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EFFECT OF TAX AVOIDANCE ON ACCOUNTING CONSERVATISM OF LISTED NON-FINANCIAL FIRMS IN NIGERIA

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ABSTRACT

The study seeks to ascertain the effect of tax avoidance on the accounting conservatism of listed non-financial firms in Nigeria. Tax avoidance was proxied by Generally Accepted Accounting Principle Effective Tax Rate (GETR), Cash Effective Tax Rate (CETR), and Book Tax Difference (BTD), while accounting conservatism was measured using Negative Accruals (NA). The control variables utilised were leverage, Return on Asset (ROA), and Firm Size (FS). The study covered a period of seven years (2014-2020) and a population of forty-eight listed non-financial firms on the Nigerian stock exchange. The data were analysed using the panel regression technique. The findings discovered that GETR and BTD significantly and negatively affect unconditional conservatism. Overall, this paper shows that tax avoidance is a determinant of financial reporting conservatism in Nigeria.

Keywords: Tax avoidance; accounting conservatism; non-financial firms; Nigeria

INTRODUCTION

Accounting conservatism ensures management reports all possible loss/expense incurred by the firm at some point in the future while all anticipated revenues not yet earned are not accounted for until they have been earned. Generally, all losses are provided when identified as incurred, while gains are recognised when there is a reasonable degree of certainty in earning them. This keeps all relevant stakeholders abreast with the true position of an entity at any point in time.

Unconditional conservatism involves management systematically understating book values of assets or expensing assets which could otherwise have been capitalised due to a specific aspect of the accounting process, while for conditional conservatism, the book values of assets are written down but not up as well asymmetrical recognition of gains and losses under adverse conditions (Basu, 1997). Under both forms conservatism, asset, and gains require higher verification than liabilities and losses.

Taxation is a fiscal policy tool used in controlling a country's economy. Although tax avoidance is legal going by the letters of the law, it refers to all measures adopted by an entity to reduce explicit tax payable by exploiting loopholes in the tax system. Corporate tax avoidance can be viewed as any medium devised by an entity/individual largely within the scope of the law to minimise its taxable income. Tax motivated conservatism requires a degree of book-tax conformity. Where this is not the case, the reporting firm has to devise a means of increasing book income while driving down taxable income (Frank et al., 2004).

In 2012, Starbucks became global news. Unfortunately, the news did not cover the company's beverages but instead discussed that no corporate tax was paid from the £400 million sales Starbucks made in the UK in 2012. This was possible because Starbucks transferred money to a sister company located in the Netherlands. Furthermore, Starbucks bought coffee beans from Switzerland and paid high interest rates for borrowing from other parts of the businesses.

Nevertheless, Starbucks was not the first multinational corporation that became worldwide news for its corporate taxes. One year before the Starbucks scandal, Amazon and Google hit the headlines. The sales of Amazon were £3.35 billion in the UK, but it reported a tax expense of just $\pounds 1.8$ million. A unit of Google located in the UK paid $\pounds 6$ million for corporate taxes on a turnover of £395 million. When this news hit the headlines, the first thing the public asked was, "Is this even legal?"

Onyeka and Nwankwo (2016) state that tax avoidance is an effort by a company using accounting methods legally in accordance with tax provision by utilising the grey area in tax law, so that tax payable becomes smaller. In essence, it refers to all measures adopted by an entity to reduce explicit tax payable by exploiting loopholes in the tax system. Tax avoidance arises in a situation where the taxpayer arranges his/her financial affairs in a way that would make him/her pay the least possible amount of tax without infringing the legal rules. Although tax avoidance is legal going by the letters of the law, the government still does not want it. Tax avoidance can also be viewed as the use of legal methods to modify an individual's financial situation to lower the amount of income tax owed.

