EFFECT OF TAX SHELTERING ON EARNINGS QUALITY OF LISTED OIL AND GAS FIRMS IN NIGERIA

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Abstract

This paper assessed the effect of tax sheltering measured using cash effective tax rate, tax savings and book tax gap on earnings quality (the modified Jones earnings model) of listed oil and gas firms in Nigeria from2017 -2021. Data was sourced from 10 listed oil and gas firms. The paper adopted ex-post facto design. Multiple regression was conducted and the result shows that cash effective tax rate and tax savings have insignificant effect on earnings quality of the sampled firms while book tax gap significantly affect earnings quality of the sampled firms. Based on the findings, the paper concluded that cash effective tax rate and tax savings insignificantly affects earnings quality while book tax gap has a significant effect on earnings quality of the sampled firms. Arising from the conclusion above, the paper recommended that prospective investors as well as business managers should access the book tax gap to find out the quality of earnings in a firm before investing. Even as investors aspire for higher returns, an increase in the tax book gap might give rise to higher returns.

Keywords: Tax Sheltering, Earnings Quality, Cash Effective Tax Rate, Book Tax Gap, Tax Savings

1. Introduction

Information gap exist between management and other stakeholders because of management involvement in the day to day running of the company. With management having at her disposal vital information concerning the company, it is apparent that management will divulge only information that is at par with their interest to other stakeholders including tax authorities. This means that, management can from time to time engage in earnings management to reduce the amount to be paid as tax.

Tax is a compulsory levy by government on citizens and companies to help the government to provide social amenities and carry out other developmental functions for the benefit of the society in general (Tarmidi et al., 2020). Companies are assessed to tax based on their reported earnings. Since tax is a charge against profit, companies tend to deploy creative accounting techniques to ensure that they pay little or no tax so as to maximize their profit (Thanjunpong & Awirothananon, 2019).

Deployment of creative accounting techniques aimed at not complying with tax distort the quality of earnings that is reported in the financial statement. This makes financial statements unreliable for decision making by stakeholders. Low earnings quality has the tendency of misleading stakeholders who rely on the information to take financial decisions about the company in question.

The main aim of the paper is to determine the effect of tax sheltering on earnings quality of listed oil and gas firms in Nigeria, while the specific objectives are to:

i. Assess the effect of cash effective tax rate on earnings quality
ii. Investigate the effect of the book tax gap on earnings quality
iii. Ascertain the effect of tax savings on earnings quality

Arising from the objectives the following hypotheses were formulated for the study as follows:

$H0_1$: The cash effective tax rate does not have a significant effect on earnings quality
H02: Book tax gap does not have a significant effect on earnings quality
H03: Tax savings does not significantly affect earnings quality

2. Literature Review

This section house conceptual clarification, theoretical clarification and empirical studies.

2.1 Conceptual clarification

Here, the concepts of tax sheltering and earnings quality are discussed.

2.1.1 Tax Sheltering

Tax shelter is a vehicle used by individuals and firms to reduce their taxable incomes with the aim of reducing their tax liabilities. Tax shelters are not illegal. They are synonymous to tax avoidance. Tax shelters include investment accounts that provide favorable tax treatment and transactions that lower taxable income via deductions. There are various possibilities for reducing an individual's or corporation's tax liability either temporary or permanently. The entity is referred to as sheltering taxes when these resources are employed to lower a tax liability.

2.1.2Earnings quality

Dechow and Schrand (2004) focused on the analyst perspective in which high-quality earnings that accurately reflect the company's current performance is a good indicator for future performance. Sepe, Nelson, Tan and Spiceland (2012) define earnings quality as the ability of reported earnings (income) to predict a company's future earnings. It is an assessment criterion for how "repeatable, controllable and bankable" a firm's earnings are, amongst other factors, and has variously been defined as the degree to which earnings reflect underlying economic effects, estimates of cash flows, conservative and predictable. To Warshavsky (2012), earnings quality refers to a company's ability to accurately represent its true earnings in its published earnings.

2.2 Theoretical Review

This paper is anchored on prospect theory and tax planning theory, which states that when firms face risks in options of making decisions, firms have the options of using aggressive tax planning activities to reduce its taxable income, as to increase its earning.

Compliance theory explains that a person takes an action that is obedient or does not comply with the provisions due to two things, namely the individual approach and the economic approach (Devos, 2012). The company complies with the tax provisions because in addition to being aware that taxes are an obligation of all citizens also to avoid the cost of tax penalties that reduce the level of profitability of the company.

2.3 Empirical Studies

Satyawati and Palupi (2017) worked on the influence of book tax differences on the correlation of current earnings, accruals and cash flows with future earnings on the basis of 147 registered firms listed on the Indonesian Stock Exchange from 2007 to 2011. Their study used pre-tax book income, large negative temporary tax differences, large positive temporary tax differences and earnings before tax of the current period to measure the independent and dependent variables. Using regression analysis to analyse the effects between the variables. Results show that large negative temporary tax differences are insignificant and do not affect the accounting earnings, which means that firms with large negative temporary tax differences may not be able to realise their future earnings. Secondly, large temporary tax differences have a positive significant effect on earnings quality, meaning that firms with large positive temporary tax differences will persist to low tax returns due to their accrual, which affects their earnings quality

Tarmidi et al. (2020) examine the effect of tax compliance on earnings quality and financial performance using 332 Indonesian and manufacturing companies in Thai for four years (2014-2017). Result show that earnings quality does not have a significant effect on financial performance while tax compliance significantly affect financial performance.

