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Full Length Research Paper

Corporate social responsibility performance and tax aggressiveness

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This study investigated the effect of corporate social responsibility (CSR) performance on tax aggressiveness of listed firms in Nigeria. A cross-sectional research design was utilized for the study, and data were collected from the published annual reports. Using a sample of 50 companies for the period of 2007 to 2013, the findings of the study reveal that there is a negative relationship between CSR performance and tax aggressiveness in Nigeria. A significant relationship was also found between firm size and tax aggressiveness, though with mixed positive and negative results. In addition, the results reveal a negative and significant relationship between firm performance and tax aggressiveness, and the extent of tax aggressiveness is reinforcing. It can be concluded that firms are more or less likely to engage in tax aggressiveness depending on their CSR standpoints and dimension and other corporate characteristics. It is recommended that more attention should be given by tax administrations to understand conditions where tax aggressiveness is more likely and measures should be put in place to combat it.

Key words: Corporate social responsibility, tax, Nigeria.

INTRODUCTION

Over the last three decades, there has been significant growth in the investment of Corporate Social Responsibility (CSR), both at national and international levels. This is because of the effect of corporate operations on the health, culture, economic, and social life of the communities within which they operate. As a result, there has been serious public responses, particularly from the human rights agencies, social investors and customers demanding organizations, especially multinational companies (MNCs) to control and

prevent the negative effects of their activities on the environment (Banerjee, 2010). While business organizations around the world are increasingly integrating CSR into all aspect of their businesses, critics question the legitimacy and value of CSR (Tsoutsoura, 2004). Some of these studies argue that corporations are inefficient and inappropriate agents of social change because firms have the sole social responsibility of maximizing the value of shareholders (Friedman, 1970; Gelb and Stawser, 2001). However, in response to these,

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Preuss (2010) and Sikka (2010) noted that some firms claiming to be socially responsible are also engaged in tax aggressive activities.

Different studies have given different definitions to corporate tax aggressiveness. For instance, Chen et al. (2010) defines tax aggressiveness as the effort of the company to minimize tax payments, using aggressive tax planning activities and tax avoidance. Similarly, Frank et al. (2009) noted that the aggressive tax returns is the arrangement of activities and manipulations to lower tax income, this is due to a kind of tax planning that can be considered as tax management. This concept may have multiple conceptualizations, references and even different ways to measure, nonetheless most of them have the same meaning and the same purpose but differ in their repercussions on the company's 'health'. Aggressive tax represents different handling activities to lower taxable income which could be legal or illegal; with the aim of maximising income after all corporate settlements.

This study focuses on examining the relationship between tax aggressiveness and CSR performance. Particularly, it contributes to existing literature in three ways. Firstly, unlike prior studies on developed economies, it provides the first empirical evidence of CSR performance on tax aggressiveness in a developing economy. The findings reveal that CSR performance has a negative relationship with tax aggressiveness. That is, socially responsible firms are less likely to engage in tax aggressive activities. Secondly, it contributes to the literature on firm performance by providing negative evidence between performance and tax aggressiveness. This suggests that firm performance is a determining factor on the use of tax aggressive strategies. Thirdly, different methods of calculating tax aggressiveness are adopted. From this, depending on the method of tax aggressiveness, the firm size may affect tax aggressiveness negatively or positively. The evidence therefore is mixed.

Statement of research problem

Studies have shown that tax aggressiveness can be a tax-saving vehicle that cuts costs and increases shareholders wealth (Graham and Tucker, 2006; Hanlon and Heitzman, 2010; Hanlon and Slemrod, 2009). Some other studies suggest that firms that use tax shelters are socially irresponsible (Erle, 2008; Schön, 2008; Lanis and Richardson, 2012), as the payment of corporate taxes helps to ensure the financing of public goods. Thus, a corporation's tax aggressive policies may have a negative effect on the society which could be assumed to be socially irresponsible therefore negating previous CSR performances (Freedman, 2003; Slemrod, 2004; Landolf, 2006). Under any of the aforementioned conditions, tax decisions are indicative of firm characteristics or management behaviour. Existing studies provide

evidence that CSR policies have an impact on firm decisions (Windsor, 2006) and firm performance (Brammer and Millington, 2008; Adams and Ferreira, 2009; Short et al., 2016). CSR is therefore likely to have an impact on tax reducing activities.

