



Value Relevance of Corporate Tax Avoidance in Listed Consumer Goods Firms in Nigeria

Abdulazeez Adeiza Daniya ^{1✉}, Kabiru Isa Dandago ², and Muhammad Liman Muhammad ³

¹Department of Entrepreneurship, Federal University of Technology, Minna, Niger State, Nigeria

^{2,3}Accounting Department, Bayero University, Kano, Nigeria

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ABSTRACT

Purpose : In the last couple of years, the Nigerian government has vigorously increased its revenue base through economic diversification with an unprecedented focus on taxation. It constitutes an economic burden on the manufacturing companies that pay different types of tax. Therefore, they are left with no option but to optimize their tax avoidance effort to continue to create value for the shareholders. Therefore, this study evaluates the value relevance of corporate tax avoidance in listed consumer goods firms for 12 years (2009-2020).

Method : Both Tax Saving (T.S.) and Tax Shelter (TSh) were used as proxies for tax avoidance, while Tabin's Q (T.Q.) was used to measure value. The study employs correlational research design because it allows the relationship between quantitative data to be established, and the quantitative data from the annual reports and accounts of the firms were analyzed using fixed effect regression, having carried out some robustness tests such as normality, VIF, Heteroskedasticity, and Hausman specification tests respectively.

Findings : The study revealed that increased tax savings led to an insignificant reduction in firm value. However, an increase in tax shelter propensity and firm age led to a significant improvement in the value of the firms. Consequently, the study found no empirical evidence to reject the first hypothesis, while the second hypothesis was rejected.

Novelty : Despite the paucity of studies in Nigeria, there is no available study in Nigeria to the best of our knowledge that used tax shelter as a measure of tax avoidance, which makes this study novel and different from other few available Nigerian studies.

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INTRODUCTION

Corporations across the globe are established on the strength of agency theoretical perspective, with corporate owners being the principals and managers representing the agents. In this regard, agents are placed in fiduciary positions to constantly devise strategies and engage in value-maximizing transactions that are in the best interest of the principals (shareholders). Utmost priority is often given to appointing managers whose credentials, antecedents, and established records of integrity are unquestionable to help assuage shareholders' interests in managing resources. It is necessary for the successful running of the business. In corroboration to the aforesaid Chen et al. (2018) confirmed that the agents must always strive to protect the interests of the principals.

Generally, managers' efforts to protect the interests of the shareholders are often reflected in the size of the value created. In this regard, a firm's market worth indicates that the higher the worth of a firm, the better the value, and vice versa (Moeljadi, 2014). It is further alluded to by Ofuan et al. (2016), who state that the size of the firm's worth through earnings determines the share price and return to investors. An increase in the market value of a company's resources over its replacement cost is considered value (Salawu et al., 2017). Value, therefore, comes in various ways, ranging from making funds available to shareholders in the form of dividends to improving the company's market worth so that the company's assets can be easily replaced.

Value creation is the brainchild of management strategic decisions. According to Contractor (2016) and Lisowsky & Mescall (2016), firms' strategic decisions that exclude corporate tax avoidance may only lead to inc-

* E-mail: d.abdulazeez@futminna.edu.ng and daniyad3d@gmail.com

Address: Gidan Kwano along Minna-Bida Road, Niger State, Nigeria

rease in profit maximization, a large portion of which will be transferred to the government through taxation if the firms fail to properly arrange their activities through tax management to create real value for the company and its owners.

Corporate organizations that are value-oriented are constantly reorganizing their operations/activities in tandem with the unfolding environmental dynamics to improve firm value, including tax planning, given that the government on the other side of the swing is also striving hard to increase her corporate tax revenue through various tax policies (Dayday & Zaam, 2017). Tax avoidance involves taking advantage of the loopholes in the tax laws, which must be done legally, and such practice is considered reasonable in the celebrated case of *Commissioner of Internal Revenue v. Newman*, 1947, where it was held that 'there is nothing sinister in arranging one's affairs to keep taxes as low as possible'. All over the world, various governments have renewed efforts to improve revenue generation through taxation. Improved revenue generation is now a priority among various governments of the world, especially the developed countries, to the extent that tax policies and systems are constantly reviewed to sustain new economic and social heights (Maryam et al., 2018). It is the same in Africa, particularly Nigeria, where the low tax-to-GDP ratio, drop in the global oil price, and crude oil theft ignited the government's renewed effort to diversify the economy with specific attention on taxation. This places corporate organizations at the center stage of the government's aggressive tax drive, hence the need for corporations to engage in tax avoidance practices (Waluyo, 2017). In line with the preceding, Nengzih (2018) and Charles (2018) agreed that corporations' corporate tax avoidance efforts could be ascertained through effective tax rates, book tax Differences, tax savings, and tax shelter.

