

# EFFECT OF AUDIT QUALITY ON SHAREHOLDERS' EARNINGS OF LISTED INDUSTRIAL GOODS FIRMS IN NIGERIA, 2012-2018

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## **Abstract**

This study examined the effect of audit quality on shareholders' earnings of listed industrial goods firms in Nigeria. Specifically, the study examined the effect of auditor's independence, audit firm size and auditors' tenure on shareholders' earnings of listed industrial goods firms in Nigeria. The study adopted Ex post-facto research design and panel data regression model with the aid of E-view 9.5 statistical software which was used to analyze data generated from 2012-2018. The study found that auditors' independence and audit firm size have positive and significant effect on shareholder's earnings of listed industrial goods firms in Nigeria while auditors' tenure has a negative and insignificant effect on shareholders' earnings of listed industrial goods firms in Nigeria. The implication of the finding is that investors and other stakeholders should pursue financial reports of the firms audited by independent auditors and the large audit firms (Big 4), paying attention to the length of audit tenure, as longer audit tenure may diminish the quality of audit, and hence the reliability of reported earnings.

**Keywords:** Audit quality, Firm size, Auditor tenure, Shareholders, Earnings per share.

## **1.0 Introduction and Background to the Study**

One of the most important responsibilities of managers of firms is to provide financial reports and information used by current and potential investors, creditors and other users in making informed investment and financial decisions. These financial reports contain accounting earnings which different stakeholders use to evaluate the profitability of the firm, future performance and related risks, as well as assess the performance of management of the reporting entity (Karima and Gerayli, 2014). To achieve desirable results, managers have resorted to managing such earnings. Healy and Wahlen (1999) posit that firms intentionally manage earnings in financial reporting to either mislead shareholders about the entity's performance or influence contractual outcomes that are based on accounting numbers. Income is often managed so that Earnings per Share (EPS) figures, which are the shareholders' income, reach the desired levels. Prior literature shows that earnings are manipulated to ensure that EPS meets analysts' forecasts and meet the market earnings expectations (Jordan and Clark, 2003). Earnings are also managed to reach user reference points in EPS. Here, the object of manipulation is not to meet analysts' expectations of EPS but rather to achieve cognitive reference points such as zeros or fives in the two digital positions right of the decimal point (Das and Zhang, 2003). This type of earnings management occurs when un-manipulated EPS falls as Thomas (1989) notes that even "small

changes in reported earnings (EPS) near user reference points have disproportionately large effects on perceived firm value". The effectiveness of auditing and its ability to constrain the management of earnings is expected to vary with the quality of the auditors. Myers, Myers and Omer (2013) proposed that when audit quality is high, auditors constrain the self-serving choices that management would like to make in the presentation of financial statements. In comparison to low-quality auditors, high-quality auditors are more likely to detect questionable accounting practices and, when detected, to object to their use and/or to qualify the audit report. Thus, high-quality auditing acts as an effective deterrent to earnings management because management's reputation is likely to be damaged and firm value reduced if misreporting is detected and revealed. Therefore, increased audit quality could lead to increased quality of reported earnings, reflected in reliable EPS (Rusmin, 2010).

The quality of the audit process in a corporation reduces the possibility of hidden misstatement to an appreciated assurance level, which strongly influences the reported earnings (shareholder's income) and investors' confidence (Knechel, 2009). However, cases of earnings management and abuse have been on the increase in the global market place, which has left shareholders in doubt as to the prospect of the effect of the audit quality on EPS which is necessary in a developing market like Nigeria, with particular reference to the industrial goods firm. Most of the prior studies on audit quality and earnings management in Nigeria have measured earnings management using the estimated values for modified discretionary accruals as stated by Dechow, Sloan and Sweeney (1995). However, if income is often managed so that Earnings per Share (EPS) figures, which is the shareholders' income, reaches the desired levels, it is imperative to measure earnings management by the result of such management, which is EPS. A study that uses EPS figure is undoubtedly desirable as it provides a better understanding of the effect of audit quality on earnings management of firms in Nigeria. It is against this background that the present study is set to fill the gaps identified in the audit quality and earnings management literature by extending its analysis to firms in the industrial goods, using Earnings per Share (EPS) in place of Discretionary accruals. The study is to investigate the effect of audit quality on shareholders' earnings of listed industrial goods firms in Nigeria.