Prior research which investigated the link between CSR and tax aggressiveness focused on developed economies; there is however dearth of research in this area for developing countries like Nigeria where the need for CSR activities is just beginning to gain significant space in corporate domains and academic community is largely attributable to the voluntary nature of CSR. Majority of the recent studies in CSR research in Nigeria are largely focused on CSR reporting and then the implications on financial performance. Perspectives on the link between CSR and tax aggressive behaviour needs attention. Understanding this relationship is especially important for a country like Nigeria as the largest country in Africa in terms of economy and population. The economy is driven largely by natural resource and crude oil exploration in particular; and the prevalence of social and environmental degradation and challenges is no longer news.

Specifically, the pertinent question being addressed in this research is; what is the impact of CSR on corporate tax aggressiveness amongst Nigerian listed companies? Alongside, the research aims to investigate the effect of firm size and firm performance on corporate tax aggressiveness.

Literature review

Tax aggressiveness

Tax fee is one of the most critical business expenses acquired by an organization which has an effect on the investors' wealth. Given the key goal of maximizing shareholder value, firms have monetary motivators to embrace tax policies that permit them to lessen their duties. As indicated by Sikka (2010) this conduct is seen as a typical and rational corporate practice. As such, a variety of tax strategies may be used, including some that respect the spirit of the law and others that are considered aggressive. Chen et al. (2010) describe tax aggressiveness as the utilization of tax planning actions for downward management of taxable income. These activities encompass both activities considered legal and illegal (as well as those in the inevitable gray area between the two). Chen et al. (2010) suggest that firms define their level of tax aggressiveness in view of a compromise of the fringe advantages and expenses of managing taxes. The marginal benefits essentially comprise the tax savings while the negligible expenses incorporate those for application (time and effort, transaction costs), the possible punishments that can be applied by the tax authorities, alongside the conceivable

reputation cost and decrease in share price in reaction to news of tax offences.

Building on the accounting and tax literature (Robinson and Sikes, 2006; Weaver et al., 2012), different methods are utilized to measure a firm's tax aggressiveness (Chen et al., 2010; Hanlon and Heitzman, 2010; Lanis and Richardson, 2012). A popular and generally accepted measure of tax aggressiveness (TAG) is the firm's current effective tax rate (ETR), defined as the current income tax expense divided by the pre-tax book income (Chen et al., 2010; Lanis and Richardson, 2012). This measure involves an expansive scope of tax schemes from superbly lawful techniques to assessment evasion. For this research, we measure tax aggressiveness by the divergent ETR measured using two measures; the Hodrick and Prescott (1977) filter and the standard deviation of the ETR.

Corporate social responsibility

The idea of social responsibility in business has been discussed for centuries (Asongu 2007). However, it is only recently that academics and other intellectuals have joined the conversation, contributing to a growing literature of theoretical and empirical work that seeks to explain what exactly constitutes good corporate citizenship, and what drives corporate behavior in this area. In general, most individuals and organizations agree that basic legal and ethical standards must be met by all businesses. Disagreement arises in deciding how far beyond those standards, and at what cost, a firm should be expected to go.

The Global Reporting Initiative (GRI) is a popular framework used by researchers involved in CSR studies. The GRI encompasses four major aspects of firm's performance, economic, environmental, social and governance. The standard contains cohesive reporting on financial and sustainability outcomes. They emphasize that an organization needs to coordinate these areas into its procedures to guarantee short and long haul business achievement and risk management. GRI also incorporates providing details on tax payment. Organizations are particularly expected to provide details regarding assessment reliefs, tax credits and tax holidays on a country basis. The program is centered on reporting and does not give direction on standards or other guidance for creating substance of tax strategies in connection to CSR. It rather recommends different methods in which reporting on tax matters is pertinent for firms. For the purpose of this study CSR performance will be measured in terms of corporate donations carried out during the year.

The existing literature on CSR performance and tax aggressiveness has yielded different results. Lanis and Richardson (2012) studied the relationship between corporate social responsibility (CSR) and corporate tax

aggressiveness. Based on a sample of 408 publicly listed Australian corporations from 2008 to 2009 financial year, the results of their analysis show that the higher the level of CSR disclosure of a corporation, the lower is the level of corporate tax aggressiveness. The findings showed a negative and statistically significant association between CSR disclosure and tax aggressiveness, thus they opined that more socially responsible corporations are likely to be less tax aggressive in nature.

