goneywell flour mills Plc	Consumer	20% **	30%	ETR < STR	Tax aggressive
21.	Mcnichols consolidated Nig. Plc	Consumer	7.20% *	30%	ETR < STR	Tax aggressive
22.	Nascon Allied Plc	Consumer	27.84% ****	30%	ETR < STR	Tax aggressive
23.	Nestle Nig. Plc	Consumer	12.49% **	30%	ETR < STR	Tax aggressive
24.	Nigeria Breweries Plc	Consumer	32.07% ****	30%	ETR > STR	Not tax aggressive
25.	Nigerian Enamelware Plc	Consumer	27.86% ***	30%	ETR < STR	Tax aggressive
26.	Nigerian Northern flour mill Plc	Consumer	57.47% ****	30%	ETR > STR	NotTax aggressive
27.	PZ Cussons Plc	Consumer	37.21% ****	30%	ETR > STR	NotTax aggressive
28.	Tiger Branded Nig. Plc	Consumer	29.19% ****	30%	ETR < STR	Tax aggressive
29.	Unilever Nig. Plc	Consumer	25.75% ***	30%	ETR < STR	Tax aggressive
30.	Vita foam Nig. Plc	Consumer	93.74% ****	30%	ETR > STR	Not tax aggressive
31.	Ekocorp Nig. Plc	Health care	25.21% ***	30%	ETR < STR	Tax aggressive
32.	Fidson Health care Plc	Health care	32.87% ****	30%	ETR > STR	Tax aggressive
33.	Glaxosmith Kline	Health care	74.92% ****	30%	ETR > STR	NotTax aggressive
34.	May & Baker Nig. Plc	Health care	1.55% *	30%	ETR < STR	Tax aggressive
35.	Morison Nig. Plc	Health care	0.78% *	30%	ETR < STR	Tax aggressive

	Company	Industry	Average ETR	Statutory Tax Ratio (STR)	Signs of Direction	Report
36.	NeimethInt.Pharm. Plc	Health care	2.90% *	30%	ETR < STR	Tax aggressive
37.	PharmaDekoPlc	Health care	2.56% *	30%	ETR < STR	Tax aggressive
38.	Union Diagnostic & Clinical service	Health care	29.20% ***	30%	ETR < STR	Tax aggressive
39.	Chams Nig. Plc	ICT	0.99% *	30%	ETR < STR	Tax aggressive
40.	Courtville investment Plc	ICT	64.91% ****	30%	ETR > STR	Tax aggressive
41.	Etranzact international Plc	ICT	10.62% **	30%	ETR < STR	Tax aggressive
42.	NCK Nig. Plc	ICT	1.17% *	30%	ETR < STR	Tax aggressive
43.	Triple Gee & company Nig. Plc	ICT	6.70% *	30%	ETR < STR	Tax aggressive
44.	Beta Glass company	Industry goods	21.93% ***	30%	ETR < STR	Tax aggressive
45.	Cement coy of Nig. Plc	Industry goods	13.54% **	30%	ETR < STR	Tax aggressive
46.	Chemical & Allied product	Industry goods	27.39% ***	30%	ETR < STR	Tax aggressive
47.	Cutix Nig. Plc	Industry goods	40.87% ****	30%	ETR > STR	Tax aggressive
48.	Dangote cement Plc	Industry goods	0.96% *	30%	ETR < STR	Tax aggressive
49.	DN meyerPlc	Industry goods	-4.65% ****	30%	ETR<STR	Not tax aggressive
50.	First Aluminium Nig. Plc	Industry goods	3.17% *	30%	ETR < STR	Tax aggressive
51.	Greit Nig. Plc	Industry goods	49.71% ****	30%	ETR > STR	NotTax aggressive
52.	Lafarge cement Wapco Nig. Plc	Industry goods	3.31% *	30%	ETR < STR	Tax aggressive
53.	Paints & coatings man	Industry goods	1.39% *	30%	ETR < STR	Tax aggressive
54.	Portland paints Nig. Plc	Industry goods	5.67% *	30%	ETR < STR	Tax aggressive
55.	Premier paints Nig. Plc	Industry goods	-0.22% ****	30%	ETR< STR	Not tax aggressive
56.	Amino international Plc	Oil & Gas	0.00% *	30%	ETR < STR	Tax aggressive
57.	Capital oil	Oil & Gas	-8.53% ****	30%	ETR<STR	Not tax aggressive
58.	ConoilPlc	Oil & Gas	31.99% ****	30%	ETR > STR	Not tax aggressive
59.	Eternal Oil Plc	Oil & Gas	11.89% **	30%	ETR < STR	Tax aggressive
60.	Forte Oil Plc	Oil & Gas	16.42% **	30%	ETR < STR	Tax aggressive