The desire of drivers of corporations to engage in corporate tax avoidance has been argued from the traditional theoretical perspective. According to Ofuan et al. (2016) and Chen et al. (2018), the traditional theory of tax avoidance holds that corporate tax avoidance increases after-tax profit, which is in the interest of the shareholders and is also considered value-enhancing to companies. From the preceding, it can be inferred that a relationship exists between corporate tax avoidance and firm value, as tax avoidance practice can either result in value enhancement or otherwise. Scholarly efforts aimed at examining the effect of tax avoidance on firm value have resulted in predominantly foreign studies, with a paucity of studies in this context in Nigeria. Based on the preceding background, this study evaluates the effect of corporate tax avoidance on the value of quoted consumer goods firms in Nigeria for 12 years (2009-2020).

Theoretically, this study is anchored by the traditional tax avoidance theory. The traditional theory holds that tax avoidance represents a value-maximizing strategy used by firms to increase after-tax profit and tactically transfer wealth from the government to shareholders (Khurana & Moser, 2013; Ying, 2015; Nanik & Ratna, 2015; Victor, 2016; Riu, 2019). It suggests that managers engage in corporate tax aggressiveness strategies in the best interest of the company's shareholders. In this instance, the tax authority is an uninvited party to the shareholders and management contractual relationship. Based on the assumption of this theory, it is envisaged that the benefit from tax savings will be used for the benefit of the shareholders.

The study also reviews the conceptual issues concerning variables used in this. For instance, as scholars have put forward, firm value has various conceptual elucidations. Bambang et al. (2012) and Moeljadi (2014) conceptualize firm value as an economic incentive created through a firm's earnings, representing investors' perception of how well or otherwise the company is doing. It provides a useful guide to making an informed investment decision. It, therefore, suggests that firm value is the worth or earning power of a firm's assets and that an increase in the earning power indicates that the firm is doing well.

The determination of firm value has explicitly been viewed from two perspectives. The dimensions according to William & Jay (2016), Monday & Abure (2017), and Charles (2018), are the accounting (Book Based) and stock market-based dimensions respectively. The choice of valuation method varies from one investor to another, and the difference in choice is a function of the investors' information needs. The accounting-based measure of value covers the endogenous factors about the firm, and such may be manipulated to attain the desired value in a bid to woo investors. However, the market-based measure of firm value considers both endogenous and exogenous factors peculiar to the firm. Proxies often used in this instance are the Market Value of equity and Tobin's Q. The market value of equity focuses solely on shareholders. Given the nature of modern corporations with myriad stakeholders, this study makes a case for Tobin's Q, which represents an all-encompassing measure of firm value that caters to stakeholders' interests beyond shareholders. Tobin's Q, introduced by Nobel Laureate James Tobin and first proposed in an academic publication by Kaldor (1966), is a measure of a firm's fair value (Jill, 2019). According to Liang-Fu et al. (2016) and Ofuan et al. (2016), Tobin's Q is the ratio of the market value of a firm to the replacement cost or book value of assets at year-end. According to Nur (2019), James Tobin hypothesized that the combined market value of all the companies listed on the stock market should equal their replacement costs. Jill (2019) opined that a low Q between 0 and 1 indicates that the replacement cost of a firm's assets is greater than the value of its stocks, which implies that the stock is undervalued. Conversely, a high Tobin's Q, which is greater than 1, indicates that the firm's stock is more expensive than the replacement cost of its assets, which implies that the stock is overvalued.

To achieve an improved firm value, several corporate strategies are often deployed. However, it has been pointed out that most strategies will lead to improved profit that may be raked into government coffers if firms do not strive to exploit the loopholes in the tax laws to reduce tax liability (tax avoidance). Firms' tax management or avoidance efforts can be ascertained from various perspectives. However, this study considers the tax avoidance

efforts of firms from the perspectives of tax savings and tax shelter propensity.

Tax savings represent another core variable used in this study, and according to Ofuan et al (2016), Monday & Abure (2017), and Silvy (2019), corporate tax saving is the difference between the statutory tax rate and the effective tax rate, which represents a firm's tax avoidance effort. In other words, tax savings are the difference between the Effective Tax Rate (ETR) and the Statutory Tax rate (STR). Managers put forth the required efforts to minimize tax liability owing to the incentive attached to such effort. This is because tax savings through tax planning are considered a mechanism through which firms generate tax savings (Annuar et al., 2014). Similarly, Ibrahim et al. (2013) argued that tax savings are the amount made by the company resulting from a reduction in tax paid compared to the actual tax that the firm would have paid if the statutory rate is applied to the firm's income. An increase in cash inflow occasioned by tax savings offers the firm the leeway to invest, pay more dividends, and save in reserves, which consequently increases firm value (Monday & Abure, 2017). It confirmed that companies that disclose a tax savings reserve in their financial statements stimulate investors' interest in the company, thereby improving the firm's value.

