

## **TAX APPROXIMATIONS AND FIRM PERFORMANCE: A STUDY OF LISTED FINANCIAL FIRMS IN NIGERIA**

Prof. Ngozi G IHEDURU<sup>1</sup>, Dr. Stanley Diepiriye DAVIES<sup>2</sup>,  
Dr. Charles U. OKORO<sup>2</sup>, and Dr. Domale EMAH<sup>3</sup>

<sup>1</sup>Department of Accountancy, Imo State University, Owerri,

<sup>2</sup>Department of Accountancy, Kenule Beeson Saro Wiwa Polytechnic Bori, Rivers State,

<sup>3</sup>Department of Banking and Finance, Kenule Beeson Saro Wiwa Polytechnic Bori,  
Rivers State

### **ABSTRACT**

**T**his study examined the effect of tax estimates on the performance of financial firms in Nigeria. The study specifically sought to explore the extent of the effects of current and deferred taxes on the return on assets (ROA), return on equity (ROE), and earnings per share (EPS) of listed financial firms in Nigeria. Data were collected from the published annual reports of 20 financial firms – 10 banks and 10 insurance companies – from 2013 to 2023, using purposive sampling technique; and these were analyzed using the fixed/random panel regression model. The results showed that current tax has significant positive effects on ROA and ROE but an insignificant positive effect on EPS. In contrast, deferred tax has significant negative effects on both ROA and EPS but an insignificant positive effect on ROE. Consequently, tax estimates strongly influence the financial performance of financial firms in Nigeria. Thus, it was recommended that the management of financial companies should not incur unnecessary costs on tax assessment, as tax liabilities do not have negative effects on their financial performance of firms in the financial sector. More so, managers should give greater preference to deferred tax liabilities than assets in order to ensure better financial performance.

**Keywords:** Tax Estimates, Firm Performance, Financial Firms, Nigeria

*JEL Classification Code:* M41, H25

## **1. INTRODUCTION**

The sustainability of financial institutions continues to remain a crucial objective at both micro and macro levels. At the micro level, superior performance guarantees the resilience and competitiveness of the firm, while at the macro level, a firm's sustainable performance has huge implications on financial sector efficiency; and by extension, economic growth and development. Financial institutions perform the crucial role of financial intermediation, which entails the mobilization and transformation of savings into investable funds to stimulate productive investments. Thus, financial institutions are critical agents in fostering and sustaining economic growth and development.

In nearly every country, corporate bodies and individuals pay taxes on their profits, income or any other tax base. In Nigeria, companies, including banks and insurance companies (both of which constitute major components of the financial sector in Nigeria) pay different types of taxes such as company income tax, withholding tax, tertiary education tax, value added tax, capital gains tax, etc. These taxes are payable to the relevant tax authorities based on income, profit, and property, as the case may be. Due to differences in tax computation by the firms and the tax authorities, taxes can be payable or receivable in the future, in which case it becomes deferred tax liability or asset, respectively. The amount of current tax payable is a liability of uncertain amount and timing. They are usually estimated since they cannot be measured with precision, like other items such as depreciation, impairment losses, warranty provisions, value of closing inventories, provision for bad and doubtful debts,

Tax assessment of firms is based on their financial performances. Financial performance shows the extent of results achieved by an entity over a certain period, (usually stated in the form of either the profits made by the entity, the efficiency of the management team, the extent of revenue growth or growth in shareholders' wealth during the period under review (Nnah, 2017). It describes how the firm performs, in terms of the achievement of its overall performance, denoted by its profits made and other growth indices set by it. Asimakopoulos et al. (2009) stressed that financial performance is an indicator of either what the firm earns, the level of profits achieved, or the extent to which the firm value appreciates. Okpara and Ifurueze (2020) on their part stated that the term "financial performance" is used to show the financial strengths and weaknesses of an entity. Evaluating the financial performance of a business, therefore, enables the decision-makers to judge the results of strategies employed by the business and its activities in money

terms. Essentially, it enables decision-makers to examine the results of business plans and strategies based on objective financial terms.