	Company	Industry	Average ETR	Statutory Tax Ratio (STR)	Signs of Direction	Report
61.	Japaul oil & Maritime service Plc	Oil & Gas	86% ****	30%	ETR<STR	Not tax aggressive
62.	Mobil oil Nig. Plc	Oil & Gas	32.36% ****	30%	ETR > STR	Not tax aggressive
63.	MRS oil Plc	Oil & Gas	173.21% ****	30%	ETR > STR	Not tax aggressive
64.	Total Nig. Plc	Oil & Gas	33.1% ****	30%	ETR > STR	Not tax aggressive
65.	Aluminium Extrusion Plc	Resources	11.82% **	30%	ETR < STR	Tax aggressive
66.	B.O.C Gases Nig. Plc	Resources	23.99% ****	30%	ETR < STR	Tax aggressive
67.	Multiverse Nig. Plc	Resources	0.00% *	30%	ETR < STR	Tax aggressive
68.	Associated Bus coy	Services	3.78% *	30%	ETR < STR	Tax aggressive
69.	Capital Hotel Plc	Services	32.75% ****	30%	ETR > STR	Not tax aggressive
70.	Cileasing Nig. Plc	Services	14.78% **	30%	ETR < STR	Tax aggressive
71.	Daar communication Plc	Services	7.39% *	30%	ETR < STR	Tax aggressive
72.	DN Tyre& Rubber (Dunlop)	Services	-0.54% ****	30%	ETR<STR	Not tax aggressive
73.	Ikeja Hotel	Services	29.18% ***	30%	ETR < STR	Tax aggressive
74.	Interlinked Technologies Plc	Services	41.25% ****	30%	ETR > STR	Not tax aggressive
75.	JuliPlc	Services	0.00% *	30%	ETR < STR	NotTax aggressive
76.	Learn Africa Nig. Plc	Services	139.62% ****	30%	ETR > STR	NotTax aggressive
77.	National Aviation Handling	Services	28.81% ***	30%	ETR < STR	Tax aggressive
78.	R.T Briscoe Nig. Plc	Services	-22.63% ****	30%	ETR<STR	Not tax aggressive
79.	Redstar Express Nig. Plc	Services	14.90% **	30%	ETR < STR	Tax aggressive
80.	Secure electronic technology	Services	0.00% *	30%	ETR < STR	Tax aggressive
81.	Studio press Nig. Plc	Services	-10.01% ****	30%	ETR<STR	Not tax aggressive
82.	Tantalizer Nig. Plc	Services	-6.30% ****	30%	ETR,STR	Not tax aggressive
83.	Tourist company of Nig.	Services	-29.4% ****	30%	ETR<STR	Not tax aggressive
84.	Trans-nationwide Express	Services	84.96% ****	30%	ETR > STR	Not Tax aggressive
85.	University press Plc	Services	56.90% ****	30%	ETR > STR	Not Tax aggressive

Where: STR = Statutory Tax Rate of 30% and average ETR = Average effective tax rate * represent highly tax aggressive firms, ** represent moderately tax aggressive firms, *** represent firm tax aggressiveness at equilibrium with statutory tax rate and **** represent not tax aggressive.

Source: Researcher's computation, 2018

From the result present in the table B, it can be observed that about 4 companies in category A were highly tax aggressive in the service industry. Two firms were moderately tax aggressive in the service industry. In category B, two (2) firms were tax aggressive at equilibrium while nine (9) companies were not tax aggressive at all in the service industry in Nigeria. In Oil and Gas industry, only one (1) firm was highly tax aggressive. Two were moderately tax aggressive, none had tax aggressiveness at equilibrium while six (6) were not tax aggressive. Five (5) firms were highly tax aggressive in the industrial goods sector; one was moderately tax aggressive; two (2) were tax aggressive at equilibrium while four (4) were not tax aggressive. Four (4) companies were highly tax aggressive while only one 91) firms was not tax aggressive in the ICT industry. Four (4) firms were highly tax aggressive in the Health care industry, two (2) were tax aggressive at equilibrium while two (2) firms were not tax aggressive. In consumer industry, four (4) firms were highly tax aggressive, three (3) were moderately tax aggressive in the reference period. Four (4) firms were tax aggressive at equilibrium, while six (6) were not tax aggressive. Four (4) firms highly tax aggressive in the construction and Real Estate industry, one (1) was moderately tax aggressive while one (1) was not tax aggressive in the construction and Real Estate industry. One (1) firm was highly tax aggressive in the conglomerate sector, two (2) firms were moderately tax aggressive, one (1) firm was tax aggressive at equilibrium while only one (1) firm was not tax aggressive in the conglomerate industry. In the Agriculture industry, one (1) firm was highly tax aggressive while two (2) firms were not tax aggressive in the reference period.