Apart from Tax Savings, efforts have also been put in place to develop another measure to ascertain the likelihood and degree of tax avoidance among corporations. The efforts resulted in Wilson's introduction of tax shelters in 2009. Several definitions have been provided in the context of the development of tax shelters as a measure of tax avoidance. For instance, Lisowsky & Mescall (2016) agreed that corporate tax shelters use complicated transactions, usually by blue-chip companies and multinational corporations, to exploit loopholes in tax laws and achieve robust tax benefits. A tax shelter is generally considered a specific category of explicit tax planning effort that involves the use of special-purpose legal vehicles such as offshore tax haven involvement, Corporate Multi-Nationality, Leverage, investment in Research and Development (R&D), and Profitability to minimize tax liability (Amy et al., 2010). Amy et al. (2010), Markus (2017), and Chen et al. (2018) reported that corporate tax sheltering activities could be ascertained using a logistic regression model to establish the depth of firms' tax avoidance practices. The logistic regression which measures tax shelter propensity is given as equation 1.

$$\text{TSh} = -4.30 + (6.63 * \text{TBTD}) + (-1.72 * \text{LEVERAGE}) + (0.66 * \text{SIZE}) + (2.26 * \text{ROA}) + (1.56 * \text{MNC}) + (1.56 * \text{R\&D}) / 100 \quad \dots\dots\dots 1$$

The use of different corporate attributes to test the tax-sheltering efforts of firms has also been debated along legal lines. Valid contributions in this respect have been offered by Kirsten et al. (2015), Maria et al (2016), and Markus (2017), whom all agreed that tax sheltering involves the exploitation and stretching the tax laws as well as going to the grey areas of the tax laws to reduce tax liability within the framework of tax accounting. By extension, the inclusion of the grey areas in the tax law and the degree of vigor deployed in using relevant corporate attributes question the legality of tax shelter. However, according to Markus (2017), the legality of tax sheltering depends on interpreting the relevant tax authority and the competent court of law. From the preceding, it is clear that shelter is a classic and apt description of corporate tax avoidance practice because it not only measures the tax avoidance efforts of companies but also provides a general framework for ascertaining the propensity of avoidance tax practice among firms. As identified by Amy et al. (2010), tax shelter components are TBTD, leverage, firm size, profitability, multi-nationality, and research and development expense.

Finally, firm age is used in this study to control for factors that may likely affect firm value but are not captured in the independent variable. Firm age is the years a firm was listed on the stock exchange (Daniya, 2021). In this regard, older firms should be able to use their long-term experience to effectively maximize value through tax avoidance practices.

Although not new in accounting, the subject matter of this study is currently enjoying renewed and overwhelming attention from academics and practitioners. It is due to the government's renewed efforts to generate more revenue through taxation to defray government expenditure. Relevant conceptual issues concerning firm value, corporate tax avoidance, and control variable (firm age) have been reviewed. The conceptual review shows a clear relationship between corporate tax avoidance (Tax Savings and Tax Shelter) and firms' value (Tobin's Q). The pattern of relationship between the variables used in this study is depicted in Figure 1

The study empirically reviews studies examining the relationship between tax savings, tax shelter, and firm

