

ACCOUNTING ESTIMATES AND MARKET BASED PERFORMANCE OF LISTED FIRMS IN NIGERIA: A PANEL DATA APPROACH

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Abstract

The study investigated the effect of accounting estimates on market based performance of listed firms in Nigeria. The population of the study was thirty-three firms in the Consumer and Industrial Goods Sector of the Nigerian Exchange Group. The study was anchored on the Agency theory. The research design was employed in the study was the ex post facto research design. Depreciation, intangible assets, current tax, and pension liability estimates were used as the dimensions of the accounting estimates (the predictor) while market based performance (the dependent variable) was measured using market price per share. The study used the convenience sampling technique to select a sample of 25 listed consumer and industrial goods companies' in Nigeria. The data collected and used for the study was for a period of 7 years from 2013 to 2019. The Panel Multiple Regression Technique was employed in testing the hypotheses formulated. Descriptive and correlational analysis were also carried out. The results of the F-statistics indicated that accounting estimates were significant in predicting market based performance at 5% significant level. The results further showed that depreciation estimates negatively affect the way market performance is measured. Secondly, the estimated amount of intangible assets does not significantly affect the market performance of listed consumer and industrial goods firms. Thirdly, current tax estimates have significant positive effect on the market prices of the listed consumer and industrial goods firms in Nigeria, therefore, firms should be mindful

when estimating current tax, as this could affect the way their performance is measured. Finally pension liabilities estimates do not have significant effect on market value, and therefore firms should continue to use the valuation methods suggested in the accounting standards.

Keywords: Accounting Estimates, Market Performance, Market price per share

JEL Code Classification: L22, L66, M41

1. Introduction

Financial statements are simply self-accountability reports by management, which serve as the basis of assessment by the users. Akenbor and Kiabel (2014) argued that the components of financial statements information influence the decision of financial statements users, in their relationship with the business and enables lenders and suppliers to appraise the credit worthiness of the business. It is the responsibility of the management to prepare financial reports, and communicate same to various users. According to Alomair *et al* (2021), accounting information is not worth presenting unless it has some minimum level of both relevance and reliability. According to Nangih and Anichebe (2021), for financial reports to be relevant, reliable, understandable, and accurate, all the numbers must be factual while the estimates and disclosures made in them must be reasonable, realistic and reliably based on the underlying accounting frameworks or standards.

Accounting estimates comprise a large and growing component of financial statements, making the dividing line between fact and conjecture largely unknown to investors (Lev *et al* 2010). They are approximations of the amount of a business transaction for which there are no precise means of measurement or estimation. Altamuro and Zhang (2013) stated that financial statement estimates are usually a requirement, particularly, when assets are evaluated at the present value of the expected net cash flows from such assets, since the variables used as inputs are usually judgmental and include expected cash flows, discount rates, growth rate of the company, number of years and other key assumptions. The major objective for accounting estimates is to forecast the outcome of one or more transactions, events or conditions giving rise to the need for the accounting estimate. For other accounting estimates, including fair value accounting estimates, the measurement objective is different. Here, they expressed in terms of the value of a current

transaction or financial statement item based on conditions prevalent at the measurement date, such as estimated market price for a particular type of asset or liability. For example, the applicable financial reporting framework may require fair value measurement based on an assumed hypothetical current transaction between knowledgeable, willing parties (sometimes referred to as marketplace participants) in arm's length transactions, rather than the settlement of a transaction at some past or future date. Ultimately, it is necessary to pay attention to use of accounting estimates in financial statements because they not only affect financial performance but affects the quality of decisions made by the financial statements users; who depend on them. Again, it is also pertinent to check the excesses of, and wrong use of estimates and manipulations since, arguably, most of the accounting scandals in history have been traceable to the misuses of such estimates deliberately to mislead the users (Nangih *et al.*, 2021).

Market performance, on the other hand, is the measure of an entity's market potentials over a specified period of time, expressed in terms of overall profits, losses, efficiency, sales growth or growth in shareholders' wealth during that time. It is also a way of assessing its profits, sales growth and growth in market and shareholders' value. It describes how the firm is perceived by the market participants as well as the extent to which the firm was able to meet the achievement of its set targets. Firms are assessed based on their financial performances, including their market potentials. Okpara and Ifurueze (2020) asserted that the firm performance shows the financial strengths and weaknesses of a firm by establishing relationships between the items of the financial position and statement of profit and loss and other comprehensive income. In other words, when performances of an entity's market and other financial performance are done, it enables decision makers or users of financial statements to assess the results of business strategies and activities employed by the management.

