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Tax Aggressiveness and Financial Performance of Selected Consumers Goods Firms in Nigeria.

Lawrence, U. Egbadju[1*] & Joy, O. Odey[2]
[1&2]Department of Accounting, Federal University Otuoke, Yenagoa, Bayelsa State, Nigeria
* Correspondence: lawuvie@gmail.com

Abstract: The study investigate the impact of tax aggressiveness on financial performance of firms in Nigeria. The period of study spans from 2009 to 2019. Data was sourced from the financial statement of 15 consumers goods firms quoted on the Nigerian Exchange Group Ltd. The results of the Random Effect Ordinary Least Squares reveals that effective tax rate (ETR) is negatively and statistically significant with firm performance represented by ROE. This is a good sign and means that the effective tax rate is lower than the statutory tax rate. LEV and FSIZE are positively and statistically significant with ROE while CAPINT and CSR are not significant.

Keywords: Effective Tax Rate (ETR); Return on Equity; Leverage; Firm Size.

INTRODUCTION

In addition to some other roles which taxation plays in today's society, tax, whether direct or indirect, is one major and most certain source of revenue available to any system of government in the world. The European Commission (2018) noted that one main function of taxation is to raise the needed revenues to finance public utilities like education, healthcare, public infrastructure, social protection, etc. Thus, it is a veritable fiscal policy tool used for the control of a nation's economy among which are the growth of investments and infant industries (Zhu et al., 2019; Olurankinse & Mamidu, 2021). For as much as government needs money, business organizations need much more money to grow their businesses. The main objective of all profit-oriented organization is to maximize shareholders' value or wealth, but tax payments constitute a significant decrease in this value since it affects not only a company's profitability but its liquidity as well. According to Udochukwu et al. (2022), the quest to maximize shareholders‟ wealth remains the fundamental objective of any profit-oriented business and this can be archived by minimizing costs of which tax payment is paramount.

Akintoye et al. (2020) opined that business managers need to engage in strategic tax planning for as much as in Nigeria, high rates of tax, multiple taxation, effective and inefficient administrative tax system, unfavourable tax policies and other operating costs all threaten the profitability and going-concern status of their businesses. Consequently, managers devise and deploy all sort of legitimate strategies to minimize or at least to reduce this tax burden more importantly when it is costly to shift the tax to final consumers. According to Fagbemi et al. (2019), economic units attempt to unburden the tax loads by looking at loopholes so as to minimize tax costs which may be through legal means of tax planning, tax

aggressiveness, tax avoidance, tax sheltering, etc - or by illegality of tax evasion. This deliberate act on the part of the taxpayers results in tax revenues loss which create 'tax gap' with great consequences on government finance. Also, Khurana, and Moser (2013) as well as Lanis et al. (2015) cited in Uniamikogbo et al. (n. d.) observed that tax aggressiveness is a substitute for tax sheltering, tax planning and tax avoidance. McClure et al. (2016) were of the view that although terms like tax evasion, tax avoidance, tax sheltering, tax minimization and tax planning may have specific legal or economic meanings; they have sometimes been used interchangeably in research literature.

Hanlon and Heitzman (2010) noted that tax aggressiveness is usually defined as a broad spectrum of activities ranging from actions, at one end, envisioned by tax policies to outright tax evasion, which represent tax fraud, at the other end. Dewi and Dwi (2010) was of the view that tax payment is a sort of wealth transfer from the owners of the company to the government and this constitute a cost for the owner-company. The owners will, therefore, desire management to do something about it so as to minimize these costs. Frank et al. (2009), defined tax aggressiveness as any action that is designed to reduce the total amount of tax paid with appropriate tax plan, which may be classified or unclassified as tax evasion. In order to achieve greater financial performance for its owners through earnings per share and greater cash flow, managers do minimize tax burden by engaging in aggressive tax planning activities of which some are legal while others may be illegal in certain circumstances (Lanis & Richardson, 2012). Fallan (2015) viewed tax aggressiveness as efforts towards the reduction of a company's current tax payments which are usually done through legal corporate tax planning, ethical questionable tax avoidance and/or illegal tax evasion**.**