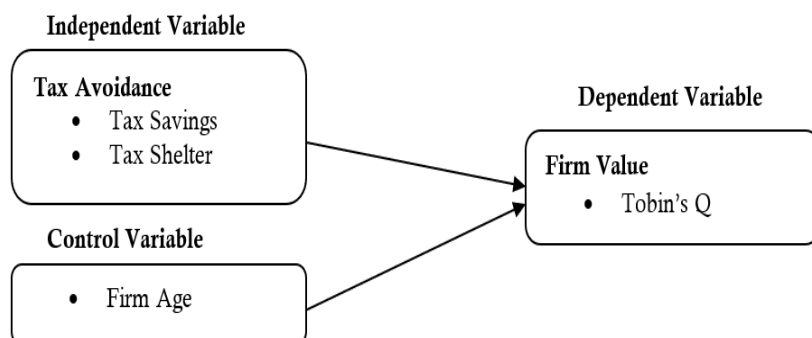


Figure 1. Conceptual framework

age and firm value. Generally, firms that keep tax burden (ETR) as low as possible will have higher tax savings due to the excess of STR over ETR. The extent, therefore, to which tax savings translate into value has been examined by Seyram and Holly (2014) in their study on the effect of tax planning on the market performance of 22 non-financial companies listed on the Ghana stock exchange for a period of 12 years (2000-2011). The study ascertained firms' level of tax planning and explored the relationship between tax planning and firms' market performance. While companies' market performance was proxied using Tobin's Q, tax planning was captured using tax savings. The result of the longitudinal correlative design indicated a significant positive relationship between tax planning and firm market performance. The firms could use the excess of STR over the ETR to improve value in no small measure. It shows the faithfulness of the managers and attests to the sound governance system of the firms. It agrees with the findings of Mihir & Dhammika (2015) and Monday & Abure (2017), who found a positive and significant relationship between tax avoidance measured by tax savings and firm value. However, Silvy (2019) empirically examined the effect of tax planning on the value of 43 manufacturing companies listed on the Indonesian Stock Exchange (IDX) from 2014 to 2016. The multiple regression results through Eviews prove that tax planning (tax savings) has a positive but insignificant effect on firm value (Tobin's Q).

In contrast, the study of Xudong et al. (2014) on the impact of corporate tax avoidance on the value of some Chinese listed firms for a period of ten years (2001-2009) found that significant negative between tax savings and firm value. This implies that increased tax savings have led to a considerable reduction in firm value. It confirms the weak governance system within the firms, which allows for self-serving management tendencies. Consequent to the preceding extant empirical findings, the study hypothesized that:

H₁: Tax Saving (T.S.) has an insignificant effect on the value of listed consumer goods firms in Nigeria

Regarding the effect of tax shelter on firm value, firms with tax shelter results closer to one (1) are said to engage more in tax avoidance practice than firms with tax shelter value tending towards zero (0). In examining the effect of tax shelter on firm value, Beng et al (2016) reported a positive but insignificant relationship between tax shelter and firm value. It implies that a leap in corporate tax shelter leads to an insignificant increase in firm value. It could suggest that firms should be holistic about their transactions to save minimal money from tax avoidance efforts. Contrary to this finding, Mihir & Dhammika (2015) reported a positive and significant relationship between tax shelter and firm value, implying that the more tax-aggressive the firms are, the better the value. It makes logical sense as the drive for tax avoidance benefits shareholders, which also complies with the traditional tax planning theory. However, Wayne et al. (2016) investigated the relationship between tax risk and value (Tobin's Q), evidence from the Luxembourg tax leak. Tax risk was measured through GAAP ETR and tax shelter, and the result of the regression analysis showed that tax shelter has a negative and significant effect on firm value. The findings imply that, despite the increase in tax sheltering activities of the studies firms, value was on the reverse. With the nature of the study (Luxembourg tax leak), tax laws may have been overstretched such that the tax authority considered it illegal. It may have also sent the wrong signal to the shareholders and prospective investors, giving rise to a significant inverse relationship. Empirical results from the review revealed mixed findings regarding the effects of tax shelter on firm value. Accordingly, the study hypothesized that:

H₂: Corporate tax shelter has an insignificant effect on the value of listed consumer goods in Nigeria

The control variable used in this study is firm age, and its effect on value was examined by Kang (2018) in a study on the effect of tax risk on tax avoidance and firm value. The study found a significant positive relationship between firm age and firm value. This finding contradicts the conclusion of Daniya (2021), as he found an insignificant negative relationship between firm age and value, suggesting that firms tend to deteriorate in value creation as they grow old.

METHODS

Generally, Burrell & Morgan (1979) contend that the fundamental assumption of quantitative research relies on the conviction of the existence of reality, which can be observed by the researcher (ontology), and the knowledge of such reality can be measured objectively (epistemology). It, however, depends on the stance of the researcher. Considering the nature of social science, researchers' stance is often seen from the lens of positivism, interpretivism, pragmatism, and advocacy. In this study, therefore, reality is already in existence (data and theory), as well as the knowledge of reality. Philosophically, the firms computed the data concerning the variables used in this study. Hence, they cannot be wholly separated from the nature of the data presented to the general public. However, the position taken by the researcher in conceptualizing and communicating reality depends on his standpoint in viewing reality (paradigm) and how he decides to interpret reality (approach). This study adopts the positivist stance as it allowed the study to objectively measure quantitative reality, using measurable properties independent of the researchers. Likewise, the results of the study were also interpreted using a deductive approach, as the researcher remained objective and unbiased throughout the process.