Prior studies have been conducted to find the relationship between financial statements estimates and financial misstatements in financial reports. For instance, Nangih, *et al* (2021), Lugovsky and Kuter (2020), Raubenheimer (2012), Akenbor and Kiabel (2014), Ayunku and Eweke (2019), Nangih and Anichebe (2021) and Ahmed *et al* (2014) all studied the impacts of the management's estimates on financial statements quality and preparation. However, most of these studies were limited in variables scope, methodology, sectorial scope as well as time horizon.

Accordingly, we are yet to see a study that was carried out using ex post facto design approach which investigates the effect accounting estimates on market price per share of consumer and industrial goods sectors in Nigeria. That constitutes a knowledge gap. This study attempted to fill that gap and to further expand the frontier of knowledge on this subject area. Firm size was used as a control variable.

2. Review of Related Literature

2.1 Conceptual review and hypotheses development

This study discusses the measures of financial statement estimates to include

i. Provision for Depreciation Estimates: Depreciation is, by definition, is the systematic allocation of the depreciable amount of the asset over its estimated useful life (IASB 2015). According to Nangih and Anichebe (2021), it is an estimation of financial requirements, since the only way to know for sure how much an asset has depreciated is to have it valued periodically. Most businesses use the straight-line method of depreciation, which assumes that an asset will depreciate in value by the same amount each year over a specific period. This estimate may not reflect the asset's real-life value, because certain assets, like vehicles, tend to depreciate at a faster rate in the early years of their useful life. IAS 16-Property, Plant and Equipment provides for the reducing balance of depreciation estimation, as an alternative to the straight line method. However, both methods are based on estimates, and will producing differing results.

ii. Intangible Non-Current Assets Estimates: Intangible assets are those assets without physical substance. They usually arise from legal or other contractual rights such as goodwill, patents, copyrights etc. Barron (2002) observes that there is a high degree of uncertainty regarding the value of future economic benefits the organization may derived from the use of intangible assets it controls. In many cases, the value may be anywhere near zero and a very high accounting amount. Another complication is that there is a wide range of assets that may be classified as intangible assets under IAS 38. Godfrey *et al* (2010) posits that accounting practice in relation to valuing and recognizing intangible assets is essentially conservative. This is probably because of uniqueness of each intangible asset and the absence of relevant price indexes (Barron *et al* 2002). Zhang (2017) posits that intangible assets reflect core competitive competences of companies.

iii. Current Tax Provisions: 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. It is also the estimated amount that a business or individual taxpayer expects to pay in income taxes for the current year. Entities are liable to pay income tax on their yearly profit. 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.

iv. Pension Liability Estimates: Pension fund is pool of resources contributed by the employees and the employers for the benefit of employees on retirement. These contributions could be invested in a long term interest-yielding securities so as to grow it. Defined benefit pension plans represent a well-defined class of economic transactions that are reasonably straightforward in terms of the underlying economics and financial implications. The acknowledged complexities in determining the appropriate accounting for pension plans arise from the measurement issues and the necessity for application of judgment, estimates, and assumptions due to the forward-looking nature of the obligation. Managers enjoy significant discretion in setting the assumed return for the calculation of pension costs on the income statement. An assumption concerning the long term rate of return on assets is made by managers when they value defined benefit pension plans. There is a difference between this assumption and the discount rate used to value pension liabilities, as the value placed on liabilities does not depend on asset allocation in the pension fund.

Market Performance: Market performance measures an organization's earnings, profits, appreciation in value as shown by the increase in the entity's worthiness in the market. It is also a measure of market performance of firms. Usually, the Share price of publicly traded company is determined through the interaction of the market forces--essentially by a consensus agreement between the buyers and the sellers of the security in a continuous auction market. However, for privately owned companies (that are not quoted on the stock exchange), the process of determining share prices is usually more complicated; as experts are usually brought in to carry out a valuation of the company to come up with a price to be placed on the company share. The major disadvantages here are that the values may vary depending on the

individual that is carrying out the valuation and the factors surrounding such exercise, in fact several times during a trading day.

