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AN EMPIRICAL EVALUATION OF TAX AGGRESSIVENESS ON OPERATING CASH FLOWS OF SAMPLED NIGERIAN BANKS

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ABSTRACT

This paper critically evaluated the extent to which tax aggressiveness affect operating cash flows (OCF) of 12 sampled Nigerian banks from 2012- 2021. The regressor is tax aggressiveness measured by accounting ETR, cash ETR, and income tax expense-ITE while the regressand is OCF measured by volumes of OCF. The study sourced data from the financial reports of the 12 sampled Nigerian banks. Specifically, descriptive statistics that were employed include mean, median, standard deviation, minimum and maximum value, skewness, kurtosis, and Correlation, diagnosis tests (variance inflation factor), and inferential statistics (panel least square estimate). The study evidenced that, a negative and negligible association among the tax aggressiveness proxies individually and OCF amongst the sampled banks within the reviewed periods. On the overall, tax aggressive has no discernible implicit effect on OCF of the 12 sampled Nigerian banks within the reviewed periods. Hence, the paper concludes that, the paper concludes that, the paper concludes high OCF is caused by tax aggressiveness. As such, the paper submits that, the sampled banks are advised to re-evaluate their asset base.

Keywords: Tax Aggressiveness, Effective Tax Rate, Cash Effective Tax Rate, Income Tax Expense, Operating Cash Flows, Sampled Nigerian Banks.

INTRODUCTION

One of the most paramount corporate policies which determine a firm's going concern is its tax policies. Justifiably, the International Accounting Standard (IAS 12) states that tax expenses are the total amount of tax taken into consideration when determining companies' profit or loss and may include both current and deferred taxes. A company's profit after tax is largely determined by tax expenses, and they play a significant role in ensuring that a firm's income is maximized by putting ideas to cut tax expenditure (Onatuyeh & Ukolobi, 2020). In general, tax expenses fall within a company's operating expenses and are seen as costs incurred while paying taxes to the government such as Company Income Tax (CITA). Ezejiofor, Oranefo, and Ndum (2021) stated that tax expenses are typically big expenses for companies that temporarily seek to restrict liquidity.

Generally speaking, tax burden increases with its earnings (Darmadi & Luliakha, 2013); as a result, a corporation needs to figure out how to claim smaller profits in order to pay less in taxes while maintaining a consistent liquidity level (Amrie & Reza, 2019). Ezejiofor and Ezenwafor (2020) sees tax aggressiveness raises net cash flow, which may then be utilized to pay down debt, fund company investments, or return money to shareholders such as dividends or share buybacks. As noted by Adeyeye (2019), tax aggressiveness legitimately aims to maximize profits once a company's debts to stakeholders and the government have been settled. Accordingly, tax aggressiveness describes the forceful aspect of tax evasion (Akpabi & Igbekoyi, 2019). Generally, tax-aggressive strategies are used to lower taxes, boost after-tax profits per share, and enhance cash on hand for shareholders (Lanis & Richardson, 2011). Since doing so shifts money accruable to the government to them and supports the company's purpose of maximizing shareholder value, shareholders typically prefer that management take a more aggressive tax stance (Martinez & Rodrigues, 2020).

Even Nevertheless, many businesses use tax evasion as a means of lawfully reducing their tax responsibilities, despite the fact that the National Tax Policy of Nigeria was created in 2017 to lessen the impact of tax system deficiencies in Nigeria. Because of this, the management of many businesses increasingly includes tax aggressiveness as a crucial duty in their corporate strategy (Umeh, Okegbe & Ezejiofor, 2020). There have also been few studies, to the researcher's knowledge, on tax aggressiveness and OCF of Nigerian banks. Evidently, pmost revious studies (Landry, Deslandes, & Fortin, 2013; Blouin, 2014; Ahmed & Mounira, 2015; and Onatuyeh & Odu, 2019) focused on tax aggressiveness and performance, board ownership, firm value, among others; this gap study aimed at filling.