## **2.0 Conceptual Review of Related Issues**

### **2.1 Audit Quality**

According to International Auditing and Assurance Standards Board (IAASB) (2011), there has been a number of attempts to conceptualize "audit quality" in the past. However, none has resulted in a definition that has achieved universal recognition and acceptance. Audit quality is in essence, a complex and multi-faceted concept. The classic definition of audit quality that is cited by most researchers is that of De Angelo (1981) which states that audit quality is the market-assessed joint probability that a given auditor will both discover a breach in the client's accounting system and Report the breach. Davidson, Stening and Wai (1987) posit that audit is the accuracy of auditor's information reporting. Wallace (1987) shows that audit quality is a measure of the auditor's ability to reduce noise and bias and meticulously improve accounting data. Behn and Choi (2008) suggest that high audit quality would improve the reliability of financial statement information and allow investors to make more precise estimate of the firm's value. Schauer (2002) also posit that "a higher quality audit increases the probability that the financial statements more accurately reflect the financial position and results of operations of the entity being audited". Titman and Trueman (1986) cited in Behn and Choi (2008) suggests that high audit quality would improve the reliability of financial statement information and allows investors to make more precise estimate of the firm's value. Schauer (2002) asserts that "a higher quality audit increases the

probability that the financial statements more accurately reflect the financial position and results of operations of the entity being audited". In other words, audit quality is part of the quality of accounting information disclosed (Clinch, 2010).

## **2.2 Auditor Independence**

Okolie and Izedonmi (2014) defined audit independence as an auditor's unbiased-ness in taking decisions during an audit. Independence implies being free from inspiration, stimulus or guidance of which in the absence of independence, the value of the audit function will be greatly compromised. Prior studies suggest that high audit paid by a company to its external auditor enhances the economic ties between them and as such may compromise the independence of the auditor (Li and Lin, 2005). An Auditor's lack of independence increases the possibility of being perceived as not being objective. This means that the auditor will not likely report a discovered breach. Prior studies contend that high fees paid by a company to its external auditors increase the economic bond between the auditor and the client and thus the fees may impair the auditor's independence (Li and Lin, 2005). The impaired independence results in poor audit quality and allows for greater EPS manipulation.

## **2.3 Audit Firm Size**

Audit Firm Size is defined by De Angelo (1981) as a natural logarithm of the total revenue of the audit firm, the educational level of the auditors, work experience of the auditors and professionalism. Audit size denotes the size of an audit firm. It is continuously measured under three dimension; the total value of assets of all listed firms audited by the auditor; the total value of sales of all listed firms audited by the auditor and the total amount of audit fees collected by the auditors in auditing listed firms. Several studies such as (De Angelo, 1981; Lawrence, Minutti-Meza, Zhang, 2011; Rezaei & Shabani) has agreed that larger firms provide higher quality-audit service than small ones. De Angelo (1981) therefore, theorizes that larger firms perform better audits because they have a greater reputation at stake. Since larger firms have more resources at their disposal, they can attract more highly skilled employees. Others have theorized that large auditors attract a fee premium because their greater wealth reduces clients' exposures in litigation. Others have theorized that there is no real audit quality difference, but the perception exists because large firms are well known and have gained a reputation for high quality. On the whole, the evidence is mixed, but it appears that there is some relationship between audit firm size and audit quality. Based on De Angelo's (1981) reports, many other studies use auditor size (specifically Big8, Big6, Big5 or Big4 Vs non-Big8, non-Big6, non-Big5 or non-Big4) to differentiate audit quality levels (Krishnan, 2003)

## **2.4 Auditor Tenure**

Auditor tenure is viewed as the length of time between auditor-client relationships (Okolie, 2014). A lengthy link between the auditor and his client may threaten unconventionality given developed familiarity. A lengthy engagement may bring about less effort to signal the failings of internal control and risk sources (Okolie, 2014). Knapp (1991) established a linkage between audit tenure and competence. The objectiveness of an auditor in detecting anomalies increases in the first years of engagement but wanes with time, reaching its weakest level after 20 years of service (Okolie, 2014). There has been considerable decrease in number of years for auditor tenure. In the US, auditor tenure was reduced from 7 to 5 years; the European Commission recommended a rotation of engagement partners every 7 years; in France, auditors are chosen for 6 years financial years, while in Nigeria audit engagement should not exceed 3 years (Okolie, 2014). For this study, auditor tenure was

proxied as length of auditor-client relationship using a dichotomous variable of “1” if 3 years + and “0” if otherwise.