Hoi et al. (2013) examined the link between corporate social responsibility (CSR) and tax avoidance. They used a sample of Australian companies and their own "broad based disclosure index" for the measurement of CSR. From an additional examination, which separates their CSR disclosure proxy into different constituents, they showed that "the social investment responsibility and corporate CSR policy of a corporation are significant components of CSR activities that have a negative impact on tax aggressiveness". Compared to Lanis and Richardson (2012), Hoi et al. (2013) utilized a number of measures for tax avoidance using a sample of 76 U.S. firms and third-party source to measure CSR activities (negative social ratings obtained from KLD Research & Analytics, Inc.).

Linking firm performance with tax aggressiveness, the study of Huseynov and Klamm (2012) find evidence that the borders between various CSR categories, profit and tax fees have an effect on tax avoidance. The results also indicate that the firms with strong CSR policies to lower cost, not only think about the advantage of the shareholders but also for the benefit of society. The firms that run into profits have a better position and can easily participate in charitable giving. Thus, for such firms it is socially acceptable to reduce the tax expense. Zimmerman (1983) studied the relationship between firm size and tax aggressiveness and finds that the fifty largest US firms in his sample experienced higher tax rates from 1969 to 1981 and are involved in one tax aggressive behavior or the other. Similarly, Rego and Wilson (2012) find that equity risk incentives are major determinants of tax aggressiveness. Rego (2003) examines 19,737 US corporations during 1990 to 1997 and finds the opposite relationship. On political connection, Kim and Zhang (2016) find that politically connected firms measured using an array of corporate political activities including the employment of connected directors, campaign contributions and lobbying, are more tax aggressive than non-connected firms due to better information on tax laws and lower market pressure for transparency.

Research hypotheses

In line with the research objectives and from the aforementioned discussions, the following hypotheses were formulated;

1. There is no relationship between CSR performance and corporate tax aggressiveness in Nigerian quoted companies.
2. There is no significant relationship between firm size and corporate tax aggressiveness in Nigerian quoted companies.
3. There is no significant relationship between firm performance and corporate tax aggressiveness in Nigerian quoted companies.

Theoretical framework

Stakeholder theory

The stakeholder theory assumes that organizations are not solely responsible to their immediate shareholders but are also responsible to its other stakeholders. Accordingly, Freeman (1984) proposes that there are several stakeholders of a firm and they are identified based on their interests in the firm. As such, stakeholders include shareholders, suppliers, customers, employees, and even the public. Therefore, firms from this perspective are expected to engage in a responsible manner towards this group of persons while acknowledging a duty of care. Stakeholder theory suggests that the needs of shareholders and stakeholders of an organization should be met side by side with consideration being given to both sides. Hawkins (2006) argues that an inclusive stakeholder approach makes it possible for firms to maximize their shareholders wealth whilst increasing total external value added to the firm. The stakeholder theory proposes an integrative social contract between externalities to the business and its internal workings. Thus, an organization can be seen to be fair towards its externals by carrying out activities that advance their development and are not seen to be harmful towards this group. This includes, refraining from tax aggressive behavior or tax avoidance.

Institutional theory

Another theory that seeks to explain the basis for organisational behaviour in a certain manner is the institutional theory or the 'institutionalist' perspective (DiMaggio and Powell, 1983; Scott, 1995). The theory emphasises how different institutional foundations accounts for existing and persisting cross-national differences in management practices (Child, 2002). A central tenet of institutional theory is the belief 'that organisations sharing the same environment will employ similar practices and thus become "isomorphic" with each other' (Kostova and Roth, 2002). DiMaggio and Powell (1983) identified three mechanisms through which institutional isomorphic change occurs: coercive, mimetic and normative isomorphism.

Coercive isomorphism occurs where external agencies impose changes on organisations. Mimetic isomorphism describes the achievement of conformity through imitation of other organisations operating in the same organisational field. Normative isomorphism stems primarily from professionalization processes within an organisational field (DiMaggio and Powell, 1983). Following this reasoning, the responsibility to pay taxes and the behavior to try to avoid paying taxes can be explained especially by mimetic isomorphism as the behavior of companies in paying taxes (or trying to avoid paying taxes), is generally common among the companies of the same industry or operating in the same environment.