The following study questions are posed so as to obtain a thorough grasp of the effects of tax aggressiveness on OCF of sampled Nigerian banks from 2013 to 2022:

- i. What impact does accounting ETR have the operational cash flow of Nigerian sampled banks?
- ii. How does cash ETR impact the operational cash flow of Nigerian sampled banks?
- iii. How does income tax expense affect the operational cash flow of Nigerian sampled banks?

LITERATURE REVIEW

Conceptual Review/Linkages

Generally, tax aggressiveness refers to a broad continuum of activities that range from behaviour that was envisioned by tax policies at one end, to outright tax fraud and tax evasion at the other hand (Hanlon & Heitzman, 2010). According to Chen, Chen, Cheng and Shevlin (2010), tax aggressiveness is defined as the effort of the firm to reduce tax payment using tax planning & tax avoidance. Also, Fran Lynch and Rego (2009) describe tax aggressiveness is a deliberate act of lowering tax liabilities.

Notable measures of tax aggressiveness include current effective tax rate, cash ETR, effective tax rate, and income tax rate. First, is obtained by dividing the entire accounting income before taxes by the current-year tax expense, which is slightly different from the accounting ETR while cash ETR refers to pre-tax income that has been adjusted for exceptional items and ceased operations in the denominator and taxes paid in the numerator. Further, ETR is obtained by dividing tax expense by income. It refers to the overall percentage of accounting income that is subject to taxation. Lastly, income tax expense reflects only the non-conforming tax avoidance. It is also a measure which does not measure tax avoidance relative to accrual accounting.

Conversely, for analysts, creditors, shareholders, and other stakeholders, operational cash flow is the most reliable measure of a company's financial health (Osisioma et al., 2020). Furthermore, one of the most important metrics for evaluating the financial health of a company's core business activities is operational cash flow (OCF). Furthermore, a company's operational cash flow, which is derived from sales and services, serves as a barometer for the income generated by its routine business operations. It can be a more reliable gauge of a firm's financial health than other earnings measures. Moreover, OCF is difficult to control using accounting techniques.

Theoretical Underpinning

The anchored theory is the Hoffman Tax Planning Theory. This theory was promulgated by Hoffman in 1961. This theory supports the reduction of tax payments to the government thereby increasing the financial position and growth of an organization (Nwaobia & Jayeoba, 2016). This theory asserted that taxation is based on business concepts, thus, an organization can adjust business activities to reduce the tax burden. Therefore, the theory proposes a direct or positive linkage between tax planning activities and the financial performance of a firm (Hoffman, 1961; Omesi & Appah, 2021). Hoffmann (1961) stresses that, firms capitalize on some loopholes in existing tax laws to take increase their earnings.

Empirical Review

Olaniyi (2022) investigated the effect of firm liquidity on the tax aggressiveness of Nigerian deposit money banks. A research design known as ex-post-facto was adopted in the study. 13 listed deposit money banks in the Nigerian Exchange Group make up the sample size (NGX). Secondary data, which were taken from the annual reports and financial statements of the chosen banks for the nine years of 2012-2020, were used in the study. The panel regression was considered. The results demonstrated that, book-tax differences, liquidity, & firm size has negligible negative influence on tax aggressive. This was reaffirmed supports the earlier findings of Omesi and Appah (2021) even when they focused on the food and beverage industry.

Conversely, Onatuyeh and Ukolobi (2020) reported that, committee's vigilance, audit fees and the board's independence all positively and considerably affected the tax aggressiveness of the 107 sampled firms in Nigeria from 2011 to 2016.

Using the panel regression approach, Martinez, Brito, and Chiachio (2020) reported that, tax preparation is a key element in keeping the job of CEOs in the Brazilian economy from 2010 to 2016.

