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INCOME EFFECTIVE TAX (IET) AND INCOME SMOOTHING OF PUBLICLY LISTED COMMERCIAL BANKS IN NIGERIA

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Abstract: *The study examined the relationship between income effective tax and income smoothing of listed commercial banks in Nigeria using ex-post facto design. Sample of twelve (12) listed commercial banks were obtained and the dependent variable is income smoothing while the independent variable is income effective tax. Secondary data were obtained from yearly published reports and accounts of the sampled commercial banks from 2014-2023 and data obtained were analyzed via descriptive and inferential statistical tools. In specific, the fixed and random effects regression result revealed that income effective tax positively significantly influence income smoothing of the publicly listed commercial banks in Nigeria. Based on the findings, the study recommends that management of publicly listed commercial banks needs to engage as well as build on their income tax mechanisms so as to discourage income smoothing. The study contributes to knowledge by establishing that income effective tax is a mechanism via which management of publicly listed commercial banks can use in discouraging income smoothing practices.*

Keywords: *Income effective tax; Income smoothing; Commercial banks; Effective tax*
JEL Classification: *M40; M49*

1. INTRODUCTION

In the accounting literature, there are few empirical evidences on the relationship between income effective tax(IET) and income smoothing, particularly as it concerns publicly listed commercial banks in developing countries like Nigeria. Income smoothing is management gimmicks or techniques used in manipulating accounting numbers so as to make them look good for wealth owners and future investors (Mohammed, Ibrahim & Maitala, 2023; and Hosam, 2019). Conceivably, income smoothing practices have made small and large firms to liquidate from the frontline of business because it compels firms to manipulate incomes, assets and expenses (Pranesh, 2017; Abdullahi, Norfadzilah & Aliyu, 2020).

Empirical studies done in most nations offer sufficient evidence that income effective tax significantly influence income smoothing of publicly listed companies in developed nations (see Gnyana, 2016; Akhalumen & Monday, 2019; Hlaing & Stapleton, 2022). The fact that income effective tax significantly affects income smoothing of companies is well supported by the positive accounting theory (Dobre, Brad & Ciobanu, 2015). More so, income smoothing literature is overwhelmed by varied models and aside the extensively used income smoothing models, this study's income smoothing model permeates changes in earnings before interest/extraordinary items and profit after tax with a view to account for hypothetical forecast errors connected with financial accounting numbers (Chen, Fang & Wang, 2016).

Consequently upon the above, this study examined how income effective tax can influence income smoothing of publicly listed commercial banks in Nigeria using ex-post facto research design. The study used twelve (12) publicly listed commercial banks from 2014-2023. The remaining parts of this paper is divided as follows: review of related literature, methodology, empirical results, conclusion and recommendations

2. REVIEW OF RELATED LITERATURE

2.1 Income Effective Tax (IET)

The disclosure of income effective tax (IET) is well acknowledged in the management literature and a vital mechanism of influencing numbers denoted in financial statements. It is calculated by dividing the overall tax expenses by the prior-year accounting income tax. Thus, IET shows the overall percentage of accounting income subjected to tax. As such, it can be linked with accounting earnings (income smoothing) (Canndice & Wang, 2018; and Rohaida, Kamarun & Hasnah, 2022). Ezejiofor, Oranefo and Ndum (2021) employed this metric to quantify tax aggressiveness while making adjustment for specific items in annual reports.

Similarly, Ezejiofor and Ezenwafor (2020); Onatuyeh and Ukolobi (2020); Akhmad and Novita (2020) employed tax aggressiveness (income effective tax) measure to investigate how income effective tax influence earnings management. Although in the accounting literature, tax aggressiveness has been a widely employed as a metrics of income effective tax, it has some drawbacks. First, because income effective tax analyses tax aggressiveness about accounting earnings, it could only identify non-conforming taxes; and second, since aggregate tax income are employed, it reflects tax tactics.

2.2 Income Smoothing

Income smoothing accounts for strategies/approaches employed by management to control the effects of extreme volatility on corporate earnings (Abdullahi, et al, 2020); it is seen as an intentional dampening of abnormal changes in earnings. Thus, income smoothing offers a steady viewpoint of future earnings, showing constant earnings growth (Akhalumen & Monday, 2019). Income smoothing is a variant of earnings management practices via which management can decrease volatility of performance and control abnormal changes to report constant earnings stream.