Zemzem and Ftouhi (2013) found positively significant relationship between tax aggressiveness and firm performance. Santa et al. (2016) and Fagbemi et al. (2019) found negatively significant relationship between tax aggressiveness and financial performance. Results that found no significant relationship between tax aggressiveness and financial performance were Irianto et al. (2017), Akamelu and Iyidiobi (2018) and Oeta et al. (2019). Measures that have been used as proxy for financial performance or firm value are: return on assets (ROE), return on equity (ROE), earnings per share (EPS), Tobin's Q which represents market price per share. Measures so far used for tax aggressiveness are the effective tax rate (ETR) with Current ETR, Cash ETR, GAAP ETR, etc as variants of it. Based on the inconclusive empirical evidence, the main objective of this study is to investigate the impact of effective tax rate (ETR) on the financial performance of selected quoted consumers' goods industry in Nigeria.

LITERATURE REVIEW

Theoretical Underpinning.

The Theory of Tax Planning by Hoffman (1961) underlies this study. This theory states that for as much as taxation is based on business or accounting concepts, a firm can engage in those activities which will enable it attain a reduction in its tax liability.

According to Hoffman (1961), an efficient corporate entity is one which uses all legal means to divert cash from the tax authority to the purse of the corporation. He observed that the relationship between a firm's tax planning activities and its performance is positive for

as much as the tax savings derivable from those activities are more than the costs to be incurred. Accordingly, firms are to identify the ambiguities and loopholes in the tax laws so as to understand unclear legislative intentions because successful tax schemes work with the exact wordings of the tax statute and legal concepts. Tax planning that minimizes taxable income is only desirable if and only if it does not have any negative impact on accounting profit since tax liability is usually based on taxable profit and not on accounting profit. Ogundajo & Onakoya (2016), in support of the theory, advised firms should only engage in those tax planning activities that reduces the income that is to be taxed, rather than the accounting profit. .

Empirical Literature

Olaniun et al (2022) studied how tax aggressiveness influenced the performance of firms in Nigeria. A panel of secondarily sourced data of ten sampled firms over the periods 2010 to 2019 was used. Return on assets (ROA) was the dependent variable while the independent variables representing tax aggressiveness were GAAP effective tax rate and CASH effective tax rate with LEV as control variable. The results of the ordinary least squares revealed that while GAAP effective tax rate and LEV were positively significant with ROA, CASH effective tax rate was negatively significant. Hashmi et al. (2022), in their study, attempted to establish if there was a relationship between tax aggressiveness and performance of firms in Nigeria. A panel dataset of 201 non-financial firms listed on the on the Pakistan Stock Exchange spanning the period 2015 to 2019 was used in this study. Return on assets (ROA) was used as the dependent variable while the independent variables representing tax aggressiveness was a dummy variable which equals to 1 if the firm was tax aggressive (ETR less than STR), 0 if otherwise; cost of debt and political connections with property plant & equipment (PPE), leverage (LEV) and firm size (SIZE) as control variables. The results of the Feasible Generalized Least Squares (FGLS) as well as the Prais-Winsten Panel Corrected Standard Errors (PW-PCSE) showed that politically connected firms have better performance with respect to tax aggressive firms than non-politically connected firms. Udochukwu et al. (2022) carried out an empirical analysis on the impact which corporate tax aggressiveness and managerial ownership have had firm performance in Nigeria. The study used cross sectional time-series research design where a panel of data obtained from the annual reports of six domestic systematically important banks (DSIBs) over the periods from 2012 to 2021 making a total of sixty firm- year observations. While return on equity (ROE) was the dependent variable, tax aggressiveness (TAG) and managerial ownership (MGO) were the independent variables and the control variable was leverage (LEV). The results of the OLS indicated that TAG was negatively significant with ROE; LEV was positively significant with ROE but MGO was insignificant.

Aondohemba et al. (2021) carried out an empirical assessment whether corporate tax mix have had any impact on the financial performance firms in Nigeria. A panel of secondary data of ten listed manufacturing firms on the Nigerian Exchange Group (NXG) for the period from 2014 to 2018 was used. Net income (NI)-financial performance measurement- was used as the dependent variable while **c**orporate income tax (CIT); deferred tax (DTAX) and **t**ax incentive (TINC) were the independent variables. The pooled OLS regression results revealed that CIT relationship with NI was positively significant while DTAX and TINC were insignificant. Ebubechukwu and Obada (2021) examined if there was any relation between tax planning