Umeh et'al (2020) investigated the impact of tax preparation on corporate value in listed consumer firms in Nigeria. The research will be based on data from annual public financial and non-financial reports from 2009 to 2018. The three hypotheses were investigated using OLS with the help of E-Views 9.0. This study discovered that tax aggressiveness (ETR) negatively influenced business value, but that this impact is small

Adejumo and Sanyaolu (2020) examined the effect of tax planning on the Nigerian banks' profit based. The study employed the panel regression technique and it was found that tax planning negatively influenced bank profitability though such influenced was highly significant.

Kayode and Folajinmi (2020) analyzed the impact of tax planning on the performance of food and beverage Nigerian from 2008 to 2018 was analyzed with OLS. It was revealed that, ETR capital intensity & thin capitalization negatively the performance of food and beverage Nigerian from 2008 to 2018 though such impact was highly significant.

METHODOLOGY

The paper adopted the ex-post-facto and longitudinal data research design will be adopted which is seen as a combination of both cross-sectional & time-series design properties. The choices of this research design are hinged on the fact that the data that obtained already existing and the researcher do not have room to manipulate or change the data as the event(s) occurs.

Out of the twenty (20) banks listed in the financial sector of Nigeria as at 31st December 2021, 12 banks were selected. The research covered ten (10) financial years (2012- 2021). While the test of correlation measures the degree tax aggressiveness is related to OCF. This model is also referred to as balanced panel regression due to its ability to use cross-sectional & time series data. Specifically, descriptive statistics that were employed include mean, median, standard deviation, minimum and maximum value, skewness, kurtosis, Correlation, diagnosis tests & inferential statistics (panel least square estimate). Thus, the econometrics software - STATA 13.0 was used for the data analysis.

Econometrically, the model adopted is presented below:

$$OCF = a_0 + a_1 BETR_{it} + a_1 CATR_{it} + a_1 ITE_{it} + \mu_t \quad \text{Eq.1}$$

Where:

U_t Error Terms

it Firms at time t.

$a_0, a_1, a_2,$ Constant Coefficient

Evidently, all the tax aggressiveness and operating cash flow proxies are presented in table 1:

Table 1
Variable Measurement and Source

Variables	Type	Definition	Measurement	Source	Apriori Expectation
OCF	Dependent	Operating Cash Flow	Net Income Plus Non Cash-Expense Minus Increase In Working Capital	Ross et al (2013)	Nil
BETR	Independent	Accounting ETR	$\frac{TOTAL TAX}{PRE TAX INCOME}$	Zyreng et al (2018)	+
CAETR	Independent	Cash ETR	$\frac{CASH TAX PAID}{PRE - TAX INCOME}$	Dyreng et al (2008, 2010)	-
ITE	Independent	Income tax expense	$\frac{INCOME TAX ENPENSE}{PRE - TAX INCOME}$	Lanis and Richardson (2012)	+

Source: Research Compilation, 2023

RESULT ESTIMATES AND DISCUSSIONS

Preliminary Analysis

The following preliminary analyses were considered before running the main regression estimate:

Table 2

Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
OCF	120	.0248333	.0799263	-.17	.23
BETR	120	-10.34467	19.67829	-97.82	100.16
CATR	120	12.97983	10.90621	-4.28	64.75
ITE	120	-8.546883	11.64131	-46.658	12.372

Source: Researcher's Computation, 2023.

With data from 12 banks in Nigeria over a 10-year period is 120. As observed, TAG measured as (BETR, CATR and ITE) has a mean value of 10.34467, 12.97983 and -8.546883 with a standard deviation of 19.67829, 10.90621 and 11.64131 respectively. The maximum (highest) and minimum (least) values stood at 100.16, 64.75, 12.375 and -97.82, -4.28, -46.678.

With regards to the regressand, Table 2 evidenced that, OCF recorded means and standard deviations of .0248333, .0799263, .5818977, .3931703 respectively. The maximum (highest) and minimum (least) values stood at 98.96, 3.13, .23, 10.124, 9.842 and 86.26, .54, -.17, 6.757, 8.241 respectively.