In Nigeria, the financial sector within the last decade has been bedeviled by a myriad of distress and corporate failures, which have raised concerns about the quality of financial reports and equally undermined investors trust regarding accounting output. Shockingly, the Nigerian Deposit Insurance Corporation (NDIC) has liquidated a total of fifty-three (53) deposit money banks as well as some insurance companies between 1994 and 2018 (NDIC, 2023). Smith and Walter (1997) – cited in Alawiye-Adams & Babatunde (2013) – noted that the failure of financial firms has a great adverse effect on the economy and is considered very important. These issues of banks' failures frequently have its roots traced to problems of financial disclosures, the extent of approximations made in financial statements and aggressive earnings management techniques embarked on by management to paint an attractive performance outlook to investors. The extensive failure in financial disclosures has triggered serious concern amongst investors, stakeholders and regulators about the quality of reported earnings with calls for setting up of strong internal control mechanism and governance structures. to enhance the quality of information embedded in financial reports.

Arguably, we can say that the way management of financial sector firms make approximations and estimates, particularly for current tax provisions, will affect the way the financial position and performance of such firms are presented to the financial statement users. No wonder, the Securities and Exchange Commission, the Financial Reporting Council of Nigeria and other regulatory bodies in Nigeria, stressed the need for full and detailed disclosure of critical accounting approximations included in the financial statements (KPMG 2015). This is to ensure relevance, faithful representation, comparability and understandability of financial statements prepared in the country.

Considering the importance of the financial sector firms to all and sundry in Nigeria, studies on the evaluation of the implication of financial statements' approximations on the firm has attracted considerable academic and professional discourse in recent times. For instance, Nnah (2017), Abakasanga et al. (2019), Nangih, et al (2021b), Lugovsky and Kuter (2020), Raubenheimer (2012), Akenbor and Kiabel (2014), Ayunku and Eweke (2019), Nangih et al. (2021a) and Ahmed et al. (2014) all studied the impacts of the management's approximations and accounting estimates on financial statements quality and performance. However, there has been very little attempt to empirically investigate the effect of tax estimations on the performance of banks and insurance companies in Nigeria.

That constitutes a knowledge gap. This study attempts to fill that gap and to further expand the frontier of knowledge on this subject area. Specifically, the study aims to investigate the impact of tax estimates on banks and insurance firms' performance in Nigeria for the period ranging between 2013 and 2023.

## **2.0 LITERATURE REVIEW**

### **2.1 Conceptual Review**

#### **Tax Estimates**

Taxes are compulsory levies imposed on the income of individuals and corporate organizations. Entities are liable to pay income tax on their yearly profit but these cannot be measured with precision, hence it is usually estimated. Provision for income tax is the tax that the company expects to pay in the current year and is calculated by making adjustments to the net income of the company by temporary and permanent differences, which are then multiplied by the applicable tax rate. The amount of this provision is derived by adjusting the firm's reported net income with a variety of permanent differences and temporary differences. The adjusted net income figure is then multiplied by the applicable income tax rate to arrive at the provision for income taxes. Hence, this provision can be altered to a considerable extent by the amount of tax planning that a person or business engages in to defer or eliminate the income tax liability. Consequently, the proportional size of this provision can vary significantly from taxpayer to taxpayer, based on their tax planning abilities.

While current tax are taxes payable within the accounting period, deferred taxes are payable or receivable in the future. It is usually approximated due to timing differences. Hence, deferred tax is a function of timing differences. Chukwu (2006) posited that taxable profits are not always the same with the accounting profit in practice. The difference between the two are as a result of treatment of certain items called non-allowable deductions in the accounts such as depreciation, traffic offences, penalties and interests and other fines, etc. This amounts included in financial statements are usually done using approximations. This is usually estimated by applying a fixed percentage. As it is an estimate of tax liability therefore, it is recorded as a provision and not a liability. The actual payment of tax can be less or more than the estimated amount which gives rise to under and over-provisions.