and financial performance of firms in Nigeria. A panel dataset secondarily obtained from the annual reports of six foods and beverage firms quoted on the floor of the Nigerian Exchange Group (NXG) covering the periods 2009 to 2019 was used in this study. Return on assets (ROA) was the dependent variable; effective tax rate (ETR) was the independent variables with size of firm (FRMSIZ) as control. The regression results revealed that both ETR and FRMSIZ relationship with ROA were insignificant. Olurankinse and Mamidu (2021) investigated whether there was any relationship between tax planning and development banks financial performance in Nigeria. The researchers used secondarily sourced panel data of three of the six development banks from 2012-2019. Return on equity (ROE) was the dependent variable; effective tax rate (ETR) and tax savings (TAS) were the independent variables with size of firm (FSZ) and capital intensity (CAPINT) as controls. capital intensity (CAPINT). The results of the OLS regression indicated that while ETR and TAS were statistically insignificant with ROE, CAPINT and FSZ were positively significant.

Khuong et al. (2020) conducted a research study to examine if there was a relationship between tax avoidance and the performance of listed firms in Vietnam. A panel of secondarily sourced data of 125 selected listed firms in two Vietnamese Stock Exchanges from 2010 to 2016 was used. Three measures of firms' performance (FV) was used as the dependent variables were ROA, ROE and TOBIN'S Q while two measures of tax avoidance (CTA) used were current ETR and BTD, firm size (SIZE), sales growth rate (GROWTH), capital structure (LEV), tangible assets (PPE) and operating cash flow (OCF) as the independent variables.The results of the generalized methods of moment (GMM) revealed that while CurrentETR and BTD were negatively and statistically significant with ROA and ROE, they are positively and statistically significant with TOBIN'S Q. LEV, PPE, SIZE and GROWTH were not statistically significant with ROA, ROE and TOBIN'S Q. OCF was statistically significant with ROA but not with ROE and TOBIN'S Q. Ogunmakin et al. (2020) empirically carried out an examination on how tax avoidance and financial performance of firms in Nigeria. Secondarily sourced data of 5 out of 17 firms listed on the Nigerian Exchange Group (NXG) from the period 2006-2014 was used in this study. The dependent variable was earnings per share (EPS) while the independent variables were profit before tax (PBT), tax cost savings (COS) and debt equity ratio (DER). The regression results of the pooled ordinary least squares (OLS) indicated that COS had a negatively insignificant relationship with EPS while PBT and DER relationship with EPS was positive and significant.

Kasim and Saad (2019) analyzed the factors that determined the strategies of multinational corporations with respect to tax avoidance. The study used a panel data secondarily sourced from Malaysia Inland Revenue Board consisting of 830 firm-year observations. The dependent variable was effective tax rate (ETR) which represents tax avoidance while the independent variables were profitability (PTI), capital intensity (CAPINT), foreign operations (FO), leverage (LEV) and firm size (SIZE). The results pointed out that PTI, FO and LEV significantly and negatively influenced ETR; SIZE influence on ETR was positively significant while CAPINT was not significant. Oeta et al. (2019) studied if tax planning has had any influence on firms' financial performance in Kenya. A panel of secondarily sourced data of selected listed manufacturing firms on the floor of the Nairobi Securities Exchange from 2010 to 2017 was used.Firms' performance (ROA) was used as the dependent variable while

capital intensity (CAPINT), research and development expenditure (R&D), debt-equity ratio (DER) and company size (SIZE) were the independent variables. The results revealed that while CAPINT, R&D and SIZE relationship with ROA was insignificantly positive, that of DER was insignificantly negative. Fagbemi et al. (2019) carried out an empirical investigation whether tax planning have any impact on the financial performance firms in Nigeria. A panel of secondary data of 8 listed systemically important banks (SIBs) on the floor of the Nigerian Exchange Group (NXG) was used. Firms' performance (PERF) was used as the dependent variable while effective tax rate (ETR) which proxied tax planning is measured as income tax expense scaled by pre-tax profits;capital intensity (CAPINT); thin capitalization (TINCAP) measured total debts to total assets ratio; LOPT represents lease arrangement options and SIZE were the independent variables. The pooled OLS regression results revealed that ETR relationship with PERF was negatively significant, TINCAP had a positive and significant relationship with PERF while other variables were insignificant.