Also, the choice framework for a given study is a function of the research materials and methods used. In this instance, Creswell & Creswell (2018) suggested three significant frameworks. They are quantitative, qualitative, or

mixed-methods approaches, respectively. Also, quantitative research design uses quantitative data to examine the subject (Mohammed, 2012). In the same vein, the general quantitative framework, according to Creswell & Creswell (2018), is in experimental, correlational, and survey designs, respectively. Given these three perspectives, correlational research design suits the nature of this study because it provides the context within which the relationship between quantitative variables is established. It, therefore, informs the use of correlational research design in this study.

The study population consists of all the twenty-seven (27) listed Consumer goods firms. It is expected that listed firms are more courteous and have high compliance tendencies to extant tax laws to minimize tax liabilities than non-listed companies. Also, from the population, the study extracted a sample size of fourteen (14) firms covering firms that were listed on or before 2009 and remain listed up till December 31st, 2020. Using the year of listing, Multi-Trex Integrated Plc was listed in 2010 and, as such, was removed from the sample. Similarly, with respect to firms that remain listed as of December 31st, 2020, 12 firms were delisted (NSE website 2020). It, therefore, provides justification for the remaining 14 firms being used as the study's sample size. The population, sample of the study, and the respective years of listing of the firms are shown in Table 1.

In line with the research's philosophical assumption and design, a secondary source of data collection was employed. It allowed the study to extract quantitative data from the published annual reports of the firms for twelve (12) years (2009-2020). Therefore, the type of data used in this study is through an ex-post-facto method where data already in existence were extracted from the firms' annual reports.

Three (3) categories of variables were employed to achieve this study's objectives. The variables are independent (corporate tax avoidance), dependent (firm value), and control variables. Proxies for corporate tax avoidance are Tax Savings (T.S.) and Tax Shelter (TSh), while Tobin's Q was used as a proxy for firm value. Also, the control variable was proxied using Firm Age (F.A.). Measurements for each of the mentioned variables are specified as follows.

Tax savings were measured as the difference between the Statutory Tax Rate (STR) and the Effective Tax

Table 1. Population of the Study

S/N	Consumer Goods Firms (Population)	Year of Listing	Sample
1	D.N. Tyre and Rubber Plc	1961	D.N. Tyre and Rubber Plc
2	Champion Breweries Plc	1983	Champion Breweries Plc
3	Golden Guinea Breweries Plc	1979	
4	Guinness Nigeria Plc	1965	Guinness Nigeria Plc
5	International Breweries Plc	1995	International Breweries Plc
6	Jos International Breweries Plc	1992	
7	Nigerian Breweries Plc	1973	Nigerian Breweries Plc
8	Premier Breweries Plc	1988	
9	7 Up Bottling Companies Plc	1986	
10	Big Treat Plc	2007	
11	Dangote Flour Mill Plc	2008	
12	Dangote Sugar Refinery Plc	2007	Dangote Sugar Refinery Plc
13	Flour Mills Nig. Plc	1978	
14	Honeywell Flour Mills Plc	2009	
15	P.S Mandrides & Co. Plc	1979	
16	Multi-Trex Integrated Plc	2010	
17	National Salt Co. Nig. Plc	1992	
18	Northern Nig. Flour Mills Plc	1978	Northern Nig. Flour Mills Plc
19	Union Dicon Salt Plc	1993	Union Dicon Salt Plc
20	UTC Nigeria Plc	1972	
21	Cadbury Nigeria Plc	1976	Cadbury Nigeria Plc
22	Nestle Nig. Plc	1979	Nestle Nig. Plc
23	Nigerian Enamelware Plc	1979	Nigerian Enamelware Plc
24	Vitafoam Nig. Plc	1978	Vitafoam Nig. Plc
25	Vono Products Plc	1990	
26	PZ Cusson Nig Plc	1972	PZ Cusson Nig Plc
27	Unilever Nig. Plc	1973	Unilever Nig. Plc

Source: Generated from NSE fact book 2013 and NSE website as of 2020

Rate (ETR). It reflects the firms' corporate tax avoidance effort. It aligns with the measurement used in the works of Seyram & Holly (2014) and Silvy (2019). In addition, Blaufus et al. (2016) confirmed that a firm either saves tax if the STR is higher than ETR or saves nothing (zero naira) where ETR is higher than STR. Following the above submission, this study sets tax savings to 0 where $ETR > STR$ is negative T.S.