METHODOLOGY

The cross-sectional design was adopted in this study. The total population for this study is all listed companies on the Nigerian Stock Exchange. The sample consists of firms with complete publicly published annual reports for the period of study. This amounted to a sample of 50 companies. Data were gathered from the annual reports for the period of 2007 to 2013 (7 years). The choice of this period is hinged on the availability of financial statements and the increase in CSR awareness during this period.

The dependent variable for the study is tax aggressiveness which is measured as the divergent effective tax rate (ETR) (Lanis and Richardson, 2012). This divergence will be measured under two conditions; using the Hodrick and Prescott (HP) (1997) filter. Using this filter (HP), the deviation is thus the difference between the ETR smoothed by the statistical filter and the observed value of the variable. The second is the standard deviation of the ETR. ETR is calculated as: current income tax/pre-tax income. Following prior studies (Hategan and Curea-Pitorac, 2017; Liang and Renneboog, 2017; Amaeshi et al., 2006) the independent variable CSR performance is measured as a firm's donation for the year. The control variables of firm performance and firm size are measured using return on asset (ROA) calculated as Annual net income/Average total asset and the natural logarithm of total assets, respectively.

Model specification

The model is an adaptation and modification of Hanlon and Heitzman, (2010),

$$TAG_{it} = \beta_0 + \beta_1 FMS_{it} + \beta_2 FMP_{it} + \beta_3 CSR_{it} + \varepsilon_{it} \dots \dots \dots (2)$$

Where the functional relationship between the variables are;

$$TAG = F (FSIZE, FMP \text{ and } CSRPERF)$$

The variables are defined as:

TAG = Tax Aggressiveness (Proxied by divergent effective tax rate -ETR),

CSRPERF = corporate social responsibility performance (proxied by donations),

FSIZE = Firm size (proxied by natural logarithm of total assets),

FMP = Profitability (proxied by return on assets(ROA)),

ε_{it} = error term,

$\beta_0, \beta_1, \beta_2, \beta_3$, = coefficients.

A Prior expectation = $\beta_0, \beta_1, \beta_2$, and $\beta_3 > 0$.

Table 1. Descriptive statistics.

Parameter	ROA	ETR	CSRPERF	FSIZE	TAG1	TAG2
Mean	6.042	0.502	1603074.	14.562	-0.391	0.001
Median	1.406	0.099	101000.0	14.706	-0.023	-0.402
Maximum	218.496	44.950	1.03E+08	18.416	0.420	44.449
Minimum	-44.791	0.001	1.000	0.000	-44.950	-0.500
Std. Dev.	17.893	2.894	7320767.	2.354	2.905	2.894
Jarque-Bera	110776.2	503576.2	205062.1	1943.367	499107.6	503576.2
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Note: TAG1 = Tax aggressiveness measured using Hodrick and Prescott (HP) filter. TAG2 = tax aggressiveness measured using standard deviation of ETR

Table 2. Correlation result.

Parameter	ROA	CSRPERF	FSIZE	TAG1	TAG2	VIF
ROA	1					1.017
CSRPERF	0.117126	1				1.0156
FSIZE	0.06343	0.04917	1			1.0059
TAG1	-0.00524	-0.00571	-0.0552	1		-
TAG2	0.00217	0.00079	0.0629	-0.99899	1	-

Note: TAG1 = Tax aggressiveness measured using Hodrick and Prescott (HP) filter. TAG2 = tax aggressiveness measured using standard deviation of ETR. ROA is our proxy for firm performance, CSRPERF is CSR performance, FSIZE is firm size. VIF (variance inflation factor) test is a test of multicollinearity amongst variables.

Presentation and analysis of data

From the descriptive statistics of the variables as shown in Table 1, it is observed that ROA has a mean value of 6.042. The maximum and minimum values stood at 218.496 and -44.791 respectively. The standard deviation measuring the spread of the distribution stood at 17.893 which suggest the presence of clustering in values of ROA across the sample companies. The mean value for ETR is 0.5019 with maximum, minimum and standard deviation values of 44.950, 0.001 and 2.893, respectively. The mean value for CSRPERF measured as donations is 1603074 with maximum, minimum and standard deviation values of 1.03E+08, 1.0000 and 7320767, respectively. The mean value for FSIZE measured as the log of total assets is 14.56216 with maximum, minimum and standard deviation values of 18.41625, 0.000 and 2.354, respectively. Tax aggressiveness is measured as the deviation from the effective tax rate. This deviation depicting the level of tax aggressiveness is computed using two methods; Tax aggressiveness computed using the Hodrick and Prescott (HP) (1997) filter. Using this filter (HP), the deviation is thus the difference between the ETR smoothed by the statistical filter (In Eviews8.0) and the observed value of the variable. The estimate of tax aggressiveness obtained with this procedure is depicted as TAG1. The second estimate of Tax aggressiveness (TAG2) is computed as the standard deviation of ETR. For TAG 1, the mean is -0.3909 with maximum, minimum and standard deviation values of 0.4196, -44.950 and 2.9049, respectively. For TAG2, the mean is 0.0012 with maximum, minimum and standard deviation values of 44.449, -0.499 and 2.894, respectively. The Jacque-bera statistics with their associated p-values are all less than 0.05, suggesting that outliers are unlikely in the distribution.

