Corporate Social Responsibility Performance and Tax Aggressiveness of Listed Industrial and Consumer Goods Manufacturing Firms in Nigeria

*AGAMA, EvwienureI. (FCA), NKAK, Promise E.(M.Sc) ¹

*Department of Accountancy Ignatius Ajuru University of Education, River State, Nigeria ¹Department of Accountancy Sure Foundation Polytechnic, Ukanafun, Akwa State, Nigeria

Abstract

Firms are poised to employ corporate strategies to reduce tax burden through aggressive tax methods. The expectation on the conduct of firms' business in a manner that is beneficial to the society is equally high using corporate social responsibility. This research investigated the relationship between corporate social responsibility performance and tax aggressiveness of listed industrial and consumer goods manufacturing firms in Nigeria during the period 2014 to 2018. A sample size of 40 listed manufacturing firms selected from the sampling frame were analysed with the use of panel data in accordance with the multiple ANOVA specification techniques. The results generally showed a negative and significant relationship on the variables investigated. The showed that tax aggressive listed industrial and consumer goods manufacturing firms may unlikely sustain the performance of their corporate social responsibilities. Our study recommended that accounting personnel in listed industrial and consumer goods manufacturing firms in Nigeria should check and cut down on the practice of tax aggressiveness and also advice company management to do the same, since it has negative effect on corporate social performance.

Keywords: Corporate Social Responsibility, Tax Aggressiveness, Consumer Goods Manufacturing Firms, Industries

Date of Submission: 01-08-2020 Date of Acceptance: 16-08-2020

I. Introduction

The industrial and consumer goods manufacturing sectors are generally described as veritable engine of growth and development of any country (Ududechinyere, Michael &Mbani, 2018). The industrial goods firms primarily deal with the process of creating goods. Therefore, various sectors such as manufacturing and machinery typically fall into this category. The consumer goods industry contains finished products that are available for public consumption (Aluko, 2018). These sectors are intertwined, that is, the demand for industrial goods is usually informed by the demand for the consumer goods they help to produce. Interestingly the history of the manufacturing sector reflects how a nation could neglect such a vital sector through economic policy inconsistencies (Adeola, 2005). As Africa's most populous country with 186 million inhabitants, Nigeria hosts a sizable industrial and consumer market for both local and international companies (Aluko, 2018).

Currently, tax aggressiveness has emerged as a subject of interest to analyst, corporate investors, managers and other market participants (Martinez, 2017). At present, the interest in the issues associated with tax aggressiveness has become even more prominent in recent years in view of a combination of political, economic and technological factors that have driven the focus of the public interest towards corporate decisions especially those related to taxation (Guenther, Matsunaga& Williams, 2017; Wilde & Wilson, 2017). Undeniably, tax aggressiveness is crucial for any corporation in trying to reduce costs as an important part of strategic decisions (Klassen, Lisowsky&Mescall, 2016). OECD (2011) tax aggressiveness consists of a scheme that reduces the effective tax rate of a particular type of income. Tax aggressiveness schemes are usually sophisticated in transactions that include a number of steps and uses complex mechanisms. Alm (2014) posits that the economic justification of tax aggressiveness scheme is generally limited, even non-existent, and its true rationale consists of entirely of reducing the effective tax rate by exploiting shortcomings, weaknesses, or ambiguities in tax laws, through the movement of funds, the construction of fictitious companies or the use of financial instructions or entities that are treated differently in different jurisdictions.

Lanis and Richardson (2012) opined that tax aggressive practices are usually implemented to minimize tax burden to achieve greater after tax earnings per share and cash available for shareholders. Corporate tax aggressiveness is considered as one of the most severe compliance issue threatening Nigeria and most nations of the world (Uladdiale, Fagbeni&Ogunleye, 2010). In fact, the most significant aim of

tax aggressiveness as observed by (Chen, Chen, Chen and Shervlin, 2010) is an increment in the net income of companies which creates a positive signal to investors. However, the concern of this study is whether the corporate objectives of tax aggressiveness as practiced by entities are generally achieved. Tax aggressiveness have similar meaning as tax planning, tax avoidance and tax shelters in that they meet the legal and ethical provisions established by tax authorities (Innocent & Gloria, 2018). Tax aggressiveness is characterised by an excessive use of tax avoidance acts (Khurana& Moser, 2013).