Corporate tax shelter involves the use of some notable corporates' attributes (offshore tax haven involvement, Corporate Multi-Nationality, Leverage, investment in Research and Development (R&D), and Profitability) to exploit the loopholes in the tax laws to achieve robust tax benefits, especially by multinational corporations. Tax shelter, for this study, was measured in consonance with the measurement used by Amy et al. (2010), Morten & Stefan (2018) and Michelle & Joel (2018) as the residual of tax shelter function given as equation 1.

The figures, as provided in the function, are constant. They are used alongside TBTD, leverage, firm size, ROA, MNC (firms that are multinational take the value 1, otherwise 0), and R&D. The TBTD is the difference between the pretax income and taxable income or the differences in income recognition as well as deduction rules for both costs and expenses in line with the relevant accounting principles and the tax laws. The resultant value, in percentage, indicates the firms' propensity to avoid tax. The value of tax shelter percentage ranges from 0 to 1, and the closer the value is to 1, the more tax aggressive the firm is, and vice versa if the value tends towards 0.

Tobin's Q is used as the explained variable, and it was measured as the sum of the book value of total debt and the total market value of equity divided by the book value of total assets. It follows the measurement used in the works of Salawu et al. (2017) and Chen et al. (2018).

Finally, firm age is used as the control variable, and it is measured as per Daniya (2021), as well as the number of years spanning since the firm was listed on the Nigeria stock exchange. A summary of the variables and their respective measurements is presented in Table 2.

Given the research design and the nature of data used in this study, descriptive statistics was employed to determine and describe the nature of data associated with the variables. Also, the correlation was used to establish the relationship among the variables and check for the existence of multi-collinearity, while the Variance Inflation Factor (VIF) test was used to check the existence or otherwise of multi-collinearity further. Fixed effect regression was used to analyze the data after conducting a heteroskedasticity test, which corroborated the use of fixed effect regression.

This study adapts the models used by Chen et al. (2018) due to the standard features the study shares with this study. Functionally, the relationship among the variables is expressed thus:

$$FV = f(CTA, CV)$$

Where:

F.V. = Firm Value

CTA = Corporate Tax Avoidance

CV = the control Variable

From the above function and with reference to the modified models of Chen et al. (2018), the broad models for the study are stated as equation 2.

$$TQ_{it} = \beta_0 + \beta_1 TS_{it} + \beta_2 TSh_{it} + \beta_3 FA_{it} + e_{it} \dots\dots\dots 2$$

Where:

T.Q. = Tobin's Q

T.S. = Tax Savings

TSh = Tax Shelter

F.A. = Firm Age

Table 2. Variable Measurements and A priori Expectation

Dependent Variables	Measurements	Sources	Apriori Expectation
Tobin's Q (T.Q.)	Book Value of Total Debt+Market Value of Equity/Book Value of Total Assets	Chen et al. (2018) and Salawu et al. (2017)	
Independent variables			
Tax savings (T.S.)	Statutory tax rate - effective tax rate	Monday Abure (2017) and Silvy (2019)	+ & Significant
Tax Shelter (TSh)	$-4.30 + (6.63 * TBTD) + (-1.72 * LEVERAGE) + (0.66 * SIZE) + (2.26 * ROA) + (1.56 * MNC) + (1.56 * R\&D) / 100$	Amy et al. (2010) and Joel (2018)	+ & Significant
Control Variables			
Firm Age (F.A.)	Number of years since listed on the NSE	Daniya (2021)	+ & Significant

Source: Generated by the Authors, 2023

e = Error term

β_0 = Intercept

β_1 - β_3 = Regression Coefficients

RESULTS AND DISCUSSION

In this section, the result of the summary statistics is first presented, followed by the correlation result. The robustness test results were discussed to give a prelude to regression analysis results, even though most of the tests are post-estimation tests.

The results of the summary statistics for the variables shown in Table 3 help to provide a detailed understanding of the nature of the data upon which analysis was carried out. Various statistical measures used to describe the data are measures of central tendency (mean), a measure of dispersion (standard deviation) used to ascertain the level of spread and distribution of the variables, as well as the minimum and maximum values for each dependent and explanatory variable.

Table 3 presents the descriptive statistics of the studied firms with a total of 168 observations across the variables, implying 14 firms studied for 12 years. Note that Tobin's Q values are shown in billions for ease of description. Tobin's Q (T.Q.) has a mean value of 22.09, which shows that the average worth (combination of the book value of total debt and market value of equity scaled by the book value of total assets) of the entire firm is 22.09 billion naira with minimum and maximum values of 0.09 (90 million) and 183.8 (183.8 billion naira) respectively. This implies that the firm's average has considerable value; however, the standard deviation of 36.63 shows that firms vary significantly within the period.