### **2.5 Earning Management/ Shareholders' Earnings**

Most of the literature on Earning Management deals with rounding earnings to reach cognitive reference points in EPS. Thus, investors would tend to remember primarily the most important digits within a number. For example, Carslaw (1988) suggests that investors would remember 398 kobo in earnings by rounding it down to 390 kobo or perhaps even to 300 kobo. Therefore, to prevent investors from rounding earnings down when un-manipulated income falls only slightly below user reference points, management will find ways to manipulate EPS to round it up to just across the breakpoint. In the example above, management would round earnings up from 398 kobo to something slightly above 400 kobo. Thomas (1989) analyzes distributions of numbers in the right-most EPS digit (i.e., the digit two places right of the decimal point). He finds that for entities with positive earnings zeros and fives appear in this digital position far more often than expected. Das and Zhang (2003) extend Thomas's (1989) work by examining the digital frequencies appearing in the position immediately right of the decimal point in the EPS numbers for a sample of companies. They conclude that their “evidence is consistent with managers manipulating earnings upward to round-up reported EPS.” They further surmise that managers are more motivated to manipulate earnings to round up EPS when un-manipulated EPS numbers are close to behavioral benchmarks.

### **2.6 Empirical Review**

Olabisi, Agbatogun and Akinrinola (2017) examined the relationship between Audit Quality and Earnings Management in deposit money banks in Nigeria over the period 2005-2014. The study adopted a longitudinal research design and panel data regression model. The population of the study comprised of fifteen deposit money banks listed on Nigerian Stock Exchange as at 2016, out of which six banks were randomly selected resulting in 60 observations. Panel data technique was employed, while fixed and random effects model were used for estimation. The results of the study showed that a significant positive relationship existed between audit specialization and earnings management. Furthermore, a significant positive relationship existed between audit independence and earnings management. However, there was an insignificant negative relationship between audit tenure and earnings management. The study concluded that lengthy audit tenures were mechanisms adopted by banks' managers to influence auditors' objectivity in the course of audit assignment. The study recommended that lengthy audit tenure should be discouraged.

Ajekwe and Ibiame, (2017) examined the association between audit quality and earnings management of listed real sector firms in Nigeria for the period from 2009-2014. Using a sample of 48 firms from among 79 real sector firms, an ex-post –facto research design adopted in the methodology, and a multivariate regression model specified to test the effect of audit quality (measured using audit firm size and audit independence) on earnings management (measured using absolute value of discretionary accruals in the modified Jones model) following the methodology of Peasnell, Pope and Young (2000). The study documents that audit firm size has a restrained earnings management, however the restraint was insignificant. On the other hand, auditor's independence significantly moderated earnings management and manipulations of real sector firms.

Zayol, Adzembe and Akaa, (2017) examined the determinants of earnings management of listed oil and gas firms in Nigeria over the period from 2010-2015. Correctional research design was adopted in order to ascertain the relationship between the

identified determinants of earnings management and earnings management. Samples of seven oil and gas firms were selected from a population of fifteen firms using random sampling techniques. Data generated were analyzed using multiple regression analysis with the aid of STATA statistical software. The study found that external sector specialization has positive and significant effect on earnings management of listed oil and gas firms while external audit tenure and audit committee gender have negative and significant relationship with earnings management of listed oil and gas firms in Nigeria. The study recommended that oil and gas firms should make periodic changes on the services of auditors that specialize in auditing the oil and gas sector and that the oil and gas firms in Nigeria should be encouraged to continue to engage the services of more independent audit firms.

Tyokoso and Tsegba (2017) investigated the effect of audit quality on earnings management of listed oil marketing companies in Nigeria for the period from 2004-2013. The dependent variable earnings management represented by discretionary accruals (DA) was estimated using the modified Jones model while the independent variable audit quality was represented by audit firm size, auditor industry specialization and auditor tenure. The findings of the study indicated that both audit firm size and auditor industry specialization have insignificant negative effect on DA of the sampled listed oil marketing companies in Nigeria during the period of study. In contrast, auditor tenure had a significant negative effect on DA of the companies.