Considering extant empirical studies, (Innocent and Gloria, 2018) in their investigation of the effect of corporate governance mechanisms on tax aggressiveness of quoted manufacturing firms in Nigeria used effective tax rate (ETR) as a measure. Taylor and Richardson (2014);(Chadefaux and Rossignel, 2016; Robinson and Sikes 2006;Minnick and Wega 2010) equally employed effective tax rate. Alternatively, tax aggressiveness has been measured by the application of the difference between book income and taxable income, also known as book-tax difference BTD (Manzon&Plesko, 2002). However, (Loretz, 2017) categorised the various measures of tax aggressiveness into (1) general indicators (country level): rates, patent, corporate income tax revenue plus decomposition, unexplained foreign direct investments, foreign controlled activities, market concentration, number of tax treaties, average repatriation taxes and attractiveness for treaty shopping (ii) general indicators (MNE group level): effective tax burden in consolidated accounts, ownership structure (iii) specific indicators (firm level): profitability gap measures, interest payment measures, intangible assets measures (iv) combination of indicators. Pointedly, Loretz (2017) posited that so far the most promising indicators appear to be firm type – specific profitability measures.

Closely related to tax aggressiveness is an important corporate activity that addresses the role of business in society. Corporate social responsibility generally refers to the strategies implemented by corporations to conduct their business in a way that is ethnical, society friendly and beneficial to community in terms of development (Ismail, 2009). Corporate social responsibility also tagged as corporate social responsibility performance defines a business organization's configuration of principles of social responsibility, process of social responsiveness and policies programs, and observable outcomes as they relate to the firm's societal relationships (Ioannou&Serafam, 2012). In other words, corporate social responsibility performance constitutes the social performance outcome of a firm's undertaking of corporate social responsibility activities (Sen& Bhattacharya, 2001). Given the burden of tax costs as the most significant claimants to the cash flows of a corporation, it is possible to expect firms and shareholders to reduce taxes through tax aggressiveness activities (Desai &Dharmapala, 2006). A reduction in the taxes paid can be viewed as value-enhancing to corporations' residual claimants since it represents an improvement in the amount of cash flows that is available for distribution. However, it is obvious that tax aggressiveness activities do not always lead to firm value maximization as there are potential costs of being tax aggressive (Nguyen, 2015). Other studies suggest that firms that use tax aggressiveness are socially irresponsible (Erle, 2008; Schron, 2008; Lanis, et al., 2012), as the payment of corporate taxes helps to ensure the financing of public goods. Tax aggressiveness policies by corporate entities may have a negative effect on the society which could be assumed to be socially irresponsible (Freedman, 2003; Slemrod, 2004; Landolf, 2006).

Another consideration of the problem of complex tax aggressiveness is that it can produce litigation costs related to the interpretation of the tax statutes. More so, the more companies are taking advantage of loopholes in the law to create complex aggressive tax schemes the greater the likelihood that tax authorities would consider it appropriate to enact additional anti-tax aggressive laws. At this point, it would be reasonable to assume that legislation of this nature could create new complexities for corporate tax reports, which can encumber the business activities, in addition to creating new financial costs (Harari, Sitben&Donyets-Kedar, 2013). More so, empirical investigations on corporate social responsibility performance employed constructs like support for education, job training programs, community projects, generous product warranties and environmental change campaign (Basuony, Elseidi& Mohamed, 2014). Similarly, this research draws relevance from previous empirical studies of the following: (Maqbool&Zameer 2018; Chad, 2016;Mgbame, Chijoke-Mgbame, Yekini&Kemi, 2017).

These empirical studies though not completely of Nigerian origin, employed the familiar proxies of corporate social responsibility performance and tax aggressiveness in their investigations. Past empirical studies scarcely considered the effect of corporate social responsibility performance on the resultant profitability gap from tax aggressiveness. Extant empirical studies hardly conducted their research investigation during the period 2009 to 2018. The results of these studies may also not be similar due to differences in study locations and timing. Hence, this research fitted these identified knowledge gaps as it investigates the relationship between corporate social responsibility performance and tax aggressiveness of listed industrial and consumer goods manufacturing firms in Nigeria between 2014 to 2018.

This paper comprises of five sections, section one; introduction and statement of the problem, section two discusses the theoretical foundation, hypotheses premise, empirical review, section three emphasis on the

methodology, the section four discusses the analysis, regression result and discussion of findings, section five focus on conclusion and recommendation of the research.

II. Review of Literature

2.1 Conceptual Clarification

2.1.1 Corporate Social Responsibility Performance

The history of corporate social responsibility can be traced to Ancient Mesopotamia around 1700 BC when King Hammurabi introduced a code in which builders, innkeepers or farmers were put to death if their negligence causal the death of others (Dankova, 2012).

Pointedly, the contemporary corporate social responsibility originated back to the beginning of the 20th century and is based upon two principles, Sims (2003). The first is the principle of clarity which is based on religious tradition and suggests that those who are well financially should give to those with difficulties. The second one, the principle of stewardship, says that the organizations have an obligation to serve the society and satisfy the public's needs since their wealth and the power that they have springs through their activities within the society (Sims, 2003). The second principle had an impact as it affected how companies were faced by governments, press and other groups which led to the development of new socially responsible laws.