According to Olatunji and Omolade (2018), the term deferred tax as discussed and conceptualized in the International Accounting Standard (IAS) 12 –Income Taxes is the amount of income tax payment due for future periods as a result of taxable temporary

differences. The study of Halim et al. (2015) asserted that deferred tax could be divided into deferred tax liabilities and deferred tax assets. David (2004), argued that deferred tax is for accounting purposes and not for tax purpose. He further asserted that deferred tax liability recognizes future taxes due when earned income.

### **Firm Performance**

Firm performance measures an organization's earnings, profits, appreciation in value as shown by the increase in the entity's worthiness in the market (Nangih et al., 2021b). Broadly speaking, it refers to the degree or extent to which the entity's set financial objectives has been accomplished which entails the process of measuring the results of a firm's set targets and operations against its actual achievements within a specified period, in monetary terms. Lim (2011) posits that two prominent indicators of financial performance are; investor's return and accounting returns. She described the investors return as measure of the firm's performance from the perspective of the shareholders, whereas that of the accounting return focuses on how the firm's earnings meet the expectations of different managerial policies.

Financial performance measures an organization's earnings, profits, appreciation in value as shown by the increase in the entity's worthiness (Asimokopoulos et al., 2009). Thus, it is the level of performance of a business over a time period, often expressed in the form of profits made or losses incurred during that period. Farah et al. (2016), on their part, viewed financial performance as the extent to which an entity's financial result or status over a period of time is ascertained in terms of certain set criteria. According to Lin and Liu (2005) financial ratios are mostly employed to evaluate a firm's financial performance. In practice, the measurement of a firm's performance traditionally employs the financial ratios, because they provide simple and understandable descriptions about the firm's financial performance, position and financial position changes in comparison with previous periods or similar firms that helps to improve the efficiency of the management. Some of the main ratios used in gauging a firm's performance are the return on assets (ROA), and the return on equity (ROE),

### **2.2 Theoretical Review**

This study anchors on the theory of performance propounded by Richard Schechner in 1934. The performance theory stresses that 'to perform' entails a sequence of acts, activities, or processes that combine skills and knowledge to generate a sound and valued result or conclusion. The relevance of the Performance theory to this study is that every organization, including non-financial sector companies, seek to improve their level of

performance, be it increase in turnover, operational efficiency, or profitability. In doing that, financial statement preparers are expected to be reasonable and fair in estimating those financial transactions, which cannot be measured with precision, so that their firm performance will not be seen to be overstated or understated, as the case may be. Additionally, the agency theory, propounded by Jensen and Meckling (1976) establishes a relationship between managers and shareholders, where the latter entrusts the management of the organization to the former; who is expected to strive to achieve the objective of maximizing shareholders' wealth (Clarke, 2004).

### **2.3 Empirical Review**

Quite a handful of empirical attempts have been made to examine the effect of tax on firm performance. Nangih et al. (2021a), examined the effect of tax estimates on the profitability of non-financial firms in Nigeria. They studied the effects of current and deferred tax estimates on the profit after tax of listed non-financial firms in Nigeria. Using secondary data were collected from firm annual reports spanning a period of 7 years from 2013 to 2019, and using panel data regression analysis, the results showed that both current and deferred taxes had significant positive effect on PAT. A similar study by Akinleye et al. (2020) on the effect of tax and provision for depreciation on financial performance of selected quoted consumer goods firms in Nigeria, between 2008 and 2017, also showed that tax positively influenced firm financial performance.

Olaoye and Alade (2019) investigated the impact of corporate taxes on the profitability of various Nigerian listed businesses using data from various published annual financial reports. The study used the pooled ordinary least square regressions and established a positive effect of current, education and withholding taxes on profit after tax. Furthermore, Lazar and Istrate (2018) studied the influence of overall firm-specific tax-mix on financial performance of firms listed on Romanian listed Stock Exchange from 2000 to 2011. Using a fixed-effect regression model, the findings showed that an increase in overall firm-specific tax rate leads to 0.15 percent decline in profitability of the companies.