Table 3
Result of Correlation Analysis

Variable	OCF	BETR	CATR	ITE
OCF	1.0000			
BETR	-0.3547	1.0000		
CATR	0.8412	-0.1223	1.0000	
ITE	-0.5630	0.4079	-0.24342	1.0000

Source: Researcher's Computation, 2023.

From table 3, the correlation coefficient among the regressed (OCF) and BETR and ITE are negative. Meanwhile, the correlation coefficient between the regressed (OCF) and CATR is positive and strong. A further cursory look at the results indicated that the regressors reported low possibility of the existence of multicollinearity. This is evident in the Pearson *R* between pairs of regressors that was found to have ranged from -0.1223, 0.4079 and -0.24342. Since no pair of independent variables had Pearson *R* that is above 0.80, we thus argue that the regressors do not have issues of multicollinearity. To confirm this assertion, the model is subjected to other diagnostic tests.

Other Diagnostic Tests

To further ensure the fitness of the model specified, the data obtained for the entire variables were further subjected to selected diagnostic tests. The results of the diagnostic tests are presented in the following section.

Table 4
Variance Inflator Factors-VIF

Variable	BETR	ITE	CATR	Mean VIF
VIF	1.26	1.22	1.11	1.11
1/VIF	0.79	0.82	0.90	

Source: Researcher's Computation, 2023.

According to Table 4, the independent variables' VIF range remained below the conventional VIF threshold (1.11:1.26<10.00). The average variance of the calculated VIF, 1.11, indicates that there is not any multicollinearity among the regressors.

Regression Estimate

The main regression estimate is presented is presented thus:

Table 5

Panel Least Square Regression-PLS Estimate (TAG and OCF)

Variables	Symbol	Coefficient	t-Statistics	P>(t)
Constant	_CONS	.01762	1.51	0.135
Acct EFT Tax Rate	BETR	-.0004328	-1.06	0.292
Cash EFT Tax Rate	CATR	-.0006385	-0.92	0.359
Income Tax Expense	ITE	-.0012897	-1.89	0.061
Number of Obs.			120	
F(3, 116)			2.37	
Prob> F			0.0741	
R-squared			0.0578	
Adj R-squared			0.0334	

Source: Researcher's Computation via STATA 13.0 * significant at 1% level; ** at 5% level

The PLS estimate is shown in Table 5. It seems sense to regress BETR, CATR, and ITE first on operational cash flow. After closely examining the data, it can be seen that the coefficients for BETR, CATR, and ITE are, respectively, -.0004328, -.0006385, and -.0012897. It is proposed that there is a negative correlation between operational cash flow (OCF) and the explanatory variables BETR, CATR, and ITE. It can be inferred that tax aggressiveness accounts for approximately 4.56% of the average systematic changes in OCF of the sampled enterprises. R-squared and Adj R-squared stand at 5.78% and 3.34%, respectively.

According to the model diagnostics, the t-statistic and p-value for BETR, CATR, and ITE were -1.06, 0-0.92, -1.89, and 0.292, 0.359, 0.061, respectively. By implication, BETR, CATR, and ITE individually negatively influenced OCF within the reviewed periods.

Overall, tax aggressive has no discernible implicit effect on OCF of the 12 sampled Nigerian banks within the reviewed periods. While our findings conflict Damayanti and Susanto (2015) findings, it conforms to Nugroho & Firmansyah (2017) & Nwaobia and Jayeoba (2017) findings.

CONCLUSION AND RECOMMENDATIONS

Having formulated and tested the research hypotheses accordingly and reported each of our findings, the paper thus concludes that, high OCF is caused by tax aggressiveness. As such, the following submissions were made:

1. To solve their cash crunch problems, the sampled banks are advised to re-evaluate their asset base.
2. Regulatory bodies should make conscious efforts to monitor the degree of compliance of banks with tax laws in regards to the preparation and publication of financial reports to ensure that they are prepared in accordance with regulatory frameworks and standards for healthy practices.

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