Table 2 presents the Pearson correlation coefficient result for the variables. However, we focus on the correlation between the dependent variable; Tax aggressiveness and corporate characteristics (CSR performance, Firm performance, and Firm

size). As observed, using TAG1, it was found to be negatively correlated with ROA (-0.00524), CSRPERF (-0.006) and FSIZE (-0.0552). Using TAG2, it was found to be positively correlated with ROA (0.002), CSRPERF (0.0008) and FSIZE (0.063). The correlation results in Table 2 show that none of the variables are strongly correlated ($r > 0.50$) and this indicates that the problem of multicollinearity is unlikely. However, the variance inflation factor test was conducted to further ascertain the collinearity status of the variables. Basically, VIFs above 10 are seen as a cause of concern (Landau and Everitt, 2003). As observed, none of the variables have VIF's values exceeding 10 and hence there is no indication of multicollinearity.

Table 3 shows the regression result for the study. The regression is conducted using the White Heteroskedasticity-Consistent Standard Errors and Covariance to control for possible heteroscedasticity in the model. Based on the identification test that is, the Hausman's Chi-square statistics, (0.032), the fixed effects result is preferred and is thus utilized in this study. In addition, the fixed effects estimates are better due to the fact that conventional ordinary least squares without effects on pooled data would estimate a single intercept for all the firms, omitting the characteristics that are specific to each firm. Omitting relevant unobservable factors would mis-specify the model from the econometric standpoint and would inevitably produce biased (or inconsistent) OLS estimates.

Panel A focuses on the effect of the explanatory variables on tax aggressiveness computed using the Hodrick and Prescott (HP) (1997) filter. As noted earlier, using this filter (HP), the deviation is thus the difference between the ETR smoothed by the filter and the observed value of the variable. The model shows a coefficient of determination (R^2) value of 0.325 which suggests that the model explains about 32.5% of the systematic variations in the dependent variable with an adjusted value of 0.22 controlling for degrees of freedom. The F-statistics is 3.166. This is significant at 1% and suggests that the hypothesis of a significant linear relationship

between the dependent and independent variables cannot be rejected. It is also indicative of the joint statistical significance of the model. The DW statistics of 2.2 indicates the absence of stochastic dependence in the model. Commenting on the performance of the model's coefficients, negative ROA value is negative (-0.0011) and statistically significant at 5% level, and this implies that the firm financial performance has a negative and significant effect on the extent of tax aggressiveness. CSR performance is negative (-2.29E-09) and significant at 10% level and this implies a negative and significant effect on the extent of tax aggressiveness. Firm size is negative (-0.0067) though not significant at 10% level and despite the non-significance, the sign of the coefficient suggests that the bigger the size of the company, the less likely the extent of its tax aggressiveness.

Panel B focuses on the effect of the explanatory variables on tax aggressiveness (TAG2) computed using the standard deviation from the effective tax rate. The model shows a coefficient of determination (R^2) value of 0.326 which suggests that the model explains about 32.6% of the systematic variations in the dependent variable with an adjusted value of 0.223 controlling for degrees of freedom. The F-stat of 3.180 is significant at 1% and suggests that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected. It is also indicative of the joint statistical significance of the model. The DW statistics of 2.18 indicates the absence of stochastic dependence in the model. Commenting on the performance of the model's coefficients, it is observed that ROA is negative (-0.001) and significant at 10% level. This implies that the firm performance has a negative and significant effect on the tax aggressiveness. CSR performance (CSRPERF) is negative (-2.37E-09) and significant at 10% level and this implies that the higher the level of CSR performance, the lower the extent of tax aggressiveness. Firm size is positive (0.009) and significant at 1% level indicating that the bigger the company, the higher the extent of its tax aggressiveness.