To our knowledge, few studies have examined tax-motivated conservatism. It is a well-known fact that accounting information may affect taxable income, particularly in the presence of earnings management. Net income (profit/loss) is one of the most important products of accounting, but this result is sensitive to discretionary adjustments that have little or nothing to do with the reality of

the firm. Thus, to fill the gap, the present study aims to estimate the effect of tax avoidance on the accounting conservatism of listed non-financial firms in Nigeria.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

According to Desai and Dharmapala (2005), tax avoidance is the downward manipulation of an entity's chargeable income. Gan (2018) examined the relationship between conditional conservatism and tax avoidance. He took a sample of listed US companies during the period of 2009-2016. He computed tax avoidance based on cash effective tax rates (CETR) and employed the C-score method developed by Khan and Watts (2009) and the skewness method from Givoly and Hayn (2000) to measure conditional conservatism. The results of the study indicated that the C-score is negatively correlated with CETR, irrespective of the different models utilised. The negative association of the C-score and CETR corroborates the hypothesis of the study that, ceteris paribus, conditional conservatism is negatively associated with tax burdens.

Bornemann (2018) conducted a study in Austria to analyse the relationship between accounting conservatism, future tax rate cuts, and countries' level of book-tax conformity using a panel of firms across 18 countries from 1995 to 2010. He used the C-score to measure conditional conservatism and book-tax conformity to measure tax avoidance. He established that conditional conservatism is positively and significantly associated with future tax rate cuts when book-tax conformity is high. The effect is particularly manifesting for firms that concentrate the majority of their operations in the country in which the tax rate is cut. In contrast, there is no significant relationship between future tax rate cuts and unconditional conservatism.

Yuniarsih (2018) carried out a study to explain the influence of accounting conservatism and corporate governance mechanism against tax avoidance in Indonesia. The study sampled 123 companies listed in the Indonesia Stock Exchange (IDX) particularly listed manufacturing companies, for a period of three years between 2014 and 2016. Secondary data were collected via the audited financial statements of the companies. Meanwhile, multiple regression analysis was used to test the hypothesis. The results indicated that conservatism has no significant effect on tax avoidance, which is in congruence with the findings of Purwantini (2017). There are no existing studies on tax avoidance and accounting conservatism in Nigeria.

Based on the reviewed works, the following hypotheses are formulated: H_{o1} : GAAP ETR does not have any significant effect on the degree of accounting conservatism. H_{o2} : Tax motivated conservatism is less prevalent for firms with high book-tax conformity. H_{o3} : CASH ETR does not influence the degree of accounting conservatism.

METHODOLOGY

The research design utilised for this study was correlational. The data used were time-series and cross-sectional, which were pooled together to form a panel data set. The data were a time-series considering that the data were from all firms in consumer goods, conglomerate, industrial goods, and health sector over a period of seven years (2014-2020), all after the adoption of IFRS in Nigeria. The study was cross-sectional since the data cuts across the selected companies. The design was also a correlational research design because it is aimed at examining the effect of tax avoidance on accounting conservatism.

The population of this study comprised all listed non-financial firms operating in consumer goods, conglomerate, and health and industrial sector of the Nigerian stock exchange. Due to the

unavailability of annual reports of some firms in all the observation years, the study utilised a population of 48 firms instead of the 50 listed non-financial firms. Also, of 48 firms captured by the study, some did not publish their financial statements in some years, as shown in the analysis, leading to unbalanced data for the relevant years of the study. In the first year, only 36 firms, representing 75% of the population, published their annual report. In the second year, 43 firms, representing 89.5, published their annual reports. From the third year until the seventh year, 45, 42, 40, 43, and 38 firms published their annual reports, respectively, accounting for 93.75%, 87.5, 83.3%, 89.6%, and 79.2% the available population.

Data were collected through secondary sources, such as journals and other related materials since they provide how others have defined and measured the key concepts. Also, since the variables are quantitative in nature, the published audited annual report of these companies was used since it is a means through which the value of the variables used in arriving at the objective of the study could be obtained. This study utilised correlation and regression analysis to ascertain the effect of tax avoidance on accounting conservatism on listed non-financial firms in Nigeria. GETR, CETR, and BTD were used to measure tax avoidance over a period of seven years. Unconditional conservatism was adopted as the measure of accounting conservatism.