Nwaorgu et al. (2019) assessed the effect of deferred tax accounting on financial performance of listed agricultural firms in Nigeria. Employing a sample of 4 quoted Nigerian listed agricultural firms for 7 years between 2011 and 2017, and applying the simple linear regression, it was found that deferred tax had positive and significant influence on the profitability of listed agricultural firms; though not significant effect on both the operating cash flow and earnings per share of the firms. In the same vein, Kumi et al. (2018) looked at the influence of corporate income tax on mining company profitability

in Ghana. The study made use of 10 years' data from 2005 to 2014 with a sample of only 2 listed mining firms on the Ghana Stock Exchange; with return on assets as a measure for profitability. They showed that corporate income tax had negative influence on firm profitability.

Olaoye and Bamisaye (2018) examined the effect of deferred tax and financial performance of firms in Nigeria. The study explored the effects of both deferred tax asset and deferred tax liability on firm's profit after tax, earnings per share, return on asset and return on equity. Using panel-based estimation techniques including pooled OLS panel estimator, fixed effect estimator and random GLS estimators on data gotten from 10 listed firms on the Nigerian stock exchange market. The analysis revealed that deferred tax asset and deferred tax liability impacted negatively on performance of firms. In a similar manner, Junaidu and Saidu (2018) assessed the effect of company income tax on the financial performance of listed consumer goods companies in Nigeria from 2006-2016 and found that there is an insignificant negative relationship between corporate tax and financial performance using return on assets. Size, on the other hand, showed a positive and significant relationship with performance.

Chude and Chude (2015) also assessed the impact of taxation on the profitability of companies in Nigeria. Applying the error correction model, it was revealed that the level of company tax has significant effect on the profitability. In Ghana, Gatsi et al. (2013) examined the effect of company tax on financial performance of manufacturing companies listed on Ghanaian Stock Exchange, using data from the annual financial reports from 2005 to 2012. The results of the panel data collected and analyzed showed that corporate tax affected financial performance negatively and significantly too. A significant positive effect of firm size on financial performance was also established.

### **3. METHODOLOGY**

The study adopted quasi-experimental research design in a bid to explore the extent of the effect of current tax approximations on the performance of listed financial firms in Nigeria. The population for the study consists presently of 43 firms, which are all listed on the Nigerian Exchange Group. However, due to data availability, adequacy and consistency, 20 financial companies, made up of 10 banks and 10 insurance companies were selected. More so, these firms make up over 70% of the total assets of the financial sector listed firms. The data, which is panel in nature, were obtained from the annual reports of the selected companies, covering an 11-year period from 2013 to 2023.

The models stated in this study are adapted, with some modifications; from the study of Nangih et al. (2021b), and they are stated as follows:

$$ROA = f(CUTEST, DFTEST, FSIZE) \tag{1}$$

$$ROE = f(CUTEST, DFTEST, FSIZE) \tag{2}$$

$$EPS = f(CUTEST, DFTEST, FSIZE) \tag{3}$$

These are further expressed in their econometric forms as:

$$ROA = \alpha_0 + \alpha_1CUTEST_{it} + \alpha_2DFTEST_{it} + \alpha_3FSIZE_{it} + \epsilon_{ti} \tag{4}$$

$$ROE = \beta_0 + \beta_1CUTEST_{it} + \beta_2DFTEST_{it} + \beta_3FSIZE_{it} + \epsilon_{ti} \tag{5}$$

$$EPS = \delta_0 + \delta_1CUTEST_{it} + \delta_2DFTEST_{it} + \delta_3FSIZE_{it} + \epsilon_{ti} \tag{6}$$