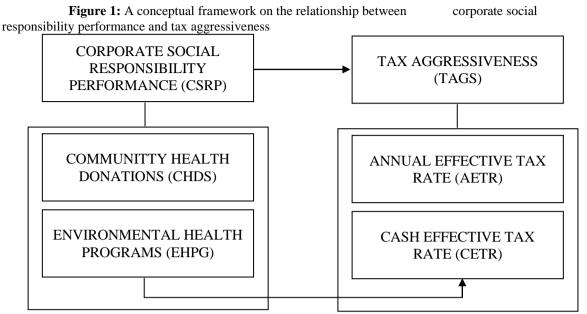
The initial academically accepted definition of corporate social responsibility CSR was found in the book written by Howard Bowen in 1953. Bowen defines CSR as an obligation to pursue those policies, to make those decisions, or to follow those lines of action that are desirable in terms of the objectives and values of the society (Panwar, Rinne, Hansen & Jushin, 2006). Since Bowen, there has been a change in terminology from the social responsibility of business, corporate social responsibility, environmental responsibility, corporate social performance and a number of approaches.

Carroll (2004) argues that the social responsibility of businesses encompasses the economic, legal, ethical and discretionary (philanthropic) expectations that society has of organizations at a given point in time (Carroll, 2004). To Buhmann (2006), corporate social responsibility is seen as doing more than what is required by law, corporate social responsibility (CSR) performance is also about the integrity with which an organization governs itself, fulfils its mission, lives by its values, engages with its stakeholders and measures its impacts and publicly reports on its activities (Asemah, Okpanachi&Olunuyi, 2013).

2.1.2 Tax Aggressiveness

Tax aggressiveness is defined as downward management of taxable, income through tax planning activities which can be legal or illegal or may lie in between (Frank, Lynch &Rego, 2009). The extent a firm is tax aggressive has to be chosen by the firm. Tax aggressive practices are usually implemented to minimize the tax burden to achieve greater after-tax earnings per share and cash available for shareholders (Lanis, et al., 2012). Thus, it could also reflect a decline in taxable income when managed through tax planning to reduce tax liability. To Khurana and Moser, (2013) tax aggressiveness can be substituted with tax avoidance, tax planning and tax sheltering. Since tax aggressiveness is a form of corporate decision and action that could reflect both executives and non-executives aversion to risk, it presents a suitable setting to assess risk taking for board members (Francis, Hasan, Wu & Yan, 2013). When making board decisions, paramount interest is shifted to the benefits and penalties linked with the engagement of tax aggressiveness. In other words, engaging in tax aggressive activities is accompanied by costs and benefits. The benefits cut across corporate tax efficiency resulting in larger cash retention for shareholders as well as managerial rewards for obtaining compensations from owners and shareholders for their tax aggressive actions (Chen, Chen, Chen, Chen, Shelvlin, 2013).

On the opposite side, the complexity and obscure nature of tax aggressivenessmay promote activities that cause diversion of shareholders' funds such as earnings management, Perk consumptions and excessive compensation to be concealed (Steijvers&Niskanan, n.d). More so, (Bruce, Deskins and Fox, 2007) opine that tax aggressivenesscan be seen as set of actions taken by companies to reduce their public debts from shaping and affecting only their scheme financial strategy. Aggressive tax represents different handling activities to lower taxable income that can be legal or illegal. At this stage tax aggressivenesscan be considered as a 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 stakeholders.



Source: Taylor and Richardson (2014); (Minnick and Wega 2010; Robinson and Sikes 2006; Basuony, Elseidi and Mohamed 2014)

2.2 Theoretical Foundation

2.2.1 Underlying Theories

As the voluntary commitment for non-economic goals are being undertaken by corporate entities, there comes more and more public interests and academic debates on tax aggressive activities by firms (Schenitz&Shrader, 2015). This research was anchored on the agency theory that has the basic assumption of corporate social responsibility performance and tax aggressiveness. However, other theories such as stakeholder theory, legitimacy theory, integrative theory, social contract theory, ethical theory and classical view theory also underpin this study.