Herianti and Chairina (2019) examined if there was any relation betweentransfer pricing and tax avoidance, transfer pricing and financial reporting aggressiveness as well as tax avoidance and financial reporting aggressiveness.A panel of secondary data of 61 listed manufacturing firms on the floor of the Indonesian Stock Exchange over the period 2013 to 2017 was used in this study. Tax avoidance was used as the dependent variable while aggressiveness of financial reporting and transfer pricing were the independent variables. The regression results revealed that the relationship between tax avoidance and transfer pricing was positively significant. Again, tax avoidance and financial reporting aggressiveness had a positive and significant relationship. Zhu et al. (2019) studied the impact of tax avoidance on the profitability of firms in Ghana. The researchers used panel secondary data sourced from selected firms listed on the Ghanaian Stock Exchange. The dependent variable used was return on assets (ROA) while the independent variables were tax avoidance represented by effective tax rate (ETR)which is the ratios of tax expense to profit before tax; profitability, firm size, inventory intensity, leverage, board independence and capital intensity. The results of the OLS showed that profitability and inventory intensity were positively and significantly related with ROA; firm size and leverage, were negatively and significantly related with ROA while board independence and capital intensity were not significant at all in explaining ROA.

Anasta (2019) attempted a study to empirically assess the impact of tax avoidance on firm value.The researchers used secondary data sourced from 45manufacturing firms listed on the Indonesian Stock Exchange covering the period 2013-2017. Two dependent variables, financial performance or firm value represented by TobinsQ and earnings management represented by discretionary accruals (DA), were used. The independent variables were return on assets (ROA) and tax avoidance represented by book tax difference (BTD). The regression results showed that while ROA and BTD were positively significant with TobinsQ, only ROA was positively significant with DA. Thanjunpong and Awirothananon (2019) attempted to analyze the association between tax planning and financial performance. The researchers used secondary data sourced from 58 firms listed on the Thailand Stock Exchange covering the period 2014-2016. The dependent variable was financial performance (FP) otherwise known as return on equity which is measured as net income to total equity ratio (ROE). The independent variables were tax planning (TP) otherwise known as

effective tax rate (ETR) measured as tax expenses to total assets ratio, firm size (SIZE), financial leverage (LEV), return on assets (ROA), capital intensity (CAP) which is measured as property, plant and equipment divided by total assets as a proxy for firms' working capital management as well asthe BIG4 which represents auditors' reputation.

Rani et al. (2018) conducted a research study to examine the relationship between tax avoidance and firms' characteristics with earnings management as a moderating variable. A panel data made up of 49 listed manufacturing firms on the floor of the Indonesia Stock Exchange covering the period 2012 to 2016 was used. ETR which means effective tax rate, used as proxy for tax avoidance (Tax/PBT), was the dependent variable while firm size (SIZE), profitability (ROA) and debt-equity ratio (DER) were the independent variables with discretionary accruals (DA) as moderator variable (ROA*DA, DER*DA, SIZE*DA). The results of the random effect model (REM) showed that ROA, SIZE and DER*DA significantly but negatively influenced ETR; DER and ROA*DA positively and significantly influenced ETR while DA and SIZE*DA influence on ETR was not significant at all.

Kurawa and Saidu (2018) investigated if there was any relationship between corporate tax and financial performance of 16 selected consumers' goods firms listed on the floor of the Nigerian Exchange Group (NXG). The researchers used panel secondary data sourced from those firms which covered the period from 2006 to 2016. ROA which stands for return on assets as a proxy for financial performance was the dependent variable while the independent variables were the effective tax rate (ETR), firm size (SIZE), age (AGE) and risk (RISK). Results revealed that ETR, AGE and RISK had insignificant relationships with ROA but SIZE significantly explain variations in ROA. Fitriana and Islami (2018) carried out a study to ascertain if there was any relationship between some Board and firms' characteristics vis-à-vis earnings quality.The study made use of secondary unbalanced panel data obtained from the Indonesian Stock Exchange on manufacturing company over the periods 2013-2014. The dependent variable was earnings quality while the independent variables were tax aggressiveness, firm size and CEO ability. The regression results indicated that firm size was negatively significant with earnings quality but tax aggressiveness and CEO ability insignificantly explained earnings quality. Ifurueze et al. (2018) empirically analyzed the impact which corporate strategic tax aggressiveness has had on the growth of firms in Nigeria. The study used panel data obtained from consumers' goods firms of the manufacturing sector over the period 2007 to 2016. FMGRTH which stands for profit after tax was the dependent variable while leverage (LEV) and effective tax rate (ETR) were the independent variables. The Pooled OLS results indicated that both LEV and ETR were not statistically significant in explaining variations in FMGRTH