The variables considered in this study were conservatism as the explained variable and tax avoidance as the explanatory variable proxied by GETR (generally accepted accounting principles effective tax rate), BTD (book-tax difference), and CETR (cash effective tax rate). This study was undertaken to examine the effect of tax avoidance on accounting conservatism. The proxy for conservatism is unconditional conservatism following Givoly and Hayn's (2000) Negative Accruals Measure ("NA"). The variables specified in the model were measured as follows. To achieve the objective of the study based on the outlined variables and obtained values, the following model is developed.

$NA_{it} = \alpha_0 + \beta_1 GETRit + \beta_2 ROAit + \beta_3 LEVit + \beta_4 FSit + eit$	(1)
$NA_{it} = \alpha_0 + \beta_1 CETRit + \beta_2 ROAit + \beta_3 LEVit + \beta_4 FSit + eit$	(2)
$NA_{it} = \alpha_0 + \beta_1 BTDit + \beta_2 ROAit + \beta_3 LEVit + \beta_4 FSit + eit$	(3)

where NA=Negative Accruals a_o=constant GETR it=generally accepted accounting principles effective tax rate at time t CETR it=cash effective tax rate at time t BTD it=book tax difference at time t Lev it=leverage at time t ROA it=return on asset at time t FR it=firm size at time t *e*t=error term at time t i=entity t=time

The table below shows the variables and their measurement.

Measurement of	Variables			
Variables	Measurements			
NA	Measured by profit before extraordinary items plus depreciation minus operating cash flow divided by total assets.			
GETR	Measured by GAAP tax expense divided by profit before tax.			
CASHETR	Measured by cash tax paid divided by profit before tax.			
BTD	Measured by the difference between accounting profit and taxable profit scaled down by total assets.			
SIZE	Measured by the natural log of total assets.			
LEV	Measured by long term plus short-term debt divided by total assets.			
ROA	Measured by profit before tax divided by total assets.			
a	(2021)			

Table 1
Measurement of Variables

Source: Authors' review (2021)

RESULTS AND DISCUSSION

This study used numerical and secondary data for analysis. The data collected were presented and analysed logically and systematically using the tables below.

Descriptive Analysis

Table 2

A summary statistic of the explained and explanatory variables is presented in Table 2.

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Descriptive Statistics					
Variables	Observation	Mean	SD	Minimum	Maximum
GETR	287	-19.51165	307.0954	-51.83662	15.3128
CETR	287	0.0025128	1.813355	-26.7816	11.79752
BTD	287	-0.1941336	14.58498	-244.5202	3.862389
NA	287	-2368492	8.105842	-119.6184	64.24893
Firm size	287	10.0836	0.8842953	7.835545	12.23603
Leverage	287	8.256533	72.33739	-3.104231	737.5428
ROA	287	0.780814	0.304537	-1.102724	3.328261

Table 2 shows the nature of data collected and their distribution. The data set contains 287 observations from 48 listed non-financial firms on the Nigerian stock exchange over seven years from 2014 to 2020.

The mean value of GETR is approximately -19.51165, indicating that, on average, firms get a tax credit of -19.51165 across the industry on profit before tax. The standard deviation of GETR shows the degree of variability from the mean to be high at approximately 307, showing that the value portrayed by the mean could be misleading as there is a very high degree of disparity from the industry average. The minimum and maximum values for GETR as portrayed in the above table are -51.83662 and 15.3128, respectively.

The CETR has a low mean value of 0.0025128, showing that the average income tax paid by listed firm in the non-financial sector is 0.25% of profit before tax. This can be attributable to the low value of GETR of firms across the industry. The standard deviation of 1.813355 shows the degree of disparity from the mean value for CETR. The respective minimum and maximum values are - 26.7816 and 11.79752, respectively, showing that the firm paying the minimum income tax receives

a tax rebate of -26.7816 of profit before tax, and the firm paying the highest income tax pays 11.79752 of profit before tax.