Where ROA = return on assets, ROE = return on equity, EPS = earnings per share, CUTEST = current tax estimates, DFTEST = deferred tax estimates, FSIZE = firm size,  $\alpha_0, \beta_0, \delta_0$  = intercepts,  $\alpha_1 - \alpha_3, \beta_1 - \beta_3, \delta_1 - \delta_3$  = coefficients of the regression, and  $\epsilon_{ti}$  = error terms. Subscripts *i* and *t* represent firm and period, respectively. The above models were tested using the fixed/random effects panel regression model. The decision rule is that the null hypothesis should be rejected if the probability value is less 0.05; otherwise it cannot be rejected. A priori expectations: DFEST, FSIZE<sub>></sub>0; CUTEST < 0

The measurement and a priori expectations are given in Table 3.1.

**Table 3.1 Operational Measure of Variables/A Priori Expectation**

S/No	Variable	Description	Type	Definition
1	ROA	Return on Assets	Dependent	$\frac{\text{Profit after tax}}{\text{Total Assets}} \times 100$
2	ROE	Return on Equity	Dependent	$\frac{\text{Profit after tax}}{\text{Total Equity}} \times 100$
3	EPS	Earnings per Share	Dependent	$\frac{\text{Profit after tax}}{\text{Total Number of Ordinary Shares}} \times 100$
4	CUTEST	Current tax	Independent	$\frac{\text{Current Tax}}{\text{Total Assets}} \times 100$
5	DFTEST	Deferred Tax	Independent	$\frac{\text{Deferred Tax}}{\text{Total Assets}} \times 100$
6	FSIZE	Firm Size	Moderating	Natural Logarithm of Total Assets

Source: Author's Compilation

#### 4.0 Results and Discussion

**Table 4.1: Descriptive Statistics**

	CUTEST	DFTEST	FSIZE	ROA	ROE	EPS
Mean	0.487365	-0.211058	26.39713	2.889740	13.11323	1.297955
Median	0.264783	0.021128	26.71266	2.304450	11.55711	0.405000
Maximum	5.623764	12.96372	30.65869	20.06069	122.0471	18.97000
Minimum	-1.751199	-71.81971	22.53352	-12.27590	-41.22014	-5.450000
Std. Dev.	0.710427	5.276338	2.326947	4.215980	14.49523	2.443532
Skewness	2.389690	-11.47648	0.024934	0.305977	2.056479	3.658764
Kurtosis	16.46181	156.0610	1.492437	7.298498	19.17645	22.96760
Jarque-Bera	1870.576	219582.9	20.85630	172.8061	2553.778	4145.637
Probability	0.000000	0.000000	0.000030	0.000000	0.000000	0.000000
Sum	107.2204	-46.43285	5807.369	635.7429	2884.911	285.5500
Sum Sq. Dev.	110.5308	6096.903	1185.816	3892.612	46014.44	1307.616
Observations	220	220	220	220	220	220

**Source: Author's Computation**

The results in Table 4.1 indicate that CUTEST, DFTEST, and FSIZE have mean and standard deviations (in parenthesis) of 0.49% (0.71%), -0.21% (5.28%), and 26.40 (4.33), respectively while on the other hand, ROA, ROE, and EPS have their mean and standard deviations as 2.89% (4.22%), 13.11% (14.50%) and N1.30 (N2.44), respectively. All the variables, except FSIZE have higher standard deviations, which shows the degree of variability in the performance the sampled firms. The results also reveal higher skewness and peakiness in all the variables, except FSIZE. However, the probability values of the Jarque-Bera statistics reveal that none of the variables is normally distributed – which is expected, given that the data is panel.