Panel C is a dynamic model that incorporates the effect of one-period TAG1 into the model. The model shows a coefficient of determination (R^2) value of 0.362 which suggest that the dynamic model explains about 36.2% of the systematic variations in the dependent variable with an adjusted value of 0.246 controlling for degrees of freedom. The F-statistics of 3.105 is significant at 1% and suggests that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected. It is also indicative of the joint statistical significance of the model. The DW statistics of 2.02 indicates the absence of stochastic dependence in the model. Commenting on the performance of the model's coefficients, it is observed that ROA is negative (-0.0009) and significant at 1% level and this implies that firms not performing well may be more tax aggressive. CSR performance (CSRPERF) is negative (-2.37E-09) and significant at 1% level and this implies that the higher the level of CSR performance, the lower the extent of tax aggressiveness. Firm size is negative in this case (-0.007) and significant at 1% level. The effect of one-period lag of TAG1 is negative (0.138) and significant which implies that tax aggressiveness appears to be reinforcing such that previous level aggressiveness affects current extent of aggressiveness.

Panel D is also a dynamic model that incorporates the effect of one-period lag of TAG2 into the model. The model shows a coefficient of determination (R^2) value of 0.363 which suggests that the model explains about 36.3% of the systematic variations in the dependent variable with an adjusted value of 0.247 controlling for degrees of freedom. The F-statistics of 3.121 is significant at 5% and suggests that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected. It is also indicative of the joint statistical significance of the model. The DW statistics of 2.03 indicates the absence of stochastic dependence in the model. Commenting on the performance of the model's coefficients, it is observed that ROA is

negative (-0.007) and significant at 1% level and this implies that firms not performing well may be more tax aggressive. CSR performance (CSRPERF) is negative (-2.32E-09) and significant at 1% level and this implies that the higher the level of CSR performance, the lower the extent of tax aggressiveness. Firm size is positive in this case (0.0102) and significant at 10% level. The effect of one-period lag of TAG2 is positive (0.1416) and significant which implies that tax aggressiveness appears to be reinforcing such that previous level aggressiveness affects current extent of aggressiveness.

RESULTS AND DISCUSSION

Corporate social responsibility performance and tax aggressiveness

The regression result in Table 3 shows that corporate social performance is negative and statistically significant at 5% level and this implies that the higher the level of CSR performance, the lower the extent of tax aggressiveness. The results are also robust across the measures of aggressiveness used that is, tax aggressiveness measured using Hodrick and Prescott (HP) filter and using standard deviation of ETR. Consequently, the alternative hypothesis of a negative significant relationship between CSR performance and tax aggressiveness is accepted. Thus, firms engaged in CSR are probably less tax aggressive because of their need to convey transparency, integrity, and a good reputation. The finding is in tandem with Lanis and Richardson (2012) as they find that more socially responsible Australian firms are less tax aggressive. Similarly, Muller and Kolk (2015) using Indian sample discovered that multinational enterprise subsidiaries with good CSR reputation pay higher effective tax rates. Matthew (2014) using a sample of U.S. firms for the period 2009 to 2011 discovered that companies with a higher level of business ethics are likely to be less tax aggressive. Lanis and Richardson (2013) found a positive and statistically significant association between corporate tax aggressiveness and CSR disclosure. However, studies of some other researchers such as Carroll and Joufaian (2005), Preuss (2010) and Sikka (2010) argued that even though some firms claim to be socially responsible, they also indulge in tax avoidance.

Firm size and tax aggressiveness

The existing empirical evidence on the relationship between firm size and tax aggressiveness is mixed. On one hand, political power theory (Salamon and Siegfried, 1977) argues that firm size and tax aggressiveness are negatively correlated. On the other hand, political cost theory (Watts and Zimmerman, 1986) proposes that larger firms pay higher taxes. Consequently, Wilkie and Limberg (1990) and Kern and Morris (1992) argue that these variances can be credited to the different time

Table 3. Regression Result.