The mean value for BTD shows that the average disparity between book and taxable income for all firms in the industry is -.1941336, while the deviation from the mean is 14.58498. The minimum and maximum values of BTD are -244.5202 and 3.862389, respectively.

The mean values for ROA, leverage and firm size are .0780814, 8.256533, and 10.0836, respectively, showing that the average return on asset for firms in the industry is 0.0780814. Firms are averagely levered at 8.256533, and the average firm size is 10.0836. The standard deviation of ROA, leverage and firm size are .3048537, 72.33739 and .8842953, respectively, all having a high degree of dispersion. The mean value for unconditional conservatism is -.2368492, while the deviation from the mean is 8.105842. The minimum and maximum values for conservatism are - 119.6184 and 64.24893, respectively.

Table 3Correlation Mag	atrix				
Variables	GETR	CETR	BTD	Unconc	LEV
GETR	1				
CETR	0.0784	1			
	0.1853				
BTD	0.9982	0.1309	1		
	0.0000***	0.0266**			
NA	-0.4605	-0.2167	-0.4607	1	
	0.0000***	0.0002***	0.0000***		
LEV	-0.5831	-0.2965	-0.6048	-0.3455	1
	0.0000***	0.0002***	0.0000***	0.0000***	
F-size	0.139	0.069	0.143	0.065	-0.231
ROA	0.0195	0.0152	0.0389	0.0379	-0.0413
	0.7419	0.7973	0.5118	0.5223	0.4863

Note: * Sig at 10%, ** Sig at 5%, *** Sig at 1%.

The correlation coefficient represents the linear association or relationship between two variables: the explained and explanatory and also between the explanatory variables themselves. The correlation matrix is designed to show whether there is a relationship between the IVs and DV. Table 3 indicates that GETR has a low negative correlation with NA (-0.4605), which is significant at a 5% level of significance. Also, CETR has a low negative correlation with NA (0.2167) but significant at a 5% level of significance. The relationship between BTD and NA is negatively low at 46% and significant at a 5% level of significance. The relationship between ROA and NA is positively low at 38% but insignificant at 5%, while that of leverage is negatively low at 35% but significant at 5%.

Regression Results

This section discusses the regression result of unconditional accounting conservatism on tax avoidance. Unconditional accounting conservatism was regressed separately on the three independent variables.

Unconditional Accounting Conservatism and GETR

Table 4 indicates that GETR, FS, and LEV have a negative effect on NA, while ROA has a positive effect on NA. The table also shows that GETR, FS, and LEV influence NA to the tune of 2.6%, 13.7%, and 10.5%, respectively. That is, a unit increase in GETR will lead to a -0.026 reduction in NA. Also, a unit increase in FS and LEV will lead to -0.137, -0.104 reduction in NA, respectively. On the contrary, ROA has a significant positive effect on NA. That is, a unit increase in ROA will lead to a 0.559 increase in NA. This is evident from their respective T-values of -4.58, -2.36, and -2.32 and p-values of 0.000, 0.019, and 0.021, respectively.

Table 4

NA	Coefficient	Т	p-values	
GETR	0264629	-4.58	0.000	
FS	137063	-2.36	0.019	
LEV	1045046	-2.32	0.021	
ROA	0.5594091	2.18	0.030	
Constant	1.448071	2.32	0.021	
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The Estimated Model of NAit = $\alpha 0 + \beta 1 GETRit + \beta 2ROAit + \beta 3LEVit + \beta 4FSit + eit$

R²=0.7806

R², which is the multiple coefficients of determination, gives the percentage or proportion of total variation in the dependent variable explained by the independent and control variables jointly. The result of the R² value of 78.06% indicates that the total variation in NA can be jointly explained by GETR, FS, ROA, and LEV, while the remaining 21.94% is caused by other factors other than those captured in this model.

Unconditional Accounting Conservatism and GETR

Table 5 portrays that CETR, FS, and LEV all have an insignificant negative effect on NA, while ROA has a significant positive effect on NA. This implies that a unit increase in ROA will lead to a 0.704 increase in NA. ROA has a t-statistics of 3.02 and a p-value of 0.003.