**Table 4.2: Correlation Matrix**

	CUTEST	DFTEST	FSIZE	ROA	ROE	EPS
CUTEST	1.000000					
DFTEST	0.146953	1.000000				
FSIZE	-0.343728	-0.066193	1.000000			
ROA	0.442897	-0.058842	-0.208963	1.000000		
ROE	0.224321	0.063269	0.268300	0.600123	1.000000	
EPS	-0.068794	-0.007299	0.577476	0.096580	0.368996	1.000000

**Source: Author's Computation**

The correlation statistics in Table 4.2 reveal that CUTEST has positive correlation with ROA and ROE, but correlates negatively with EPS. On the other hand, DFTEST correlates positively with ROE but negatively with ROA and EPS; whereas FSIZE has a negative correlation with ROA but positive correlations with both ROE and EPS. The results also show that there are no perfect correlations among the independent variables, suggesting that there is absence of multi co-linearity in the model estimate.

**Table 4.3: Hausman Test**

Test Results	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Model 1	14.884142	3	0.0019
Model 2	2.001378	3	0.5721
Model 3	14.020836	3	0.0029

**Source: Author's Computation**

The results of the Hausman tests indicate chi-square statistics and probabilities (in parenthesis) of 14.88 (0.0019), 2.00 (0.721), and 14.02 (0.0029), respectively. Thus, the fixed effect model is appropriate for models 1 and 3, whereas the random effect model is ideal for model 2.

**Table 4.4: Panel Regression Test**

Variable	Model 1	Model 2	Model 3
CUTEST	1.657142 [6.386759]***	7.146017 [4.645684]***	0.042180 [1.006364]
DFTEST	-0.120664 [-13.65136]***	0.043426 [0.487313]	-0.018601 [-2.627889]***
FSIZE	0.441878 [3.799859]***	2.578130 [5.220172]***	0.609457 [7.519872]***
C	-9.607675 [-3.134469]***	-58.41557 [-4.171036]***	-14.81444 [-6.931995]***
R-sq.	0.732157	0.148010	0.723229
Adj. R-sq.	0.702245	0.136177	0.692320
F-stat.	24.47749	12.50802	23.39903
Prob(F-stat.)	0.000000	0.000000	0.000000
D-Watson stat.	1.872008	1.599415	1.961564

**Author's Computation**

\*\*\*Significant at 1%

Table 4.4 reveals that the independent variables determine 70.22%, 13.62%, and 69.23% of the variations in ROA, ROE, and EPS, respectively. More so, the t-statistics reveal that all the variables have significant effects on all three performance proxies, except for an insignificant effect of DFTEST and CUTEST on ROE and EPS, respectively.

### **Discussion of Findings**

The results of the panel regression tests in Table 4.4 reveal that current tax (CUTEST) exerts positive influences on all the dependent variables, which are also significant at 1% level, except that of EPS. Thus, current tax has positive effect on the performance of the selected financial companies assessed in this study. The positive sign of the coefficients of current tax is inconsistent with the a priori expectation and implies that an increase in current tax will result in an increase in the financial performance of financial companies. The positive effect of current tax on firm performance is probably due to the correlation between tax and profitability; as tax is dependent on the earnings capacity of a firm. Thus, higher taxes are associated with higher profitability. However, the effect of tax is insignificant on both the ROA and the EPS. The effect of tax on firm operations is diluted by superior financial performances. This finding contradicts that of Kumi et al. (2018) who established that corporate income tax had negative influence on firm profitability in Ghana.

In contrast, deferred tax (DFTEST) was found to have a significant negative effect on ROA and EPS but an insignificant positive effect on ROE. The negative influences of deferred tax on both ROA and EPS is inconsistent with the a priori expectation, and implies that an increase in deferred tax reduces financial performance. These complement the studies of Olatunji and Omolade (2018) as well as Olaoye and Bamisaye (2018), whose results revealed that deferred tax impacted negatively on the financial performance of firms. On the other hand, the positive effect of deferred tax on ROE is in tandem with the a priori expectation. The negative influence of deferred tax approximations on financial performance is due to the fact that most of the firms have prepaid tax liabilities; considering the negative mean of deferred tax estimates. As a result of these, some of the resources that would have been useful to the firms' operations are held down in the form of deferred tax assets, thus, reducing the financial performance potential of the firms. In this regard, the management of the firms have been unable to take advantage of the deferred tax window to maximize their stakeholders' returns as buttresses by the agency theory.