2.2.2 Agency Theory

This refers to a situation in the process of conducting business where the owner of the business organisation (principal) utilizes the expertise of an agent (appointed manager) to perform some tasks on his behalf (Heath & Norman, 2004). This express the relationship between the agents (managers) and the principals (Shareholders/Investors), the managers are acting as agents to the shareholders, they are the ones responsible for decision making and implementing it in running the affairs of a business organisation, and they are having access to information that even the owners cannot get. One of the major issues or fundamental problem that this form of legal relationship presents to the principal is the need to have a constant scrutiny on each step taken by their agent, therefore the principal also needs financial information update at regular basis to help in monitoring the gains achieved from delegating responsibility to the agent (Salazar & Husted, 2008). It is naturally assumed that agents know more of a corporation than the principal does. Due to this perception, some agents can at times exercise their discretion to maximise their utility at the expense of the principal as noted in (Salazar & Husted, 2008). To ensure compliance with the principal's directive there must be a provision for agency cost, bonding costs and monitoring to motivate the agent in delegating on behalf of the principal. Since delegation of responsibility and contractual obligation are vested on the shoulders of the agent, all his actions are considered acts of the principal and if within the legal framework been conducted it is deemed acceptable. The agency theory literatures are all focusing on how to maintain the relationship between the agent and the principal so that owners and managers can all get what they expect due to the benefits of proper delegation of authority to agents. Thus, it becomes necessary to consider agency theory further, specifically, in the context of tax avoidance/aggressiveness. Firms have incentives to reduce their tax burden through tax planning because the incurrence of income taxes is a substantial expense for firms and the payment of income taxes can reduce the cash available for reinvestment, growth, and shareholders. Notwithstanding the cash savings benefit of tax avoidance behaviour, it can be a potentially costly activity to shareholders. Aggressive tax planning requires complex structuring of transactions such as transfer pricing, allocation of debt and earnings stripping, creating hybrid entities or instruments, setting up offshore intellectual property havens, and centralizing operating activities in tax friendly jurisdictions to minimize the overall corporate tax burden. For example, some corporations take advantage of tax breaks and/or tax holidays offered in certain countries to centralize their

regional administrative, research and development, manufacturing or logistics function to reduce overall tax burden and to reap economies of scale in these operating activities. These tax-planning arrangements are likely to increase organizational complexity and financial opacity, making it more difficult for outsiders to interpret the source and persistence of the firm's earnings and cash flows and thus lead to reduced corporate transparency (Balakrishnan, Blouin&Guay, 2013). The emerging complexity could impair seamless communication to outside parties, such as equity investors, creditors, and analysts and transparency problems can arise.

III. Methodology

The study adopted the ex-post-facto design also known as a single cased. The use of this design became appropriate as it was a realistic approach for behavioural science research that does not take the form of experimentation. The population for this study comprised of all listed industrial and consumer goods manufacturing firms that currently trade shares in the Nigerian Stock Exchange (NSE). Therefore the total of forty-five (45) listed manufacturing firms which comprised of twenty-two (22) industrial and twenty-three (23) consumer goods were sampled from the total sampling frame stated above. Essentially, the forty-five (45) listed manufacturing firms under investigation were sampled based on the availability of published financial records. Hence forty (40) of these firms were considered based on the aforementioned conditioncovering 2014 to 2018. The 40 firms investigated under a period of 5 years formed a panel study for 200 observations. This sample represents eighty-eight (89) per cent of the population.

3.1 Empirical Model Specification

The model specified in this study was carried out in accordance with the multiple ANOVA specification techniques. Therefore, the model specifications for corporate social responsibility performance with its dimensions as well as tax aggressiveness with its measures during the period 2014 to 2018 was divided into functional, mathematical and econometric forms:

```
Functional Form
                      f(CHDS, EHPG) .....(1)
AETR
CETR
              =
                      f(CHDS,EHPG) .....(2)
Combining equations 1-2 gives
MathematicalForm
                      f(CHDS, EHPG) .....(3)
AETR
                      f(CHDS, EHPG) .....(4)
CETR
EconometricForm
AETR
                      \beta_0 + \beta_1 CHDS + \beta_2 EHPG + \dots + \dots U_{1t} (6)
CETR
From equations 5 and 6, it is expected that \alpha_1 > 0, \alpha_2 > 0, \beta_1 > 0, \beta_2 > 0
Where
AETR
                      Annualexpectedtaxrate
CETR
                      Cashexpectedtaxrate
CHDS
                      Communityhealthdonations
              =
EHPG
                      Environmentalhealthprograms
              =
                      Statisticalconstant
\alpha_{o}\beta_{o}
                      Statisticalcoefficient
\beta_1\beta_2
              =
              =
                      Statisticerrorterm
U_{1,t}
                      Statisticalestimator
```

3.2 Measures of Variables

Annual effective tax rate (AETR)

A widely used measure of tax aggressivenessis the effectiveness tax rate (ETR) which is divided into various forms. It is utilized as a measure of tax aggressivenessbecause ETR helps to estimate the effectiveness in companies' tax planning activities (Phillips, 2003). While ETR is measured generally as the proportion of tax liability to accounting income, several variants have been documented in the literature.

The annual effective tax rate (AETR) is the reported effective tax rate as par the financial statements. It is computed as the total tax expenses divided by the pre-tax income. This could be expressed as follows:

$$\begin{array}{ll}
AETR & = \frac{\text{Total tax expense}}{\text{Pre -tax income}}
\end{array}$$

Huseynov and Klamm (2012)employed this measure for tax aggressiveness in their study of the relationship between some measures of corporate social responsibility (CRS) disclosures.