R², which is the multiple coefficients of determination, gives the percentage or proportion of total variation in the dependent variable explained by the independent and control variables jointly. The result of the R² value of 22.09% indicates that the total variation in NA is caused jointly by CETR, FS, ROA, and LEV, while the remaining 77.91% is caused by other factors other than those captured in this model.

The Estimated Model	of NAIt = $\alpha 0 + \beta ICEIRit + \beta 2$	2ROAit+β3LEVit+β4	FSit+eit
NA	Coefficient	Т	p-values
CETR	-1.563266	-1.02	0.309
FS	125567	-1.48	0.139
LEV	0505629	-0.81	0.420
ROA	.7042689	3.02	0.003
Constant	1.39573	1.66	0.098

Table 5 The Estimated Model of NAit= $a0+\beta ICETRit+\beta 2ROAit+\beta 3LEVit+\beta 4FSit+eit$

R²=0.2209

Unconditional Accounting Conservatism and BTD

Table 6 shows that BTD, FS, and LEV are all negatively associated with NA, while ROA is positively associated with NA. The table further shows that BTD, FS, and LEV influence NA to the tune of 58.7%, 15.9% and 11.1%, respectively. That is, a unit increase in BTD, FS, and LEV

will lead to -0.587, -0.158, and -0.110 decrease in NA, respectively. On the contrary, a unit increase in ROA will lead to a 1.080 increase in NA. All these relationships are significant at less than 1% level of significance, as shown by the respective values of T and p in Table 6.

 R^2 , which is the multiple coefficients of determination, gives the percentage or proportion of total variation in the dependent variable explained by the independent and control variables jointly. The result of the R² value of 82.58% indicates that the total variation in NA is caused jointly by BTD, FS, ROA, and LEV, while the remaining 17.42% is caused by other factors other than those captured in this model.

The Estimated Model	10 MAII = 0.0 + pIDIDII + p2K	OAII + pJLEVII + pHI	
NA	Coefficient	Т	p-values
BTD	5873011	-5.27	0.000
FS	158914	-2.66	0.008
LEV	1105946	-2.74	0.007
ROA	1.080402	3.90	0.000
Constant	1.657473	2.61	0.009
$P^2=0.8282$			

Table 6

The Estimated Model of NAit= $a0+\beta IBTDit+\beta 2ROAit+\beta 3IEVit+\beta 4ESit+eit$

 $R^2=0.8282$

Test of Hypothesis

Hypothesis 1: H_{ol}: GAAP ETR does not have any significant effect on the degree of accounting conservatism.

The general assumption under the test procedure is that when the p-value is ≤ 0.05 , the null proposition is rejected; else, the study fails to reject the null proposition if the p-value is ≥ 0.05 . From the result of the regression model, the p-value is estimated to be 0.000, indicating that a statistically significant relationship can be inferred from the interaction of the variables considered. It, therefore, means that the null hypothesis fails to stand. As such, the study accepts the alternate hypothesis. Therefore, GAAP ETR has a significant effect on the degree of accounting conservatism.

Hypothesis 2: H_{o2}: CASH ETR does not influence the degree of accounting conservatism.

It can be inferred from the regression model that with a p-value of 0.309, there is statistically no significant relationship between CETR and NA because the p-value of 0.309 exceeds 0.05 alpha level of significance. This translates to the study failing to reject the null hypothesis. Hence, the null hypothesis is not rejected, meaning that CASH ETR does not influence the degree of accounting conservatism.

Hypothesis 3: H_{03} : Tax motivated conservatism is less prevalent for firms with high book-tax conformity.

The regression result for this hypothesis shows a p-value of 0.000, which is less than the alpha value of 0.05 significance, indicating a significant relationship. As such, the null hypothesis that tax-motivated conservatism is less prevalent for the with high book-tax conformity is invalidated. This implies that tax-motivated conservatism is prevalent for firms with high book-tax conformity.