The literature review of various researchers indicate that market performance can be measured based on the entity's market value or potential indicators such as earnings per share ratio, dividend per share, earnings yield, price earnings ratio, total assets per share, net assets per share, etc. Market value per share can be affected by several factors such as financial performance of the company, outlook of the industry or sector to which the company belongs, demand and supply conditions in the market, investor sentiment and several other macro-economic conditions.

Firm Size: The size of a firm cannot be overruled in determining the value of the firm. Larger firms are prone to having a maximized value than smaller firms. Most companies are intent to expand the size of their business operation for them to grow either in revenue, number of employees, or size of facilities (Pervan & Višić, 2012). Firm's size is measured in different ways such as asset, employment, sales, and market capitalization. This study measured firm size as natural logarithms of firm's total assets. It is frequently used as a control variable in many studies, as it is used in this study.

From the review of literature above, the following hypotheses were formulated to guide the study;

Ho₁ depreciation provisions do not have significant effect on market price per share of listed consumer and industrial goods firms in Nigeria

Ho₂ intangible assets estimates do not significantly affect market price per share of listed consumer and industrial goods firms in Nigeria

Ho₃ There is no significant effect of current tax provisions on market price per share of listed consumer and industrial goods firms in Nigeria

Ho₄ There is no significant effect of pension liability estimates and market price per share of listed consumer and industrial goods firms in Nigeria

2.2 Theoretical Review

This study is anchored on the Agency theory. The agency theory is based in the relationship between principals and agents. According to this theory when one party (the principal) delegates decision making powers to another party (the agent) under a contract, a principal – agent relationship arises (Jensen & Meckling 1976; Clarke, 2004). Jensen and Meckling (1976) defined the principal-agent relationship as a contract under which one or more persons (principals) engages another person (the agent) to perform some services on their behalf, which involves giving some decision-making authority to the agent. While the intention of both parties in the agency relationship is to work towards the interest of the principal, information asymmetry and greed lure management into pursuing personal objectives instead of those of the principal. This conflict of interest or lack of goal congruence between management and the shareholders is described as the agency problem (Clarke, 2004). A typical example of the principal-agent relationship is that between management and shareholders. The relationship arises when shareholders delegate the administration of an entity to management, thus making management the agent of the shareholders. In this kind of relationship, the expectation is that the agent (management) will pursue the shareholders' wealth maximization objective (Clarke, 2004).

The agency theory's concern to solving the agency problem has led to two somehow different but complementary versions of the theory; the positivist version and the principal – agent version. According to the positivist version of the agency theory, the agency problem can be solved by prescribing the appropriate governance mechanisms to limit the agent's opportunistic behavior, document that the proponents of the Positivist Theory are more concerned with describing the mechanisms that solve the agency problem than with the various forms that the agency relationship may take or the optimal governance mechanism to apply (Eisenhardt, 1989; Clarke, 2004).

The critiques to this theory arise from the fact that it does not include limited rationality contrary to the transaction cost theory. It is assumed that the principal knows the agent's utility function and what contract is more adequate for each one. Furthermore, it is also probable that the theory overstates management problems inefficiency due to its static approach.

The relevance of the agency theory to this study is that directors or managers are expected to be agents of their principal, which are investors. They are expected to act in the best interest of their principals when reporting financial transactions. Hence, investors would require a credible, reliable financial that truly shows a true and fair view of the entity's financial performance and position in order to make sound and rational financial investment decisions and not those manipulated using accounting estimates with the main aim of enhancing their financial performance and or stewardship.

2.3 Empirical Review

The following empirical reviews will be made to underscore our study; Nangih, Onuora, Okafor and Orjinta (2021), examined the effect of tax estimates on profitability of non-financial firms in Nigeria. The study was anchored on the performance theory. The specific objectives were to assess the effects of current tax estimates and deferred tax estimates on profit after tax of listed non-financial firms in Nigeria. Ex-post facto and cross-sectional research designs were used in this study. The research questions and hypotheses were formulated based on the study objectives; and were tested at 5% level of significance. The secondary sources of data were collected from the published annual reports of non-financial firms (covering a period of 7 years from 2013 to 2019) using purposive sampling technique. The results showed that current tax estimates had significant positive effect on PAT while deferred tax estimates also positively affected PAT.