As indicated in Table 3, tax savings have a mean value of 0.11 with minimum and maximum values of 0 and 0.29. The mean value implies that the firms saved about 11% in tax out of the 30% statutory tax rate expected to be paid. Also, tax savings have a standard deviation of 0.09, which indicates that firms do not vary considerably in the amount of tax saved during the period. With regard to a tax shelter, Table 3 shows a mean value of 0.80 with minimum and maximum values of 0.58 and 0.99, respectively. It suggests that the firms have a high propensity for tax avoidance practices. It is evident in the mean value of 0.80, which suggests that the average probability of the firms' tax avoidance effort is 80%, and this did not substantially vary from one firm to the other, as revealed by the standard deviation of 0.08. The implication of this is that the firms are highly tax-aggressive. Finally, the descriptive statistics result reveals that while very few firms are as old as 59 years, other firms are in their 13th year of being listed on the Nigeria stock exchange. The average number of years of the firms is 40, which does not significantly vary from one firm to another, given the standard deviation of 11.46. Generally, very few firms are in their infant stage.

Table 4 also presents the correlation results of the dependent variable (Tobin's Q), independent variable (tax savings and tax shelter), and control variable (firm age). The Variance Inflation Factor (VIF) of the proxies for independent variables is also presented in Table 4. It is necessary to establish the association between the explanatory and the dependent variables on one hand and among the explanatory variables themselves on the other hand.

The result of the correlation, as shown in Table 4 shows the correlation coefficients of the variables, which range from -1 to 1 with indicative signs (positive and negative) that denote the pattern or direction of the relationship. The diagonal correlation coefficients of 1.000 show that each variable has a perfect positive linear relationship with itself.

For the correlated variables, the results show that both tax shelter and firm age are positively correlated with both Tobin's Q (T.Q.) while tax savings are negatively correlated with T.Q. The inverse relationship between tax savings and T.Q. indicates that tax savings are moving in the opposite direction with T.Q. In other words, as tax savings increase, Tobin's Q decreases. On the other hand, the result shows that as tax shelter and firm age increase, so also Tobin's Q. Generally, the correlation coefficients for each explanatory variable show the absence of multi-collinearity as the highest correlation coefficient of 0.629, which is between tax shelter and Tobin's Q is less than the recommended 0.8 threshold. It is further corroborated by the VIF test, which shows a mean value of 1.02, less than 10, confirming the absence of multi-collinearity among the explanatory variables.

Regression Results of Corporate Tax Avoidance and Firm Value

Table 3. Summary Statistics of the Variables

Consumer Goods				
No. of Obs. 168				
Variables	Mean	Std.	Min	Max
TQ	22.09	36.63	0.09	183.82
TS	0.11	0.09	0	0.29
TSh	0.80	0.08	0.58	0.99
FA	40.14	11.46	13	59

Table 4. Correlation Matrix for the Variables

Var.	TQ	TS	TSh	FA	VIF
TQ	1.000				
TS	-0.036	1.000			1.02
TSh	0.629	-0.004	1.000		1.02
FA	0.224	-0.151	0.177	1.000	1.03
Mean VIF					1.02

Table 5. FE Regression Results

Var.	TQ				
TS	<i>-0.288</i> (0.675)	No. of Obs.	168	P-value	0.000
TSh	<i>6.946***</i> (0.000)	R ²	0.41	Var.	TQ
FA	<i>0.007*</i> (0.071)	F-value	36.15	TS	<i>-0.288</i> (0.675)
				TSh	<i>6.946***</i> (0.000)

Source: Generated from the annual reports of the studied firms through 'STATA' 2023.

Note: The coefficients for each variable are shown in italics, while their respective p-values are in parentheses. Corporate tax aggressiveness variables that show a significant relationship with firm value are shown in asterisks and their various degrees of significance. ***, **and * denote significance at 1%, 5% and 10% respectively.

In response to the outcome of the heteroskedasticity tests, which revealed a chi-square value of 0.159, indicating that the model is homoskedastic, the study resulted in the use of fixed effect regression in analyzing the data. The F.E. regression result is presented in Table 5.

The regression results in Table 5 have 168 observations with an overall R² of 0.41. The multiple coefficients of determination show that 41% of the total variation in the dependent variable of listed consumer goods firms is explained by tax savings, tax shelter, and firm age. The result, tax savings, reveals coefficients of -0.288 (P = .675) concerning firm value (T.Q.). It indicates that tax savings have a negative effect on firm value, though the effect is statistically insignificant. It contradicts our priori expectation: a significant positive effect would be anticipated. However, the findings of this study are in agreement with those of Xudong et al. (2014), Seyram and Holly (2014), Mihir and Dhammika (2015), and Monday and Abure (2017). Given the preceding result, there is no justification to reject the null hypothesis, which states that tax saving has an insignificant effect on the value of listed consumer goods in Nigeria. In other words, the study accepts the null hypothesis and rejects the alternate hypothesis.