Irianto et al. (2017) studied the influence of certain factors in explaining the variation in tax avoidance in Indonesia. A panel of secondarily sourced data of 36 listed manufacturing firms on the floor of the Indonesian Stock Exchange from 2013 to 2015 was used. Tax avoidanceknown as effective tax rate was used as the dependent variable while capital intensity, firm size, profitability and leverage were the independent variables. The results revealed that while capital intensity, profitability and leverage relationship with tax avoidance was insignificantly positive, that of firm size was significantly positive. Salawu et al. (2017)

attempted, in their study, to establish if there was a relationship between tax planning and the value of firms in Nigeria. A panel data of 50 non-financial firms listed on the Nigerian Exchange Group (NXG) spanning the period 2004 to 2014 was used in this study.The results of the pairwise VAR Granger Causality test showed no directional relationship between tax planning represented by effective tax rate (ETR) and firm value which stands TobinQ. This means that the two endogenous variables did not granger cause each other.

Nwaobia and Jayeoba (2016) carried out an empirical analysis on the impact which corporate tax planning strategies have had on firms' liquidity in Nigeria. The study used cross sectional time-series research design where a panel of data obtained from 11Nigerian manufacturing firms for the period 2001to 2014 making a total of 154 firm- year observations. Current Ratio (CR) was the dependent variable while Lease Option (LOPT), Thin Capitalization (TINCAP), Capital Intensity (CAPINT), Industry sector incentives (IND) and firm size (SIZE) were the independent variables. The results indicated that while LOPT, TINCAP and CAPINT were statistically and negatively significant in explaining variations in CR, SIZE was statistically and positively significant but IND was insignificant. Oyeleke et al.

(2016) investigated whether there was any relationship between gender diversity of the board of directors' and tax aggressiveness in Nigeria. The researchers used secondarily sourced panel data of 15 banks listed on the Nigerian Exchange Group (NXG) from 2012-2014. ETR, effective tax rate measured as current tax expense divided by pre-tax income or profit before tax is a proxy for tax aggressiveness, was the dependent variable. The independent variables were female director (FD), financial performance (ROA), firm size (SIZE), board size (BSIZE), capital intensity (CINT), leverage (LEV) and independent board (INDB). The results revealed that only BSIZE and INDB were significantly and positively related to ETR, but FD, ROA, SIZE, LEV and CINT were not significant at all in explaining changes in ETR. Santa et al. (2016) sought to anayze the factors that could determine the relationship, if any, between tax avoidance and the values of Brazilian firms. The study used a panel of secondarily sourced data from Brazilian Stock Exchange consisting of 1,704 firm-year observations, that is, 323 firms over a period of 2006 to 2012. The dependent variable was Tobin's Q which represents firm value while the independent variables were total book-tax differences (BTD) representing tax avoidance, total accruals (TA), net income (NI), long term debt (LTD) and net sales (SALES). The results pointed out that BTD significantly and negatively influenced Tobin's Q; NI influence on ETR was positively significant while TA, LTD and were not significant in explaining variations in Tobin's Q. .

Zemzem and Ftouhi (2013) embarked on a research study to investigate if there were board characteristics that spurred tax aggressiveness in Tunisia. The study used cross sectional time-series research design where a panel of data obtained from 73 French firms for the period 2006to 2010. The dependent variable used , ETR, is the effective tax rate and a proxy for tax aggressiveness, while the independent variables were boards size (BSIZE), firm size (FSIZE), boards Duality (DUA), firm performance (ROA), independent directors (INDEP) and board diversity (DIV). The results revealed that ROA and FSIZE were statistically and positively significant with ETR, BSIZE was statistically and negatively significant while DUA, DIV and INDEP were insignificant.