Akinleye *et al* (2020) analyzed the effect of tax and provision for depreciation on financial performance of selected quoted consumer goods firms in Nigeria, captured by reserve (2008-2017). The secondary data were sourced from the Published Annual Reports of selected quoted consumer goods firms in Nigeria, the study utilized panel least square analytical technique. The result of the findings showed that tax (TAX), provision for depreciation (PFD) and profit before tax (PBT) positively influenced the financial performance of FLRM and NEST by 31811588 and 6310438 respectively. Also, it was discovered that tax (TAX), provision for depreciation (PFD) and profit before tax (PBT) in the period under consideration hindered the financial performance of DANG, UNIL and NEST by 18482966, 16389816 and 2461191 respectively in Nigeria.

Nwaorgu (2019) assessed the effect of accounting estimates on the profitability of listed agricultural firms in Nigeria. The scope of the study in relation to time covers a period between 2010-2015. The study used ex post factor research design and the secondary data gathered were analyzed using regression analysis. The regression result shows there is a very strong relationship between (PEB, PBD) and PROF at 85.0%. It was further observed that there is no significant effect of Provision for bad debt on profitability of firms but there exists a significant effect of provision for employee benefit on the profitability of firms. In consonance with this study's findings, it was recommended that Listed firms in Nigeria should make Proper estimates in other to capture the real cost incurred so as to determines its effect on firm's profitability. Firms should also be more focus on their estimates to enable them makes the right decisions as regards their debt policies.

Olaoye and Alade (2019) examined the effect of corporate taxation on the profitability of selected firms in Nigeria from 2007 to 2016. Secondary data was sourced from various publications of the firms' financial report and used for the study. The study adopted the pooled ordinary least square as the estimation technique. The results revealed that corporate tax on profit after tax was positive. Equally, the coefficient of withholding tax was positive. The study concluded that corporate tax rate and education tax have positive and significant effects on profit after tax. It is also clinched that value-added tax rate and withholding tax as having positive and significant effects on profit after tax. Therefore, the study recommended that the government and its agencies such as relevant tax authorities should improve their tax administration strategies in order to avoid non-compliance.

Indrayani (2018) examined the analysis of fixed assets depreciation method on company profits. The study used the descriptive research design and also made use of descriptive statistics method of analysis. The variables for the study were straight line method, double declining method and profit for the year. It was concluded that the depreciation method and policy had significant effect on the company profit.

Nnah (2017) investigated the impact of accounting estimates on financial reporting quality of manufacturing companies in Nigeria. The study employed the survey design approach. The questionnaire was used as a source of data collection, which was tested by multi-correlation analysis method. The study found out that

accounting estimates had significant relationship with financial reporting quality amongst manufacturing firms in Nigeria.

Belsoi *et al* (2017) studied the effect of estimates on financial performance of Microfinance firms in Kenya. The study employed the survey design and used a total population of ninety-three (93) persons in three different strata (account officers, internal auditors and management) of the 14 microfinance institutions. Their study revealed a significant positive relationship between estimation techniques accuracy and financial performance of microfinance institutions. Further, a significant negative was also found to exist between the estimation of an asset useful life and financial performance.

Zhang (2017) investigated the nexus between degree of intangibles and firm profitability. Using 17 listed telecommunication companies' financial statements in China between 2014 to 2016, the study gave an empirical evidence that intangible assets' had positive and significant relationship with firms' financial performance, proxied by return on assets (ROA).

Akenbor and Kiabel (2014) examined the relationship between accounting estimates and financial reporting in Nigeria. Using the hospitality companies in Nigeria, they adopted the pilot survey technique. The data were collected via the questionnaire, which were administered to auditors of twenty-seven (27) selected hospitality firms. The result of the study discovered that accounting estimates had significant relationship with financial reporting quality.

3. Methodology

The study was anchored on the philosophy epistemological Positivism. In a bid to achieve the underlying objectives of this study, which is geared towards investigating the extent to which various accounting estimates influence the market performance of listed consumer and industrial goods firms, the ex post facto research design was adopted. The population of this study consists of all the firms that are listed in the consumer and industrial subsectors of the Nigerian Stock Exchange, which are about 33 (20 Consumer and 13 Industrial goods firms). The sample size for this study is 25. The sample size was determined through the convenience sampling technique. The nature of the data is panel, which is a combination of time series and cross-sectional data. The data was sourced from the annual report of the firms selected in this study. The data employed in this study were sourced from secondary sources, specifically

from the annual reports and financial statements of the selected firms over the seven-year period from 2013 and 2019. The data collected obtained by the researcher was analyzed using both descriptive, correlation and multiple panel regression techniques.