Cash effective tax rate (CETR)

This measure of effective tax rate is concerned with the proportion of cash taxes paid as reflected mainly from the cash flow statements. It is usually unaffected by the accrual basis accounting. It is computed by dividing cash taxes paid with total pre-tax income. This could be expressed as follows:

$$CETR = \frac{\text{Total taxes paid}}{\text{Pre -tax income}}$$

The cash ETR is not affected by accrual adjustments. The use of cash amount of tax paid as opposed to tax expense help to minimize the likely effects of items such as valuation allowance and tax cushions (Minnick &Wega, 2010). Besides this, cash ETR also uses the tax information for multiple years (say 3-10 years) which eliminates the volatility in the year level measures (Hanlon &Heitzman, 2010).

IV. Research Data and Output

Hypothesis 1 test:

Ho₁: There is no significant effect of community health donations on annual effective tax rate of listed industrial and consumer goods manufacturing firms in Nigeria.

Table 4.1: MS- Excel regression results for CHDS and AETR

Regression Statistics					
Multiple R	0.01907				
R Square	0.65376				
Adjusted R Square	-0.00469				
Standard Error	234.468				
Observations	200				

ANOVA

	Coefficients	Standard Error	t Stat	P- value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-48.7046	17.0098218	2.863324	0.004644	15.160964	82.2483	15.16096414	82.2482959
CHDS	-3.9E-08	1.4481E-07	-0.26838	0.026551	-3.24E-07	2.47E-07	-3.24433E-07	2.467E-07

The result above showed a negative estimated coefficient of -48.70463. This value signified a relationship between community health donations and annual effective tax rate. The estimated coefficient further showed that as community health donations decreased by -3.9, annual effective tax rate decreased by a constant term of -48.70463. This negative estimated coefficient showed the effect on community health donations occasioned by annual effective tax rate. The R² = 0.65 showed that the model is strong. That 65% change in annual effective tax rate was caused by community health donations. The remaining 35% could be associated to other factors not captured in the model but covered by the error term. Using the p-value approach at 0.05 significant level for a 2-tailest test and applying the decision rule with CHDS. P-value of 0.026551 less than the 0.05 alpha levels showed that Ho₁ was significant and hence rejected. Therefore, HA₁ was accepted. The study found Negative and significant relationship between community health donations and annual effective tax rate. This result means that community health donations as disclosed by listed industrial and consumer goods manufacturing firms have negative or lack the ability to change annual effective tax rate within the sampled period 2014 to 2018, the result equally implied that if community health donations decreased by a significant proportion, annual effective tax rate also increased by the same proportion and vice versa. This finding supports the empirical result by (Saqi, Mushtaq&Samie, 2013;Inua 2018&Elshabasy, 2018).

Hypothesis 2 test:

Ho₂: There is no significant effect of environmental health programs on annual effective tax rate of listed industrial and consumer goods manufacturing firms in Nigeria.

Table 4.2: MS-Excel regression results for EHPG and AETR

Regression Statistics				
Multiple R	0.015631			
R Square	0.602122			
Adjusted R Square	-0.0048			

Standard Error	234.482
Observations	200

ANOVA

	Coefficients	Standard Error	t Stat	P- value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-48.4129	16.90807	2.8633	0.004644	15.06986	81.75588	15.06986	81.75588
EHPG	-3.2E-08	1.46E-07	0.21998	0.016133	-3.2E-07	2.55E-07	-3.2E-07	2.55E-07

The result in table 4.2 above showed a negative estimated coefficient of -48.41287. This value showed the presence of a negative relationship between environmental health programs and annual effective tax rate of listed industrial and consumer goods manufacturing firms in Nigeria. The estimated coefficient further revealed that as environmental health programs decreased by -3.2, annual effective tax rate decreased by a constant term of -48.41287. This therefore showed the effect on environmental health programs occasioned by annual effective tax rate. The R-square value of 0.602122 signified that 60% change in annual effective tax rate was caused by environmental health programs of listed industrial and consumer goods manufacturing firms in Nigeria. The remaining 40% could be apportioned to other factors not captured in the model but covered by the error term. Using the P-value approach at 0.05 significance level for a 2-tailed test and applying the decision rule with EHPG p-value of 0.01633 less than the 0.05 alpha level of significance showed that Ho_2 was significant and hence rejected. Therefore HA_2 was accepted.

The study revealed a Negative and significant relationship between environmental health programs and annual effective tax rate. The result implied that environmental health programs that were disclosed in the financial records of listed industrial and consumer goods manufacturing firms in Nigeria have an inverse effect on annual effective tax rate. This means that an increase in environmental health programs of the firms under investigation could result to a decrease in annual effective tax rate and vice versa. However, this finding corroborated with the empirical result by (Elshabasy, 2018) which showed a negative significant relationship with environmental information disclosure (EID).

Hypothesis 3 test:

Ho₃: There is no significant effect of community health donations on cash effective tax rate of listed industrial and consumer goods manufacturing firms in Nigeria.