METHODOLOGY

The study uses the ex-post facto research design, otherwise called the descriptive or correlational research design, to investigate the relationship between tax aggressiveness and financial performance of firms in Nigeria. The population of this research comprises selected firms of the manufacturing industry listed on the floor of the Nigerian Exchange Group (NXG) . Secondarily sourced data obtained from 15 of quoted consumers' goods annual reports over the period 2009 to 2019, making a total number of 165 observations, is used in this study.

Table1 **Measurement and Definitions of Variables.**

S/N	Variables Names	Definitions	Types	Measurements
1	ROE	Returns on equity	Dependent	Net income / Equity
2	ETR	Effective tax rate (A proxy for tax aggressiveness)	Independent	Tax expense / Profit before tax
3	CSR	Corporate social responsibility	Independent	1, if company engages in CSR. Otherwise, 0
4	CAPINT	Capital intensity	Independent	PPE / Total assets
5	LEV	Leverage	Control	Total Debts/ Total Assets
6	LOGTA	Firm size	Control	Logarithms of the total assets of the company.

Model Specification

The functional equation of tax aggressiveness and firms' financial performance is stated as:

ROE = f (ETR, CSR, CAPINT, LEV, LOGTA) ……. (1)

The functional testable model will be derived as:

$ROE = \beta o + \beta_1 ETR + \beta_2 CSR + \beta_3 CAPINT + \beta_4 LEV + \beta_5 LOGTA + \varepsilon_1$ …… (2)

Where the definitions are as stated in Table1 above.

β1, β2, β3, β4, β5 are the beta coefficients of the independent variables. While β1 is expected to be negative, β2, β3, β4, β5 are expected to be greater than zero. ε_1 = Error term

Since we are using panel data, the model is specified in the form which considers both the cross-sections ,i, and the time series,t. such as:

$ROE_{it\ t} = \beta o + \beta_1 ETR_{it} + \beta_2 CSR_{it} + \beta_3 CAPINT_{it} + \beta_4 LEV_{it} + \beta_5 LOGTA_{it} + \varepsilon_{1i}$ ……..(3)

RESULTS

Analysis of the data was done by first considering the unit root test. Thereafter, we carried out an estimation of the models and finally the diagnostics tests. The results of the unit root tests in Table 2 above indicated that all the variables of interests are I(0) stationary. Meaning that they revolve round the mean and not drift far apart so as not to render our regression output nonsensical.

Table 2 - Unit Root Test

Variables	Phillips Perron(PP) Fisher	Im, Pesaran & Shin	ADF Fisher	Decision
ROE	0.0326	0.0000	0.0487	I(0) stationary
ETR	0.0000	0.2310	0.0041	I(0) stationary
CSR	0.0000	0.0075	0.0007	I(0) stationary
CAPINT	0.0000	0.5614	0.5644	I(0) stationary
LEV	0.0000	0.0354	0.0011	I(0) stationary
LogTA(Firm Size)	0.1535	0.0199	0.0035	I(0) stationary

Regression Models Estimation Results and Hypotheses.

Shown in Table3a and Table 3b below are the Random Effect regression output and the Hausman Test Results respectively. The results of the Hausman test showed that the Random Effect model is preferred to the Fixed Effect model because the p-value which is 0.8764 is greater than 0.05.

From Table 3a, ETR is negatively and statistically significant with ROE. This is a good sign because it means the effective tax rate is lower than the statutory tax rate. This position is supported by Hoffman (1961) Theory of Tax Planning. Our result is in line with our expectation and that is, by engaging in tax aggressiveness will lower the effective tax rate (ETR) and consequently lead to increase in firm performance (ROE) and in cash out flow. With a coefficient of -152.68, it means that a 1 unit (1%) decrease in the effective tax rate will lead to about 153 unit (153%) increase in firm performance. This result supports those of Olaniun et al (2022); Udochukwu et al. (2022); Khuong et al. (2020); Rani et al. (2018) and Fagbemi et al. (2019). This means that the more profitable the firm is, the more it will like to decrease its ETR. It is, however, contrary to those of Zemzem and Ftouhi (2013); Oyeleke et al. (2016) and Hashmi et al. (2022) where a positive relationship was recorded meaning that an increase in the effective tax rate will lead to a reduction in firm performance. With this result, we reject the null hypothesis that there is no significant relationship between effective tax rate (ETR) and financial performance (ROE) and accept the alternative hypothesis that there is a significant effect.