Variable	Panel A	Panel B	Panel C	Panel D
	TAG 1	TAG 2	DYN-TAG1	DYN-TAG2
C	-0.294*** (0.0621)	-1.131** (0.0550)	-0.385*** (0.092)	-0.048 (0.094)
ROA	-0.0011** (0.000)	-0.001* (0.000)	-0.0009*** (0.000)	-0.007*** (0.000)
CSRPERF	-2.29E-09*** (2.87E-10)	-2.37E-09*** (2.47E-10)	-2.37E-09*** (8.19E-10)	-2.32E-09*** (7.64E-10)
FIRMSIZE	-0.007 (0.004)	0.009*** (0.004)	-0.007*** (0.006)	0.0102* (0.006)
TAG1 ₍₋₁₎			0.138*** (0.050)	
TAG2 ₍₋₁₎				0.142*** (0.047)
R ²	0.325	0.326	0.362	0.363
Adjusted R ²	0.222	0.223	0.246	0.247
D.W	2.2	2.18	2.02	2.03
Mean of Dep.Var	-0.829	-4.270	-0.970	-3.765
S.E of Regression	2.432	2.433	2.440	2.438
F-stat	3.166 (0.00)	3.180 (0.00)	3.105 (0.00)	3.121 (0.00)

Note: TAG1 = Tax aggressiveness measured using Hodrick and Prescott (HP) filter. TAG2 = tax aggressiveness measured using standard deviation of ETR. ROA is our proxy for firm performance, CSRPERF is CSR performance, FSIZE is firm size. *, ** and *** represent statistical significance at 10%, 5 % and 1% level respectively. Roust standard errors are in parenthesis.

periods used in each study. Gupta and Newberry (1997) also affirm that the varying results suggest that firm-size effects could be sample-specific and not likely to exist over time in corporations with longer histories. The present results appear to depict these mixed findings already existent in extant literature as firm size appears to be positive using TAG1 and negative using TAG2. Nevertheless, the variables appear statistically significant. Therefore, we fail to accept the null hypothesis of no significant relationship between firm size and tax aggressiveness. Stickney and McGee (1982) did not find any significant relationships between tax aggressiveness and firm size. Phillips (2003) found no significant relation between firm size and tax aggressiveness. Kim and Limpaphayom (1998) examined the relation between tax aggressiveness and firm size in Hong Kong, Korea, Malaysia, Taiwan and Thailand. They found different relationships between firm size and tax aggressiveness in different regions and/or different study periods.

Firm performance and tax aggressiveness

Commenting on the performance of the model's coefficients, it was observed that ROA is negative and significant and it is robust across measures of tax aggressiveness used that is, using TAG1 and TAG2. The results suggest that firms not performing well may be more tax aggressive. Consequently, the alternative hypothesis of a negative significant relationship between financial performance and tax aggressiveness is accepted. Providing the justification for the results, Sikka (2010) proposes that tax avoidance is a tax saving vehicle, which reduces costs and increases profit as well as the wealth of shareholders. Thus, companies doing

badly financially may resort to tax aggressive strategies to create a lee-way to smooth earnings and improve their profitability numbers.

CONCLUSION AND RECOMMENDATION

Corporate social responsibility performance-tax aggressiveness nexus is clearly an area that has not received any serious attention from researchers in this part of the world. However, it has become one of the emerging contemporary extensions of CSR research. The reasoning behind the causal effects of CSR performance on tax aggressiveness, defined as effort of the company to minimize tax payments using aggressive tax planning activities, is that firms may engage in tax aggressiveness depending on the CSR dimension they have developed. Using a survey design technique and fifty companies listed on the Nigerian stock exchange from 2007 to 2013, the research findings reveal that there is a significant relationship between corporate social responsibility and corporate tax aggressiveness, there is a significant relationship between financial performance, firm size and corporate tax aggressiveness. Finally, the extent of tax aggressiveness appears to be reinforcing such that previous level aggressiveness affects current extent of aggressiveness. The present study recommends that there is the need for tax authorities to effectively monitor tax trend of companies and to ensure that tax avoidance and aggressiveness schemes are not developed using CSR performance activities.

Like every other research, the study is not without its limitations. Donations have been utilized as a proxy for CSR activity. As noted by Amaeshi et al. (2006), CSR should reflect the culture and needs of the country. This

dimension therefore appears to be disclosed by most listed companies in Nigeria. It may however not suffice as a robust proxy for developed economies. Future research can investigate a comparative analysis between different dimensions of CSR. Again, the use of HP filter and the standard deviation of ETR has been criticised by some studies. Future research can incorporate other measures for tax aggressiveness. These limitations do not undermine the validity of the results. They should serve as building blocks for new research.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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