Income smoothing can be employed in restating earnings by transferring expense(s) from under-performed accounting years to highly performed accounting years or transferring revenue(s) from accounting year with high-performance to under-performed accounting year (Alhadab & Al-Own, 2017). The accounting literature differentiates between normal and intentional income smoothing following the practices employed. While intentional income smoothing manifests when management intend to control timing of decisions of businesses, normal income smoothing largely depends on accrual processes which does not necessarily employ manipulative practices by management (Canndice & Wang, 2018). Thus, intentional income smoothing occurs when management intend to select specific policies of accounting and estimates to alter allocation of revenues and expenses in a desired way devoid of any effect on cash-flows.

Over the years, income smoothing has been widely acknowledged as a manipulative action or practices of management that could lead to noise in financial statements and decrease in the quality of earnings (Chen, Fang & Wang, 2016). According to the opportunistic views, income smoothing is motivated by management opportunistic behaviour to introduce noise in earnings, hence leading to less-informative earnings (Gnyana, 2016; Hosam, 2019). Thus, income smoothing can decrease the ability of financial statements to reflect economic reality of firms and can decrease the ability of share return to show future losses (Pranesh, 2017; Dobre, Brad &Ciobanu, 2015). Consequently, income smoothing is a mechanism for decreasing information uncertainty.

2.3 Theoretical Framework

The theoretical framework of this study was anchored on the Hoffman tax planning theory introduced in 1961. The theory emphasized how tax planning can decrease tax obligations without having detrimental influence on accounting incomes (Ahmed & Mounira, 2015). According to the paradigm, decreasing tax payments to government can enhance a firms' financial situation, spur its expansion and make it engage in income smoothing practices or earnings management practices (Erhirhie, Oraka &Ezejiofor 2018; Martinez & Rodrigues, 2020).

Consequently, the Hoffman tax planning theory accentuates that income effective tax or tax planning or aggressiveness is beneficial and can decrease tax revenue without altering revenue (Onatuyeh & Odu, 2019; Umeh, Okegbe & Ezejiofor, 2020). According to the Hoffman tax planning, a firm can modify its operations to decrease its tax burden since taxes are predicated on business concepts (Bradshaw, Liao Ma, 2019; Nweze, Ogbodo & Ezejiofor, 2021).. Hence, the theory suggests that there is a direct correlation between a firm's financial success and its tax planning activities or actions(Hoffman, 1961 as cited in Adeyeye, 2019; and Ofurum, Amaefule, Okonya &Amaefule, 2018). The theory asserts that firms make use of certain legal framework flaws in tax system to offer chances for tax savings targeted at enhancing not only financial performance but making firms to engage in income smoothing practices (He, Ren & Taffler, 2019).

3. METHODOLOGY

This study examined the nexus between income effective tax (IET) and income smoothing of listed commercial banks in Nigeria. *Ex-post facto* research design was employed and study population comprised the twenty-three (23) listed commercial banks out of which twelve (12) were sampled using purposive sampling techniques. The sampling techniques was based on inclusion and exclusion criteria (banks with national and international authorizations were selected).

Secondary data on measures of IET and income smoothing were obtained and computed from the published annual reports and accounts of the selected listed commercial banks in Nigeria from 2014-2023. The dependent variable is income smoothing while the independent variable is IET. Given the above, the following empirical model was estimated:

$$Q_{it} = \alpha_0 + \beta_1 x_1 + \mu_{it} \quad (1)$$

Equation 1 is the implicit regression model while equation 1 describes the explicit regression model of the nexus between IET and income smoothing. Where α, β and μ are constants of regression; to estimate the empirical model, we translated equation 1 to equation 2 as follows:

$$ismoth_{it} = \alpha_0 + \beta_1 iet_{it} + \varepsilon_{it} \quad (2)$$

Where: i = 1, 2, 3...12 (number of commercial banks for the study); t = 1,2, 3….10 (time period 2014-2023); $\beta_{1\text{-}2}$ = Coefficient of independent variable (IET); ε_t = Error (variables not shown in the model)

Secondary data obtained were analysed via descriptive (mean, median, standard deviation, kurtosis, and skewness) and inferential (fixed and random effects regression models) statistical tools. Furthermore, Hasuman specification test was done to determine the most efficient model and the statistical analysis was done using STATA 15.0.