3.1 Model Specification

The model adopted in this study is derived, with some modifications; from the study of Chukwu and Egbuhuzor (2017). The model expresses market performance as a function of a set of explanatory variables, as follows; MPS = (DEPR, INTG, CUTX, PLIB, FSIZ)

Where MPS = Market Performance (Dependent variable) DEPR = Depreciation; INTG = Intangible Assets, CUTX = Current Tax, PLIB = Receivables FSIZ = Firm Size

This function is further expressed into a model as follows

$$MPS = f(DEPR, INTG, CUTX, PLIB, FSIZ) \quad (3)$$

This is further expressed in the econometric form as

$$MPS = \beta_0 + \beta_1 DEPR_{it} + \beta_2 INTG_{it} + \beta_3 CUTX_{it} + \beta_4 PLIB_{it} + \beta_5 FSIZ_{it} + \mu \quad (4)$$

Where MPS = Market Price per Share; β_0 = Constant; $\beta_1 \dots \beta_5$ = Coefficient of the regression equation. μ = Error term; i is the cross section of firms used; t = Time period

4. Analysis of data

Table 4.1 Descriptive Statistics

	DEPR	INTG	CUTX	PLIB	FSIZ	MPS
Mean	0.044589	0.024606	0.031451	0.037937	23.32158	3.193829
Median	0.039000	0.004000	0.018000	0.015000	23.18600	0.710000
Maximum	0.606000	0.282000	0.280000	1.138000	26.68600	57.63000
Minimum	0.001000	0.000000	-0.018000	0.000000	19.26600	-3.180000
Std. Dev.	0.049772	0.054568	0.042126	0.096687	2.041990	8.278148
Skewness	8.320523	3.371808	2.946904	8.865266	-0.050825	4.376703
Kurtosis	93.77643	14.47019	14.93498	97.83336	1.884135	24.43123
Jarque-Bera	62105.20	1290.929	1291.943	67868.92	9.154589	3907.749
Probability	0.000000	0.000000	0.000000	0.000000	0.010283	0.000000
Sum	7.803000	4.306000	5.504000	6.639000	4081.277	558.9200
Sum Sq. Dev.	0.431046	0.518118	0.308773	1.626602	725.5317	11923.83
Observations	175	175	175	175	175	175

Source EViews 10 Output Computed by Researcher, 2022

In Table 4.1, the results of the descriptive statistics reveal that DEPR, INTG, RECV, CUTX, PLIB and FSIZ have means and standard deviations (in parenthesis) of 0.045 (0.005), 0.025 (0.055), 0.031 (0.042), 0.038 (0.097) and 23.32 (2.042), respectively. On the other hand, the means and standard deviations of MPS are (8.278) and (241.547), respectively. Furthermore, the values of skewness and kurtosis statistics also show that also the variables are skewed with high peaks. In addition, the Jarque-Bera statistics and p-values reveals that none of the variables is normally distributed, which is usually the case in most panel data sets.

Table 4.2 Correlation Matrix

	DEPR	INTG	CUTX	PLIB	FSIZ	MPS
DEPR	1.000000					
INTG	0.196618	1.000000				
CUTX	-0.126835	0.135041	1.000000			
PLIB	-0.019725	-0.049497	0.009401	1.000000		
FSIZ	0.056617	0.186811	0.030388	-0.083982	1.000000	
MPS	0.021354	0.008406	0.240225	-0.053370	0.263960	1.000000

Source: EViews 10 Output Computed by Researcher, 2022

The correlation between two variables expresses the degree to which they move together in the same direction or apart in opposite direction. It shows the degree of association between two variables as well as an indication of the existence or non-existence of multi co-linearity among the independent variables. Table 4.2 shows the correlations between the variables employed in the present study. From the correlation statistics in Table 4.2, only PLIB is negatively correlated with MPS while all other variables are positively correlated. Moreover, none of the independent variables have perfect positive correlations with each other. Thus, there is an unlikelihood of the existence of multi co-linearity between the independent variables.