CONCLUSIONS AND RECOMMENDATIONS

After a careful review of the results and relevant literature, the study concludes that:

GETR used as a proxy of tax avoidance has a negatively significant effect on unconditional i. conservatism. This means that the higher the GETR, the lower the degree of conservatism, implying that conservative firms have low GETR.

- ii. The study concludes that CETR does not influence the degree of accounting conservatism, and the negative relationship is insignificant. As such, conservative firms need not pay attention to CETR but other factors that affect conservatism.
- iii. The study finally concludes that tax-motivated conservatism is prevalent for firms with high book-tax conformity, and the relationship is negatively significant. This means that the higher the degree of conformity between book income and taxable income, the lower the level of conservatism. As such, conservative firms should lower the degree of conformity between book and taxable income.

Based on the conclusions above, the following recommendations are made:

- i. The government should, through its relevant agencies, identify loopholes in tax legislation and develop and implement relevant complementary laws to checkmate such loopholes to ensure the loss of revenue through various avoidance techniques does not occur. This can be achieved through regular update of tax laws to avoid usage of obsolete laws.
- ii. The government should identify appropriate mediums through which firms can be enlightened on the political and reputational cost of tax avoidance and its negative effect on firms. This can be achieved through regular organisation of seminars and enlightenment meeting with companies' executive board members
- iii. Regulatory agencies should also look into the concept of conservatism with the aim of limiting management's ability to utilise the concept at the expense of other stakeholders discretionally. This can be achieved through regular update of financial regulations and standards.

Our conclusions may not be generalisable to countries with a lower level of local GAAP that inhibits conservatism in their financial reporting. In addition, the study used only unconditional conservatism as the measure for accounting conservatism. Future studies can utilise conditional conservatism as a measure of accounting conservatism. The study also only used GETR, CETR, and BTD as proxies for tax avoidance. Future studies can operationalise cash taxes paid/operating cash flow, income tax expense/operating cash flow, and long-run cash ETR.

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REFERENCES

- Basu, S. (1997). The Conservatism Principle and the Asymmetric Timeliness of Earnings. *Journal of Accounting and Economics*, 24(1), 3-37.
- Bornemann, T., (2018). *Tax Avoidance and Accounting Conservatism*. WU International Taxation Research Paper Series, No. 2018–04. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3114054
- Desai, A. M & Dharmapala, D (2005). *Corporate tax avoidance and firm value* (National Bureau of Economic Research Working Papers No. 1050).
- Frank, M. M., Lynch, L. J., Rego, S. O. (2004). Does Aggressive Financial reporting Accompany Aggressive tax reporting (and Vice Versa)? <u>https://www.semanticscholar.org/paper/Does-Aggressive-Financial-Reporting-Accompany-Tax-Frank-Lynch/586b23116fe9354974ff06b93ba6b60052a48e1a</u>
- Gan, Z. (2018). Conditional Conservatism and Tax Avoidance. *Unpublished M.Sc Dissertation*. Eramus School of Economics, University of Rotterdam
- Givoly, D. and C. Hayn. (2000). The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative? *Journal of Accounting & Economics*, 29(3), 287-320.
- Khan, M., & Watts, R. L. (2009). Estimation and empirical properties of a firm-year measure of accounting conservatism. *Journal of Accounting and Economics*, 48(2), 132–150. https://doi.org/10.1016/j.jacceco.2009.08.002
- Onyeka, V. N., & Nwankwo, C. (2016). The impact of corporate social responsibility reporting on profitability of Nigerian manufacturing firms. *Research Journal of Finance and Accounting*, 7(16), 227-232.
- Purwantini, H. (2017). Minimising Tax Avoidance by Using Conservatism Accounting Through Book Tax Differences (Case Study in Indonesia). *International Journal of Research in Business and Social Science*, 6(5), 55-67.
- Yuniarsih, N. (2018). The effect of accounting conservatism and corporate governance mechanism on tax avoidance. *Academic Research International*, 9(3), 68-76.