Lastly, firm size was found to have a significant positive effect on all the proxies, which is consistent with the a priori expectation and implies evidence of scale economies. That is, financial firms can leverage on size advantage. Junaidu and Saidu (2018), Gatsi, et al. (2013) also found a significant positive effect of firm size on financial performance.

## 5. SUMMARY AND CONCLUSIONS

This study was undertaken to assess the extent of the effect of tax estimations on the financial performance of financial firms in Nigeria. Applying the fixed/random effect panel regression model on 20 listed financial firms, the results revealed that current and deferred taxes have significant positive and negative effects on financial performance of the selected firms. Consequently, the study concludes that tax estimates significantly affect firm financial performance in Nigeria. Given these findings, the study recommends the following:

- i) Management of financial companies should re-evaluate the cost of carrying out tax assessments, especially by external consultants. This is so as to ensure that unnecessary costs are not incurred on tax assessment, as tax liabilities do not have negative influences on the financial performance of firms in the financial sector.
- ii) Managers should give greater preference to deferred tax liabilities than assets in order to ensure better financial performance; as deferred tax assets tie up resources that could have been utilized to maximize shareholders' wealth, as buttressed by the agency theory.
- iii) There is also the need for the management of financial companies to engage in the expansion of their operations in order to ensure that they take advantage of potential economies of scale.

**Competing Interest:** The authors declare that there is no competing or conflicting interest in this manuscript.

## REFERENCES

- Abakasanga, N. O., Ofurum, C. O., & Ogbonna, G. N. (2019). Financial reporting quality and financial performance of quoted banks in Nigeria. *Research Journal of Finance and Accounting*, 10(9), 59-79.
- Ahmed, A., Mohammed, A. Y., & Adisa, A. O. (2014). Loan loss provision and earnings management in Nigerian money deposit banks. *Mediterranean Journal of Social Sciences*, 5(17), 49-56.

- Akenbor, C. O., & Kiabel, B. D. (2014). Accounting estimates and credibility of financial statement in the hospitality industry in Nigeria. *Mustang Journal of Accounting and Finance*, 9(6), 98-107.
- Akinleye, G. T., Olaoye, C. O., & Fajuyagbe, S. B. (2020). Effect of tax and provision for depreciation on financial performance of selected quoted consumer goods firms in Nigeria. *The Journal of Accounting and Management*, 10(1), 5-12.
- Alawiye-Adams, A. A., & Babatunde, A. (2013). How recurrent bank failures contributed to the under development of the Nigerian economy. *SSRN Electronic Journal*.
- Asimakopoulou, I., Samitas, A., & Papadogonas, T. (2009). Firm-specific and economy wide determinants of firm profitability: Greek evidence using panel data. *Managerial Finance*, 35(11), 930-939.
- Ayunku, P. E., & Eweke G. O. (2019). Accounting estimates and financial reporting quality: Evidence from quoted deposit money banks in Nigeria. *Federal University of Otuoke Journal of Management Sciences*, 3(1) 41-51.
- Chude, D. I., & Chude, N. P. (2015). Impact of company income taxation on the profitability of companies in Nigeria A study of Nigerian Breweries. *European Journal of Accounting, Auditing and Finance Research*, 3(8), 1-11.
- Chukwu, G. J. (2006). *Accounting Standards: An illustrative approach to SASs, IASs and IFRSs*. Ano Publishing Company.
- Clarke, T. (Ed.). (2004). *Theories of corporate governance: The philosophical foundations of corporate governance*. Routledge
- David, H. (2004, April). Fuzzy numbers. *Business Week*, 3902, 78-88.
- Farah, N., Farrukh, I., & Faizan, N. (2016) Financial performance of firms: evidence from Pakistan cement industry. *Journal of Teaching and Education*, 5, 81-94.
- Gatsi, J. G., Gadzo, S. G., & Kportorgbi, H. K. (2013). The effect of corporate income tax on financial performance of listed manufacturing firms in Ghana. *Research Journal of Finance and Accounting*, 4(15) 118-124
- Halim, S., Veysel, K., & Baykut, E. (2015). A research on deferred taxes: A case study of BIST listed banks in Turkey. *European Journal of Business and Management*, 7(2), 1-9.  
<https://ssrn.com/abstract=23193997>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Junaidu, M. K., & Saidu, H. (2018). Corporate tax and financial performance of listed Nigerian consumer goods firms. *Journal of Accounting and Financial Management*, 4(4), 30-43.