Table 4.3: MS-Excel regression results for CHDS and CETR

Regression Statistics					
Multiple R	0.008584				
R Square	0.773808				
Adjusted R Square	-0.00498				
Standard Error	74.62713				
Observations	200				

ANOVA

	Coefficients	Standard Error	t Stat	P- value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-19.4339	5.413933963	3.589458	0.000418	8.75671546	30.10946	8.75671546	30.1094603
CHDS	-5.6E-09	4.60906E-08	-0.12079	0.043976	-9.6459E-08	8.53E-08	-9.646E-08	8.5324E-08

The result above signified a negative estimated coefficient of -19.43309. The value represented a negative relationship between community health donations and cash effective tax rate of listed industrial and consumer goods manufacturing firms in Nigeria. The estimated coefficient also showed that as community health donations decreased by -5.6, cash effective tax rate decreased by a constant term of -19.43309. The decrease in both variables showed the statistical effect on community health donations occasioned by cash effective tax rate. The R-squared value of 0.77 signified that the overall model was fit. It also showed that 77% change in cash effective tax rate was caused by community health donations. The remaining 33% could be attributed to factors not captured in the model but covered by the error term.

Using the p-value approach at 0.05 levels of significance for a 2-tailed test and applying the decision rule with CHDS p-value of 0.043976 less than 0.05 alpha levels showed that the Ho₃ was significant ant

therefore rejected. Thus, HA₃ was accepted. The study showed a Negative and significant relationship between community health donations and cash effective tax rate. Thus, result signified that community health donations moved in opposite directions with cash effective tax rate for listed industrial and consumer goods manufacturing firms in Nigeria during the period 0f 2014 to 2018. A negative and significant relationship implied that an increase in cash effective tax rate could lead to a decrease in community health donation during the period under review and vice versa. This finding was supported by the empirical result by Inua (2018) in the investigation of corporate cash effective tax rate of listed manufacturing companies in Nigeria during the period 2011 to 2016.

Hypothesis 4 test:

Ho₄: There is no significant effect of environmental health programs on cash effective tax rate of listed industrial and consumer goods manufacturing firms in Nigeria.

Table 4.4: MS-Excel regression results for EHPG and CETR

Regression Statistics					
Multiple R	0.007684				
R Square	0.597756				
Adjusted R Square	-0.00499				
Standard Error	74.62768				
Observations	200				

ANOVA

	Coefficients	Standard Error	t Stat	P- value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-19.4009	5.381266292	3.605266	0.000395	8.78894743	30.01285	8.78894743	30.0128498
EHPG	-5E-09	4.6326E-08	-0.10813	0.015001	-9.636E-08	8.63E-08	-9.636E-08	8.6347E-08

The result from the MS-Excel tool showed a negative estimated coefficient of -19.4009. The estimated value signified a negative relationship between environmental health programs and cash effective tax rate of listed industrial and consumer goods manufacturing firms in Nigeria. The estimated coefficient further showed that as environmental health programs decreased by -5, cash effective tax rate decreased by a constant term of -19.4009. The decrease signified the marginal effect on environmental health programs occasioned by cash effective tax rate. The R-squared value of 0.59 showed that the overall model was fit. It also showed that 59% change in cash effective tax rate was caused by environmental health programs. The remaining 41% could be apportioned to factors not captured in the model but covered in the error term. Using the R value approach at 0.05 level of significance for a 2-tailed test and applying the decision rule with EHPG P-value of 0.01500 less than 0.05 alpha levels showed that the Ho_4 was significant and therefore rejected. However, the HA_4 was accepted.

The finding revealed a Negative and significant relationship between environmental health programs and cash effective tax rate. The findings implied that environmental health programs as disclosed in the financial records of listed industrial and consumer goods manufacturing firms in Nigeria during the period 2014 to 2018 moved in opposite directions with cash effective tax rate. This also means that an increase in environmental health programs could lead to a decrease in cash effective tax rate and vice versa. The findings corroborated with the result by Saqi, Mushtaq and Samie (2013) that investigated the short and long run relationship between annual effective tax rate and economic growth of Pakistan from 1975 – 2012.

V. Conclusion and Recommendations

The study concluded as follows:

- 1. That there exists a negative and significant relationship between community donations and annual effective tax rate. In conclusion, this study posits that a decrease in annual effective tax rate could lead to an increase in community health donations in fact, the variables under investigation move in opposite or inverse directions
- 2. That there exists a negative and significant relationship between environmental health programs on annual effective tax rate. Therefore, this study concludes that a decrease in annual effective tax rate could bring about an increase in environmental health programs and vice versa.
- 3. That there exists a negative and significant relationship between community health donations on cash effective tax rate. Thus this study concluded that the variables under investigation move in inverse direction.

That is a decrease in cash effective tax rate could lead to an increase in community health donations and vice versa.