Results in Table 5 show that both tax shelter and firm age have a positive and significant effect on T.Q. given the coefficients of 6.946 (P<.001) and 0.071(P=.007) for tax shelter and firm age, respectively. It indicates that tax shelter has a significant positive effect on firm value. It further suggests that an increase in corporate tax shelter propensity significantly improves firm value via resource availability and efficient utilization to create further wealth. This finding is in consonance with our a priori expectation and also consistent with the reports of Mihir and Dhammika (2015), Wayne et al. (2016), and Michelle and Joel (2018) but contradicts that of Beng et al. (2016). Likewise, the result concerning firm age suggests that firms tend to avoid a significant tax rate as they grow old. The firm age finding agrees with (Kang, 2018) but contradicts that of (Daniya, 2021). In response to the mentioned findings, the study thus rejects the second hypothesis, which states that tax shelter has insignificant effects on the value of listed consumer goods firms in Nigeria.

The preceding findings imply that, while firms are confirmed to engage in high levels of tax avoidance, particularly through their long-term experience of being in business, such effort has yet to yield the desired result as increment in savings dwindles value, though this is not significant. Plausible reasons for this could be due to shareholders' expropriation by managers, information asymmetry impelled by lack of transparency in conduct and reporting, and weak governance systems within the firms. It could also be due to the intense competition that forced companies to lower prices or reinvest profits to remain competitive, even with tax savings. Another reason for the insignificant effect could be other factors like market fluctuations or changes in consumer behavior that overshadow the effect of tax savings.

CONCLUSIONS

This study explored the nexus between corporate tax avoidance and the value of listed consumer goods firms in Nigeria. Tax avoidance was considered from the perspectives of how much tax is saved by the firm compared to the statutory tax rate of 30%, the extent to which the firm deploys tax avoidance strategies, and their long-term industry experience to reduce tax liability without compromising the primary intent of the tax laws. At the same time, Tobin's Q was used as a surrogate for firm value. In response to the findings of this 12-year study (2009-2020), the following conclusions have been drawn.

First, the firms have been unable to translate savings from tax avoidance practices into value for both the shareholders and the firms. Evidence revealed that the firms saved an average of 11% in tax out of the 30% statutory tax rate but still contributed negatively to value even though the negative effect of savings is insignificant. We have

ascribed this to shareholders' expropriation by managers, information asymmetry, and a weak governance system within the firms. Also, the increase in the firms' tax avoidance propensity shows the appreciable deployment of tax avoidance strategies to enhance value significantly. It indicates that the management of the firms understands the loopholes in the tax laws and has deployed appropriate tax-reduction strategies to increase the after-tax profit of the firms. However, a spark in tax avoidance propensity (tax shelter), with an average of 80% and 99% maximum propensity, is considered too risky for the firms as this could spur suspicion and increase record scrutiny by the tax authority. It, by extension, could signal a negative perception from the general public owing to possible disclosure of tax fraud occasioned by increased suspicion and record scrutiny. Finally, improved firm value through tax avoidance strategies is driven by years of experience as firms perform better in proportion to their years of industry experience.

Given the findings and conclusion from this study, the following recommendations have been made.

The firms should strengthen their governance mechanism to ensure that the benefits of savings resulting from tax avoidance practices translate into value through transparency in conduct and reporting. It can be achieved through the establishment of an independent corporate governance monitoring team with reputable members that report to both the board and the shareholders within each firm or strengthen the existing one through injection into the membership reputable and independent members as well as improved audit quality practice within the firms to reduce information asymmetry.

Also, the increasing rate of tax shelter should be checked and closely monitored by the relevant tax authority (FIRS) to ensure that government tax incentives are not abused, especially by multinational companies. It can be achieved through specialized training for tax officers to make them more efficient in record scrutiny. Also, firms should be modest in their tax shelter propensity (not more than 70%) to keep away suspicions capable of increasing record scrutiny by tax administrators as well as reducing investors' adverse perception of firms' tax risk exposure.

Finally, the firms should continue to leverage their industry experience to improve value. It can be achieved by training, retaining, and rewarding experienced staff without giving them the reason for job turnover. With this strategy, many of the experienced staff, particularly in the area of tax avoidance strategies, tend to grow with firms and impact the firms more meaningfully.

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