Table 4.5 Hausman's Test

Correlated Random Effects - Hausman Test

Equation Untitled

Test cross-section random effects

Test Summary	Chi-Sq.		
	Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	7.007341	5	0.2201

Source EViews 10 Output Computed by Researcher, 2022

Also, in Table 4.5, the Chi-Square statistic is 7.007 and the p-value is 0.220. Since the p-value is greater than 0.05, the random effects regression model is also considered the most appropriate.

Table 4.6 Fixed Effect Regression Test

Dependent Variable MPS

Method Panel EGLS (Cross-section random effects)

Sample 2013 2019

Periods included 7

Cross-sections included 24

Total panel (balanced) observations 168

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEPR	-146.8485	34.78699	-4.221364	0.0000
INTG	62.96912	80.38029	0.783390	0.4345
CUTX	162.5030	66.26735	2.452233	0.0153
PLIB	-3.481598	16.14176	-0.215689	0.8295
FSIZ	1.252729	0.577683	2.168541	0.0345
C	2.333711	72.38668	0.032240	0.9743
Effects Specification				
			S.D.	Rho
Cross-section random			45.39596	0.8653
Idiosyncratic random			17.91168	0.1347
Weighted Statistics				
R-squared	0.891719	Mean dependent var	4.594616	
Adjusted R-squared	0.867038	S.D. dependent var	19.07673	
S.E. of regression	18.02231	Sum squared resid	52618.19	
F-statistic	5.022541	Durbin-Watson stat	1.737786	
Prob(F-statistic)	0.000264			

Source EViews 10 Output Computed by Researcher, 2022

The result in Table 4.6 also indicates that the independent variables determine 86.7% of the changes in MPS, which indicates a high explanatory power. In addition, the F-statistic of 5.02, which is significant at 5%, implies that the model has a very high goodness of fit. More so, the t-statistics reveal that DEPR, CUTX and FSIZ have significant effects on MPS whereas INTG, and PLIB are insignificant. On the other

hand, the Durbin Watson statistic of 1.74 is very close to the benchmark of 2.0; and it suggests that there is absence of serial auto correlation in the model estimate.

5. Discussion of Findings

The result of the data analysis in Tables 4.4 and 4.6 also indicate that the independent variables determine 86.7% of the variations in MPS. This implies that accounting estimates explains the market performance of consumer and industrial goods firms in Nigeria, to a great extent. Furthermore, the F-statistics of 5.02, obtained in the model estimates reveal a high goodness of fit of the model 5% level of significance. In addition, the Durbin Watson statistics of 1.74 are close to the benchmark of 2.0, suggesting unlikelihood of serial correlation in the model. Thus, the model has a quite strong global utility; and therefore reliable in generating reliable inferences about the estimated relationships.

The first hypothesis also sought to examine whether or not depreciation provisions significantly affect the market price per share of listed consumer and industrial goods firms in Nigeria. This was also tested using the t-test, which revealed a t-value of -4.221364 and a p-value of 0.0000. Thus, the null hypothesis is rejected, since the p-value is less than 0.05. Consequently, depreciation provisions significantly affect the market price per share of listed consumer and industrial goods firms in Nigeria. This therefore implies that increasing depreciation costs will lead to a reduction in the market performance of a firm. The reason for this is probably because depreciation is treated as an expense. Consequently, the higher the provisioning for depreciation, the lower the profitability; and consequently, the lower the market performance (since the market performance of the firm usually reflects the level and consistency of profitability). A similar study by Indrayani (2018) also established that depreciation affects the level of profitability of a business organization.

The second hypothesis also sought to examine whether or not the estimated amount of intangible assets significantly affects the market price per share of listed consumer and industrial goods firms in Nigeria. This was also tested using the t-test, which revealed a t-value of 0.783390 and a p-value of 0.4345. Thus, the null hypothesis is accepted, since the p-value is greater than 0.05. Consequently, estimated amount of intangible assets does not significantly affect the market price per share of listed consumer and industrial goods firms in Nigeria. This implies that an increase in value of intangibles will lead to a reduction in per share earnings but an increase in the

market value of the firm. The negative effect of intangible assets on firm earnings results from the fact that excessive level of intangibles could lower financial performance because they do not directly contribute to firm profitability. This agrees with the findings of Zhang (2017) who found a significant effect of intangibles on profitability