LEV is positively and statistically significant with ROE at the 1% level. The import of this is that as LEV increases, ROE also increases. It is worthy to note that debt financing is always cheaper than equity financing for as much as we know that the interest costs on debt is allowed for taxable income calculation. This result supports those of Ogunmakin et al. (2020); Rani et al. (2018) as well as Fagbemi et al. (2019).

FSIZE is positively and statistically significant with ROE at 3% significant level. The size of a firm which is measured by a firm's total asset, total sales or market value classify it as either big or small. All things being equal, the bigger the company the bigger its profit is expected to be and the more it is expected to be tax aggressive with its complex transactions. This result supports those of Zemzem and Ftouhi (2013); Kurawa and Saidu (2018) as well as Irianto et al. (2017). With this result, we reject the null hypothesis that there is no significant relationship between firm size and financial performance (ROE) and accept the alternative hypothesis that there is a significant effect.

CAPINT is negatively insignificant with ROE at 66%. Capital intensity is defined as the ratio of non-current assets to total assets. Great investment in non-current assets will attract both investment tax credit and accelerated capital allowances to the advantage of the firm. This is in addition to the fact that such huge investment will definitely draw the attention of management to avoid more tax. But this is not the case in our result. This result supports those of Khuong et al. (2020); Fagbemi et al. (2019); Kasim and Saad (2019); Oeta et al. (2019); Zhu et al. (2019); Irianto et al. (2017). With this result, we accept the null hypothesis that there is no significant relationship between capital intensity and financial performance (ROE).

CSR is negatively insignificant with ROE at 29.8% . Investment in corporate social responsibility activities constitute a drain in the firm's purse more so if those activities are not tax deductible and the society cannot compensate the firm with increase purchases of the firm's products. With this result, we accept the null hypothesis that there is no significant relationship between capital intensity and financial performance (ROE).

In general, the model is well fitted with an Adjusted R-squared of 0.998775. This means that all the independent variables of interest accounted for about 99.88% variations in firm performance while only 0.12% are explained by other variables not captured by our model.

Table 3a
Dependent Variable: ROE
Method: Panel EGLS (Cross-section random effects)
Date: 10/21/21 Time: 00:03
Sample: 2009 2019
Periods included: 11
Cross-sections included: 15
Total panel (unbalanced) observations: 162
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ETR	-152.6796	0.444556	-343.4427	0.0000
CAPINT	-4.589500	10.43187	-0.439950	0.6606
CSR	-75.80115	72.55205	-1.044783	0.2977
LEV	0.222154	0.052305	4.247274	0.0000
LOGTA	7.60E-09	3.46E-09	2.196942	0.0295

C	140.0459	69.88902	2.003833	0.0468

Effects Specification		
	S.D.	Rho
Cross-section random	27.17923	0.0096
Idiosyncratic random	275.4807	0.9904

Weighted Statistics			
R-squared	0.998813	Mean dependent var	-568.4556
Adjusted R-squared	0.998775	S.D. dependent var	7788.909
S.E. of regression	272.6575	Sum squared resid	11597372
F-statistic	26245.93	Durbin-Watson stat	1.816348
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.998814	Mean dependent var	-598.1164
Sum squared resid	11677150	Durbin-Watson stat	1.803939

Source: Researcher's Computations (2022) Using EViews10 Software.

Table 3b

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.797274	5	0.8764

Source: Researcher's Computations (2022) Using EViews10 Software.

Additional Tests of Robustness checks

Table 4.a: Cross Section Dependence Test
Residual Cross-Section Dependence Test
Null hypothesis: No cross-section dependence (correlation) in residuals
Equation: Untitled
Periods included: 11
Cross-sections included: 15
Total panel (unbalanced) observations: 162
Note: non-zero cross-section means detected in data
Test employs centered correlations computed from pairwise