Kimouche (2022) assess the impact of deferred tax on earnings quality as a required attribute to achieve the objective of financial reporting. The study used the model of Sloan (1996) through 280 firm-year observations that concern 40 Algerian companies from 2013 to 2019. Employing persistence and predictive ability as proxies for earnings quality, the results show that earnings of Algerian companies present a high level of persistence and a weak level of predictive ability. However, the deferred tax does impact neither the persistence of earnings nor their predictive ability.

Osegbue et al. (2018) examined the effect of tax sheltering measured by cash effective tax rate, long-term effective tax rate, taxsavings, book tax gap, temporary difference of tax shelter and permanent difference of tax shelter on the modified Jones earnings model (earnings quality management) for eight years (2009 – 2016). Using 116 listed companies on the Nigerian stock exchange as sample. Using panel multiple regression, result shows that tax sheltering have a significant and positive effect on modified Jones earnings model (earnings management).

3. Methodology

The paper used ex post facto design. Secondary data were sourced from the audited accounts of 10 quoted oil and gas companies for 5 years (2017-2021).

In specifying our panel regression model of the effect of tax sheltering on earnings quality, our major variables are the cash effective tax rate (CETR), long term effective tax rate (LTETR) and tax savings (TS).Earnings quality is measured based on the method used by Marai1 and Pavlović (2014).

Table 3.1 variables and their measurements

Nature of variable	Name of variable	Measurement
Dependent	EM	DAt = {TAt} - {(βoi (1/Tt-1) + β1i (ΔREVt - ΔRECt)+ β2i (PPEt)}
Independent	CETR	Total tax expenses divided by the income before tax
	BTG	Total tax expenses divided by the income before tax; uses the tax information for multiple years
	TS	difference between the statutory tax rate and the effective tax rate

The panel regression with an error term (μi) is expressed thus:

ModifiedJonesit = f (CETR + BTG + TS)…. (1)

ModifiedJonesit = αi + β1 CETRit + β2 BTGit + β3 TSit + μi …… (2)

Where, αi = constant,

EMit = earnings management,

CETR it = cash effective tax rate,

BTG it = long-term cash effective tax rate,

TSit = tax savings,

μit = error terms

Dependent Variable: MJM = modified Jones model.

The model estimates firms' abnormal accruals (discretionary) based on some economic and accounting fundamentals using time series regression used by Dechow, Ge and Schrand (2010).

μt = DAt = {TAt} - {(βoi (1/Tt-1) + β1i (ΔREVt -ΔRECt)+ β2i (PPEt)}

4. Result and Discussion

Table 4.1: Summary Statistics

VARIABLE	OBS	MEAN	STD. DEV	MIN.	MAX.
EM	50	0.097	0.013	0.05	0.12
CETR	50	7	2.69	0	9.
BTG	50	8	3	3	14
TS	50	0.331	0.301	0	0.78

Earnings management (EM) which is the dependent variable of the study has an estimated minimum value of 0.05, maximum value of 0.12 and an average value of 0.097with standard deviation of 0.013.Table 4.1 also revealed the mean statistics in respect to CETR to be 7 with a standard deviation of 2.7. The minimum value of CETR is 0 and the maximum value is 9.01.The mean statistics for BTG is estimated at 8 with a standard deviation of 3. The result revealed a minimum of 3 and a maximum of 14.TS as presented in Table 4.1 reflect an estimated mean of 0.331 with a standard deviation of 0.301. The minimum and maximum values are 0 and 0.78 respectively.

Table 4.2 Summary of OLS Regression Results

EM	Beta Coef	Z-values	P –value
CETR	.0007106	1.29	0.189
BTG	-.0003628	-0.73	0.470
TS	-.0018648	-0.37	0.708
Constant	.0763733	3.10	0.002
R^2		0.3789	
Prob> F		0.0000	
Obs		50	

Table 4.2 shows that the f-statistic is significant (0.0000). This means the model is well fitted, while the coefficient of determination R^2 of 39.89% explains that tax sheltering has combined predictive power of 37.89% on earnings management of listed oil and gas firms in Nigeria, while the remaining 62.11% is accounted for by factors not captured in the model.

4.1 Test of Hypotheses

Hypothesis One

$H0_1$: *Cash effective tax rate does not have a significant effect on earnings quality*

CETR according to Table 4.2, has a coefficient of -0.oo7 and p-value 0.18 which implies a negative and insignificant effect on earnings quality. Hypothesis one is therefore accepted. This implies that an increase in the cash effective tax rate of the sampled firms lead to an insignificant decrease in earnings quality. This result is similar with Frank, Lynch and Rego (2009) and Demeré et al. (2017)

Hypothesis One

H02: *Book tax gap does not have a significant effect on earnings quality*

BTG has a coefficient of -0.0003 and p-value 0.03.Since the p-value is less than 0.05, we therefore reject hypothesis two and accept the alternate that book tax gap significantly affect earnings quality. The finding agrees with Gunther, Hu, and Williams (2013) and Abdul Wahab and Holland (2014.)

Hypothesis One

H03: *Tax savings does not significantly affect earnings quality*

TS has a coefficient of -0.0018 and p-value 0.07.Since the p-value is greater than 0.05, we therefore accept hypothesis three and conclude that tax savings do not significantly affects earnings quality of listed oil and gas firms in Nigeria. This finding, is in tandem with Eko (2013) and Li (2014)

5. Conclusion and Recommendations

This paper concludes that, cash effective tax rate and tax savings insignificantly affects earnings quality while book tax gap has a significant effect on earnings quality of the sampled firms. Arising from the conclusion above, the paper recommends that prospective investors as well as business managers should access the book tax gap to find out the quality of earnings in a firm before investing. Even as investors aspire for higher returns, an increase in the tax book gap might give rise to higher returns.

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