4. That there exists a negative relationship between environmental health programs on cash effective tax rate. This study therefore concluded that an increase in cash effective tax rate could result to a decrease in environmental health programs and vice versa.

Based on the foregoing, the study recommends as follows:

- 1. The management of listed industrial and consumer goods manufacturing firms in Nigeria should make corporate laws against corporate tax aggressiveness, as the practice is not sustainable with corporate social responsibility performance.
- 2. The relevant environmental agencies in Nigeria such as the National Environmental Standards and Regional Enforcement Agency (NESREA) and National Biosafety Management Agency (NBMA) should educate the management of industrial and consumer goods manufacturing firms on the inherent dangers of effective tax rate as it concerns the implementation of environmental health programs in and around host communities.
- 3. The listed manufacturing firms should be made to carry out corporate social responsibilities on their host communities as a legal requirement and not as a social requirement. When this is achieved, community health donations could increase.
- 4. Accounting personnel in listed industrial and consumer goods manufacturing firms in Nigeria should check and cut down on the practice of tax aggressiveness and also advice company management to do the same, since it has negative effect on corporate social performance.

Reference

- [1]. Adeola, F.A. (2005). Similarities and differences, IFRS and Nigerian GAAP, Lagos: Pricewater House Coopers International Limited (PwC).
- [2]. Aluko, N. (2018).Nigerian industrial and consumer goods: Overview and opportunities, Retrieved from https://kpakpakpa.com/spotlight/nigerian-industrial-and-consumer-goods
- [3]. Asemah, E.S., Okpanachi, R.A. & Olunuyi, E.O. (2013). Universities and corporate social responsibility performance; implosion of the reality, An International Multidisciplinary Journal, 7(4), 195-224
- [4]. Balakrishnan, K., Blouin, J., &Guay, W. (2013). Does tax aggressiveness reduce financial reporting transparency? University of Pennsylvania, Working Paper.
- [5]. Basuony, M.A., Elseidi, Ř.I. & Mohammed, E.K. (2014). The impact of corporate social responsibility on from performance: Evidence from a mena country, Corporate Ownership and Control, 12(1), 761-774.
- [6]. Bruce, D.,Deskins,J.& Fox, W. F. (2007). On the extent, growth and efficiency consequences of state business tax planning in taxing corporate income in the 21st century, Cambridge University Press.
- [7]. Buhmann, K. (2006). Corporate social responsibility. What role for law? Some aspects of law and CSR, International Journal of Business in Society, 2(1), 188-202.
- [8]. Carroll, A.B. (2004). Managing ethnically with global stakeholders: A present and future challenge, Academy of Management Executive, 18(2), 114-120.
- [9]. Chadefaux, M. &Rossignol, J.L. (2016). The effective tax rate, French Review of Accounting, 38(6), 8-10.
- [10]. Chen, S., Chen, X., Chen, O. &Shevlin, T. (2010). Are family firms more tax aggressive than non-family firms? Journal of Financial Economics, 91(1), 1-56.
- [11]. Dankova, P. (2012). Human factor in the CSR, Journal of Sustainable Development, 4(1), 17-38.
- [12]. Desai, M.A. & Dhamafala, D. (2006). Corporate tax avoidance and firm value, Review of Economics and Statistics, 91(3), 537-546.
- [13]. Elshabasy, Y.N. (2018). The impact of corporate characteristics on environmental information disclosure: An empirical study on the listed firms in Egypt, Journal of Business and Retail Management research, 12(2), 232-241.
- [14]. Erle, B. (2008). Tax risk management and board responsibility, Berlin Inc.
- [15]. Frank,M, M., Lynch, J.L &Rego, S.O (2009). Are financial and tax reporting aggressiveness reflective of broader corporate policies? Accounting Review, 84(2), 467-496
- [16]. Freedman, J. (2003). Tax and corporate responsibility, Tax Journal, 695(2), 1-4.
- [17]. Guenther, D.A., Matsunaga, S.R. & Williams, B.M. (2017). Is tax avoidance related to firm risk? Accounting Review, 92(1), 115-136.
- [18]. Hanlon, M. & Heitzman, S (2010). A review of tax research, Journal of Accounting and Economics, 50(4), 127-178
- [19]. Harari, M.A., Sitben, O. &Donyets-kedar (2013). Aggressive tax planning and corporate social responsibility in Israel, London: The Missing Billions.
- [20]. Heath, J., & Norman, W. (2004). Stakeholder theory, corporate governance and public management: What can the history of staterun enterprises teach us in the post - Enron era? Journal of Business Ethics, 53, 247-265.
- [21]. Huseynov, E &Klamm, B. K (2012). Tax avoidance, tax management and corporate social responsibility, Journal of Corporate Finance, 18(4), 804-827
- [22]. Innocent, O.C. & Gloria, O.T. (2018). Effect of corporate governance mechanisms on tax aggressiveness of quoted manufacturing firms on the Nigerian Stock Exchange, Asian Journal of Economics, Business and Accounting, 8(1), 1-20.
- [23]. Inua, I.O. (2018). Determinants of corporate effective tax rate: Empirical evidence from listed manufacturing companies in Nigeria, International Accounting and Taxation Research Group, 12(4), 48-61.
- [24]. Ioannou, I. & Serafam, G. (2012). What drives corporate social performance? The role of nation-level institutions.
- [25]. Ismail, M. (2009). Corporate social responsibility and its role in community development: An international perspective, The Journal of Social Research, 2(9), 1-40.
- [26]. Khurana, I. & Moser, W.J. (2013).Instructional shareholders' investment horizons and tax avoidance, American Accounting Association, 35(1), 111-134.