- KPMG (2015). Getting accounting judgments and estimates right: Board perspectives. <https://boardleadership.kpmg.us/content/dam/blc/pdfs/2014/accounting-judgments-estimates-board-perspectives.pdf>
- Kumi, J. A., Amaniampong, M., & Kumi, M. A. (2018). Effects of corporate income tax on the profitability of mining companies: Evidence from Ghana Stock Exchange. *IJRDO Journal of Business Management*, 4(2), 55-64. <https://doi.org/10.53555/bm.v4i2.1858>
- Lazar, S., & Istrate, C. (2018). Corporate tax-mix and firm performance: a comprehensive assessment for Romanian listed companies. *Economic Research*, 3(1), 1258-1272.
- Lin, W., & Liu, C (2005). Performance efficiency evaluation of the Taiwan's Shipping Industry: an application of data envelopment analysis. *Eastern Asia Society for Transportation Studies*, 467-471.
- Lugovsky, D., & Kuter, M. (2020). Accounting policies, accounting estimates and its role in the preparation of fair financial statements in digital economy. *Springer Nature*, 78, 165-176.
- Nangih, E, Onuora, J. K. J., Orjinta, H. I., & Okafor, G. O. (2021a). Tax estimates and profitability nexus evidence from listed non-financial sector in Nigeria. *Global Journal of Scientific and Research Publications*, 1(11), 1-6.
- Nangih, E. Onuorah J. K. J., & Okafor, G. O. (2021b). Accounting estimates and financial performance of listed non-financial firms in Nigeria. *Journal of Accounting Business and Social Sciences (JABSS)*, 4(1), 15-37.
- Nigeria Deposit Insurance Corporation (2023). *Annual report and statement of accounts*. NDIC.
- Nnah G. N. (2017). *Accounting estimates and financial reporting quality of quoted manufacturing companies in Nigeria* [PhD Theses, Rivers State University, Port Harcourt].
- Nwaorgu, I. A., Abiahu, M. F. C., Tapang, A. T., & Iormbagah, J. A. (2019) Deferred tax accounting and financial performance: The listed agricultural firms' perspective in Nigeria. *SSRN Electronic Journal*. <https://ssrn.com/abstract=3474769>
- Okpara, U. C., & Ifurueze, M. S. (2020). Effect of financing mix on corporate profitability of selected brewery and beverage industry in Nigeria. *Journal of Accounting, Business and Social Sciences*, 3(1), 31-48.
- Olaoye, C. O., & Alade, E. O. (2019). Effect of corporate taxation on the profitability of firms in Nigeria. *Journal of Economics and Behavioral Studies*, 11(1), 191-201.
- Olaoye, C. O., & Bamisaye, T. (2018). Deferred tax and financial performance of firms in Nigeria. *Journal of Business Administration and Management Sciences Research*, 7(2), 050-058.

- Olatunji, C. O., & Omolade, B. T. (2018). Deferred tax and financial performance of firms in Nigeria. *Journal of Business Administration and Management Sciences Research*, 7(2), 050-058.
- Raubenheimer, E. (2012). Accounting estimates in financial statements by some South African construction companies. *Journal of Economic and Financial Sciences*, 6(2), 383 – 400.