The third hypothesis also sought to examine whether or not current tax provisions significantly affect the market price per share of listed consumer and industrial goods firms in Nigeria. This was also tested using the t-test, which revealed a t-value of 2.452233 and a p-value of 0.0153. Thus, the null hypothesis is rejected, since the p-value is less than 0.05. Consequently, current tax provisions significantly affect the market price per share of listed consumer and industrial goods firms in Nigeria. This result is in consonance with the expected apriori, and it implies that an increase in current tax provisioning enhances the market performance of the firm. These results are also similar to the result obtained in Olaoye and Alade (2019), who found a significant positive effect of corporate tax on profit-after-tax. The reason for this is hinged on the fact that taxes are directly proportional to firm profitability, thus, the higher the tax provisions, the higher the earnings of the firm; and vice versa. More so, there may be additional cash flows, especially in cases where actual tax deductions are less than provisions.

The fourth hypothesis also sought to examine whether or not pension costs estimates significantly affect the market price per share of listed consumer and industrial goods firms in Nigeria. This was also tested using the t-test, which revealed a t-value of -0.215689 and a p-value of 0.8295. Thus, the null hypothesis is accepted, since the p-value is greater than 0.05. Consequently, pension costs estimates do not significantly affect the market price per share of listed consumer and industrial goods firms in Nigeria. Thus, the more the provisions for pension liabilities, the lower the market value of the firm. The reason for this inverse relationship is that pension liabilities constitute an outflow from the organization, which reduces the earnings of the firm as fewer resources are made available for the organization's productive activities.

The last independent variable in the study is firm size which was used as a control variable in this research. This was also tested using the t-test, which revealed a t-value of 2.168541 and a p-value of 0.0345 for MPS. This indicates that firm size, FSIZ,

has a significant effect on the market price per share of listed consumer and industrial goods firms in Nigeria. This implies that as a firm grows, a firm is likely to increase its market value. This can be attributed to scales economies; as greater operating efficiency is achieved as a firm increases in size as well as scale of operations.

6. Conclusions and Recommendations

The study sought to investigate the effect of estimates on the market performance of firms listed in the consumer goods as well as the industrial goods subsectors of the Nigerian Stock Exchange. Consequently, fifteen research hypotheses were formulated, in line with the study objectives and research questions. More so, conceptual, theoretical and empirical literatures that are consistent with the various concepts were explored, while secondary data, obtained from a panel of twenty firms, for a seven-year period from 2013 to 2019, were employed; which were analyzed using the fixed/random effects models. The major findings made from the study are as follows;

- i) Depreciation provisions have insignificant and significant negative effects on market prices of listed consumer and industrial goods firms in Nigeria.
- ii) The estimated amount of Intangible assets has a positive effect on the marker price per share of the listed consumer and industrial goods firms in Nigeria; but not significant.
- iii) Current tax estimates have significant positive effects market prices of the listed consumer and industrial goods firms in Nigeria.
- iv) Estimates of pension liabilities also have insignificant negative effects on market price per share of listed consumer and industrial goods firms in Nigeria.

Based on the findings made in the course of the researchers' investigations into the subject matter of the study, the following inferences have been drawn. First, if the rate of depreciation a firm adopts is high, such a firm is likely to experience lower market performance. Second, an increase in the intangible assets of firms in the consumer and industrial goods subsectors may lead to lower per share earnings but higher market prices. However, the effect is not significant. Thirdly, current tax estimates will directly and significantly affect the market performance of firms in the consumer and industrial goods subsectors. Again, it was concluded that the higher the provisions for future pension obligations to a firm's employees, the lower the

expected market performance. And finally; as a firm grows in size, it is likely to enjoy scale advantages and this in turn enhances its market potentials.

In consideration of the findings and conclusions made in this study, the following policy recommendations were made by the study;

- i) Provisions of IAS 16 should be followed when estimating depreciation so that it does not affect the way performance is measured.
- ii) Intangible assets should be estimated in line with the provisions of IAS 38, meaning that it should be done with optimality and reasonability since affects the performance.
- iii) Firms should be mindful when estimating current tax, as this could affect the way their performance is measured.
- iv) Pension liabilities should be recognized with using the standards provided by IAS 19, though it does not have significant effects on market price per share of listed consumer and industrial goods firms in Nigeria.

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