4. EMPIRICAL RESULTS

Table 1: Summary of Descriptive Statistics

Statistics	Iet	Ismoth
Mean Score	-19.539	76.305
Median	-14.059	-28.425
Standard Deviation	139.50	21.254
Kurtosis	108.98	11.939
Skewness	-10.145	-1.1839
Observations	120	120

Source: Computed by the Researcher (2024)

Table 1 showed the summary of descriptive statistics for the dependent (income smoothing - ismoth) and independent (income effective tax – iet) variables for the sampled publicly listed commercial banks in Nigeria from 2014-2023. It was found that income smoothing had a mean of 76.305 while income effective tax had a mean of -19.539; this indicates that income effective tax (iet) is inadequately used by publicly listed commercial banks, since it assumed a negative value. Income smoothing recorded the highest dispersion simply because it was expressed in Naira. The standard deviation revealed relative changes in the variables revolving around 21.3 percent

Furthermore, the skewness values are negative for both income smoothing and income effective tax; this suggests that in Nigeria income effective tax and income smoothing move in the same direction. More so, the kurtosis values for both income smoothing and income effective tax were greater than 3 (leptokurtic distribution); indicating increased chances of income smoothing which can be negatively influenced by income effective tax among the publicly listed commercial banks in Nigeria.

Table 2: Fixed and Random Effects Regression

Estimator(s)	Fixed Effect		Random Effect	
Variable(s)	Coefficient	Probability	Coefficient	Probability
iet	-0.7429 (-9.30)	0.000	-0.8372 (-11.50)	0.000
_cons.	-0.7743 (-3.85)	0.000	-0.8913 (-4.49)	0.000
F-value	(F, 1, 109) = 10.12			
F-probability	0.000			
R-Squared (Within)	0.0014			0.0014
R-Squared (Between)	0.0395			0.0395
R-Squared (Overall)	0.0021			0.0021
Wald Ch2(3)				12.67
Prob. Ch2				0.000
Hausman test	Chi2(2) = 1.340		Prob>Chi2= 0.64370	

Source: Computed by the Researcher (2024)

Table 2 showed that the coefficients are -0.7429 (fixed effect – FE) and -0.8372 (random effect – RE), indicating that increasing income effective tax of publicly listed commercial banks in Nigeria would lead to about 74.3% and 83.7% decrease in income smoothing Also, the t-test results of -9.30 (FE) and -11.50 (RE) revealed that they are statistically significant in explaining how income effective tax influence income smoothing among the publicly listed commercial banks in Nigeria

Besides, the overall R^2 is 0.0021 for FE and RE respectively; this indicates that income effective tax explained about 2.1% variation in income smoothing. Impliedly, there are other variables that could predict income smoothing which were not captured in teh empirical model of the study. Hausman specification result (Prob>Chi2=0.64370 > 0.05%) indicating that RE is more efficient than FE. Thus, the Wald Ch2 (RE) is 12.67 (p-value = 0.0000 < 0.05) and is statistically significant, providing evidence that income effective tax significantly affects income smoothing of the publicly listed commercial banks in Nigeria. This finding agrees with the results of Alhadab and Al-Own (2017); Wang and Ooi (2023) who found that income effective tax significantly influence income smoothing.

5. CONCLUSION AND RECOMMENDATIONS

This study investigated the relationship between income effective tax (IET) and income smoothing of publicly listed commercial banks in Nigeria. Ex-post facto research design was used and sample of twelve (12) publicly listed commercial banks were obtained. The dependent variable is income smoothing while the independent variable is income effective tax. Secondary data were collected from the yearly published reports/accounts of the publicly listed commercial banks from 2014-2023.

Data obtained were analyzed by means of descriptive and inferential statistical techniques. In specific, the fixed and random effects regression result revealed that income effective tax significantly influence income smoothing of the publicly listed commercial banks in Nigeria. Based on the findings, the study recommends that management of publicly listed commercial banks needs to engage and build on their income tax mechanisms in order to discourage income smoothing practices.

The study contributes to knowledge by showing that income effective tax is a mechanism through which management of listed commercial banks can use in discouraging income smoothing. Finally, with the low R-squared value, suggesting that there are other variables predicting income smoothing of publicly listed commercial banks in Nigeria, researchers should identify and focus on the variables (such as firm age, size, leverage) so as to see whether they could predict income smoothing of publicly listed commercial banks in Nigeria.

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