- [27]. Klassen, K.J., Liseowsky, P. & Meseall, D. (2016). The role of auditors, non-auditors and internal tax departments in corporate tax aggressiveness. The Accounting Review, 91(1), 79-205.
- [28]. Lanis, R. & Richardson, G. (2012). Corporate social responsibility and tax aggressiveness: An empirical analysis, Journal of Public Policy, 31(1), 86-108.
- [29]. Loretz, S. (2017). Aggressive tax planning indicators, European Commission, Directorate-General for Taxation and Customs Union, Taxation Papers Working Paper 2017 (71), 181.
- [30]. Manzon, G.B. & Plesko, G.A. (2002). The relation between financial and tax reporting measures of income, Tax Law Review, 55(8), 144-175.
- [31]. Maqbool, S. &Zameer, M.N. (2018). Corporate social responsibility and financial performance: An empirical analysis of Indian banks, Future Business Journal, 4(1), 84-93.
- [32]. Martinez, A.L. (2017). Tax aggressiveness: A literature survey, Journal of Education and Research in Accounting, 6(2), 104-121.
- [33]. Mgbame, C.O., Chijoke-Mgbame, M.A., Yekini, S. &Kemi, Y.C. (2017). Corporate social responsibility performance and tax aggressiveness, Journal of Accounting and Taxation, 9(8), 101-108.
- [34]. Minnick, K. & Wega, T. (2010). Do corporate governance characteristics influence tax management? Journal of Corporate Finance, 16(2), 703-718. Nguyen, A. (2015). Product market advertising and corporate tax aggressiveness.
- [35]. OECD (2011).Education at a Glance, OECD Indicators, OECD Publishing. https://www.oecd.org/education/skills-beyond-school/48631582.pdf http://dx.doi.org/10.1787/eag-2011-en ISBN 978-92-64-11420-3 (print).
- [36]. Panwar, R., Rinne, T., Hansen, T. & Juslin, H. (2006). Corporate responsibility, balancing economic, environmental and social issues in the forestry industry, Forest Products Journal, 56(2), 4-12.
- [37]. Phillips, J (2003). Corporate tax planning effectiveness: the role of compensation based incentives, The Accounting Review, 78(3), 847-874
- [38]. Robinson, J.R. & Sikes, S.A. (2006). Is aggressive financial and tax reporting related to the orientation of the corporate tax function? National tax association proceedings from the 99th annual conference on taxation. Boston: Massachusetts.
- [39]. Salazar, J., & Husted, B. W. (2008). Principals and agents: Further thoughts on the Friedmanite critique of corporate social responsibility. In A. Crane et al. (eds.) The Oxford handbook of corporate social responsibility, Oxford University Press
- [40]. Saqi, M., Mushtaq, K. &Samie, A. (2013). An empirical analysis of tax rate and economic growth linkages of Pakistan, Pakistan Journal of Life and Social Sciences, 11(1), 14-18.
- [41]. Sen, S. & Bhattacharya, C.B. (2001). Does doing good always lead to doing better? Consumer reactions to corporate social responsibility, Journal of Marketing Research, 38(2), 225-243.
- [42]. Sims, R. (2003). Ethics and corporate social responsibility, Why Giants Ltd.
- [43]. Slemrod, J. (2004). The economics of corporate tax selfishness, National Tax Journal, 57(8), 877-899.
- [44]. Taylor, G. & Richardson, G. (2014).Incentives for corporate tax planning and reporting. Empirical evidence from Australia, Journal of Contemporary Accounting and Economics, 10(2), 1-45.
- [45]. Uladdiale, O.M., Fagbemi, T.O. &Ogunleye, J.O. (2010). An empirical study of the relationship between culture and personal income tax evasion in Nigeria, European Journal of Economics, Finance and Administrative Services, (2092), 116-126.

AGAMA, EvwienureI, et. al. "Corporate Social Responsibility Performance and Tax Aggressiveness of Listed Industrial and Consumer Goods Manufacturing Firms in Nigeria." *IOSR Journal of Business and Management (IOSR-JBM)*, 22(8), 2020, pp. 31-40.