4.1. Level of Tax Aggressiveness on Industry Basis in the Nigerian non-Financial Sector

In this part, the level of tax aggressiveness is explained on industry basis. It is necessary to state here that the level of tax aggressiveness in each industry is a function of the level tax aggressiveness of the quoted sampled companies in the industry. The essence of this analysis is for each industry to come up with policy prescription as regard tax aggressiveness with a view to enhancing the companies and maintaining competitiveness and engendering market values. The analysis of the industry by industry level of tax aggressiveness is reported in the table below:

TABLE C - LEVEL OF TAX AGGRESSIVENESS ON INDUSTRY BASIS

S/N	Industry	Average ETR	Statutory Tax Rate	Sign of Direction	Report
1.	Agriculture	7.79% *	30%	ETR < STR	Tax Aggressive
2.	Conglomerate	20.00% **	30%	ETR < STR	Tax Aggressive
3.	Construction & Real Estate	18.79% **	30	ETR < STR	Tax Aggressive
4.	Consumer	23.38% ***	30%	ETR < STR	Tax Aggressive
5.	Health care	21.24%	30%	ETR < STR	Tax Aggressive

		***			
6.	ICT	16.87% **	30%	ETR < STR	Tax Aggressive
7.	Industrial goods	13.58% **	30%	ETR < STR	Tax Aggressive
8.	Oil & Gas	32.18% ****	30%	ETR > STR	Not Tax Aggressive
9.	Resources	11.93% **	30%	ETR < STR	Tax Aggressive
10.	Services	21.41% ***	30%	ETR < STR	Tax Aggressive

Source: Researcher's Computation, 2018

From the table above, we observe that only Agriculture industry was highly tax aggressive (≤10% ETR) in the sampled industries in the reference period. Construction and Real Estate, ICT, industrial goods and Resources industries were moderately tax aggressive (≤20% ETR). Health care and services industries were tax aggressive at equilibrium (≤30% ETR) while only Oil and Gas industry was not tax aggressive (> 30 ETR) in the reference period. Generally, the results obtained regarding the tax aggressiveness of the listed firms and industries in the non-financial sector of Nigeria when compared with the results of prior researches are quite impressive. The empirical results showed that listed firms on the basis of their tax aggressiveness in the Nigeria context are better than that obtained by Koanantachai (2013) ETR of 13.98% in Thailand, Ying (2011) ETR of 22.7% in China, Boussaidi and Hamed (2015) ETR of 12.37% in Tunisia; Oyeleke et al. (2016) ETR of 12.10in Nigeria; Sar and Martani (2010) ETR of 29% in Indonesia, Illaboya etal. (2016) ETR of 29.88% in Nigeria and Konstantinos (2016) ETR of 7.5% in Greece respectively.

5. CONCLUSIONS AND RECOMMENDATIONS

This study has empirically examined the level of tax aggressiveness of listed firms in the Nigerian non- financial sector. The extent with which shareholders are maximized is partly how tax aggressive managers in a firm are. How in doing this, cautions are exercised to avoid sliding into tax evasion which has negative effects on the managers and the company. This study's findings indicated that majority of the companies in the non- financial sector were highly tax aggressive, some were fairly tax aggressive, very fewer of them were tax aggressive at equilibrium, thus enhancing the firm earnings after tax and shareholders wealth maximization goal. It is suggested that firm should create a tax department and it should be manned by tax experts / auditors who are deemed to be imbued with wide experience on tax strategies to minimize tax expense payment. The managers should do as much as they can to avoid those activities that are mostly illegal though not enforceable in law court in attempt to be more tax aggressive so as to overcome tax evasion trap. Since tax evasion cause reputation costs to managers and firms as well as thereafter the survival due to litigation effect. This may even cause attendant adverse effect on the stock price of the affected firm and thereby destroy the market value.

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