samples

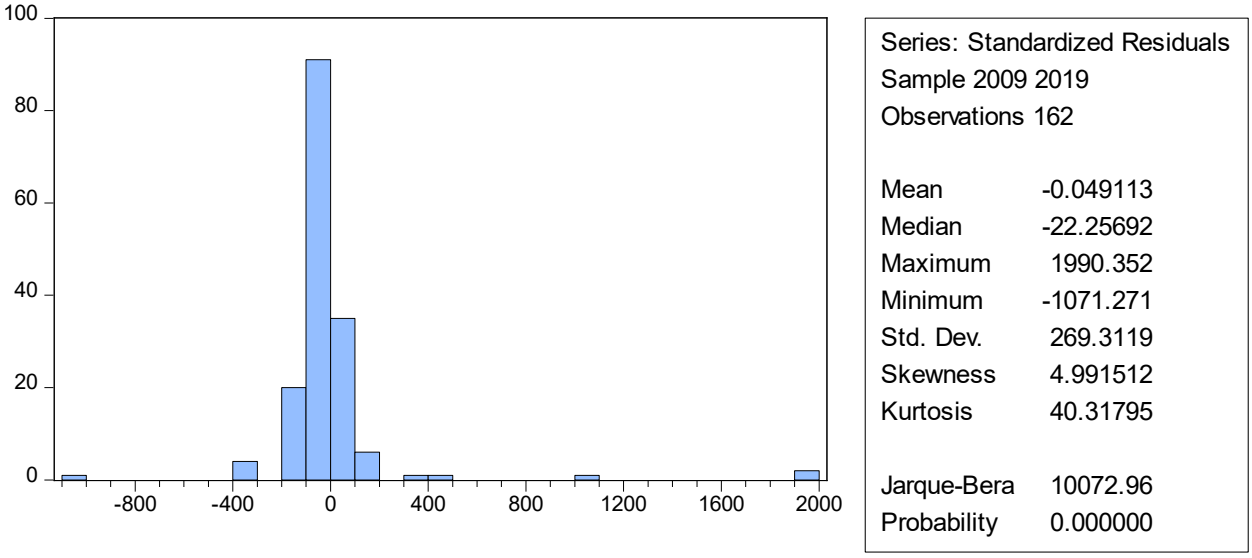
Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	150.7424	105	0.0023
Pesaran scaled LM	3.156527		0.0016
Pesaran CD	-1.150909		0.2498

Source: Researcher's Computations (2022) Using EViews10 Software.

Just as we subjected the data to statistical tests for unit roots, we also carried out some diagnostics tests on the ROE model used based on the model's underlying assumptions. These tests are very important to certify the validity of the model and of the final outcome of the regression results. Normally, where N is very large with a finite time T or where T is greater than N, we use the Breusch-Pagan LM test Statistic. But where N = T or where T is of the same magnitude with N, we use the Pesaran CD test Statistic. The results of the cross sectional dependence tests in Table 4.a above shows that at least the Pesaran CD test statistic accept the null hypotheses of no cross sectional dependence in the residuals since the results of the test-Statistic (0.2498) is greater than the 0.05 benchmark.

Normality Test

Table 4.b: Histogram-Normality Test (Post IFRS)



Source: Researcher's Computations (2022) Using EViews10 Software.

Normality Test is a test conducted with the aim to assess the distribution of data in a group of data or variables, whether the distribution of data is normally distributed or

not. Normality Test is useful for determining data that has been collected in normal distribution or taken from a normal population. If Probability value is greater than 0.05, Ho is accepted which implies that the distributions are normally distributed. According to the results in Table 4b above, the data used in analyzing the regression model are not normally distributed since the P-value of the Jaque-Bera statistic is (0.000) which is less than 0.05. However, the danger posed by non-normality test does not apply here since the sample size is large enough according to the Central Limit Theory (CLT).

CONCLUSION

In this study, we empirically investigated the impact which tax aggressiveness has on the financial performance of some listed manufacturing firms in Nigeria. The results of the tests show that effective tax rate (ETR) is negatively and statistically significant with firm performance represented by ROE. This is a good sign and means that the effective tax rate is lower than the statutory tax rate. LEV, ROE and FSIZE are positively and statistically significant while CAPINT and CSR are not significant.

RECOMMENDATIONS

Tax aggressiveness is a two sides of the same coin since it is a loss of revenue first, to the company and then to the government in the same economy. Thus, recommendations could be made either to the company or to the government or to both. Companies in the consumers goods industry should either set up a department dedicated to tax matter or outsource to tax expert who should be able to:

1) Probe into the tax statutes so as to know the available tax incentives provisions to reduce their tax liabilities.
2) Advise the company on tax loopholes which the tax laws never covered in order to minimize tax costs.
3) Adequately consider the cost-benefit analysis of engaging in aggressive tax planning since it could results in loss of revenue and reputation.

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