Aliyu, Musa and Zachariah (2016) examined the effect of audit quality on earnings management of listed deposit money banks in Nigeria. The specific objectives were to examine the effect of audit firm size, joint audit and auditor financial dependence on earnings management. The study used a sample of seven deposit money banks for the period from 2006-2013. Data analysis was done using ordinary least square (OLS) regression technique. The study found that both audit firm size and joint audit have significant negative effect on earnings management of listed deposit money banks in Nigeria. Auditor financial dependence had a significant positive effect on earnings management of listed deposit money banks in Nigeria during the study period.

## **2.7 Theoretical Framework**

### **2.7.1 Theory of Inspired Confidence**

Theory of inspired confidence was developed by the Limperg Institute in Netherlands in 1985. The theory states that the auditor, as a confidential agent, derives his broad function in society from the need for expert and independent examination as well as the need for an expert and independent judgment supported by the examinations. Thus, auditors are expected to know and realize that the public continues to expect a low rate of audit failures. This requires that the auditors must plan and perform their audit in a manner that will minimize the risk of undetected material misstatements. The accountant is under a duty to conduct his work in a manner that does not betray the confidence which he commands. The significance of the theory is that the duties and responsibilities of the auditors are a derivation from the confidence that are bestowed by the public on the success of the audit process and the assurance which the opinion of the accountant conveys. Since this confidence determines the existence of the process, a betrayal of the confidence logically means a termination of the process or function. Carmichael (2004) in discussing the social significance of the audit stated that when the confidence that society has in the effectiveness and quality of the audit process and audit report is misplaced, the value relevance of that audit is destroyed. Therefore, auditors are expected to maintain reasonable quality assurance to the owners and management of companies and to investors and stakeholders and along with financial reporting, corporate governance and regulations, support confidence in the capital markets.

### **2.7.2 Signaling Theory**

Signaling theory suggests that companies with good performance use financial information disclosure to send signals to the market. Craven and Marston, (1999) show that firms will attempt to accept the same level of disclosure as similar firms operating in the same industry because if a firm does not keep up with the same level of disclosure as others, it may be perceived by stakeholders that it is hiding bad news or negative information. Thus, a high quality audit sends a signal to the market that the financial statement is more credible than those audited by lower quality auditors. The market perceives audit firm size and specialist auditors to be of a higher quality than others and rewards (punishes) companies with larger improvements (or plummets) in share prices accordingly (Krishna and Yang, 1999). Therefore, signaling should theoretically affect the demand for audit quality over and beyond the monitoring function alone. The positive signal of transparency and credibility it sends to the market and the assurance it provides to stakeholders about the quality of earnings performance disclosure suggests a positive association between EPS and audit quality.

## **3.0 Methodology**

### **3.1 Research Design**

Ex-post –facto research design is adopted for this study based on positivist approach. An Ex-post facto research design is used to describe the statistical effect of events that had already taken place. It is most appropriate for this study because it allows for testing of expected effects between audit quality proxies and shareholders' earnings of listed consumer goods companies in Nigeria based on already existing data. The data for the period from 2012-2018 were extracted from the published audited annual reports and accounts of the eleven (11) companies selected out of the entire companies in the industrial goods companies quoted in Nigerian Stock Exchange (NSE). The selected companies include: Premier, Portland, Meyer, Lafarge, First ALU, Berger Paints, CAP, Greif, Dangote Cement, BETA, and Austin Laz because they are the available consumer goods companies in Nigeria. The data extracted from this source are on Audit Firm Size (AFS), Auditor Independence (ADI) and Auditor Tenure (ADT) which represents the independent variable. Similarly, data on shareholders' earnings represented by Earnings per Share (EPS) were extracted from the same source.

### **3.2 Dependent Variables**

The dependent variable for this study is Earnings per Share (EPS). EPS is net profit after tax (but before taking account of extra-ordinary income and expenses) deflated by ordinary share in issue. It is mathematically expressed as:

$$\text{EPS} = \frac{\text{Profit after interest and taxes (excluding extra ordinary items)}}{\text{No. of ordinary Shares in issue}}$$

### **3.3 Independent Variables**

- i. Auditors' independence (ADI) is measured as auditors' fees divided by firm revenue.
- ii. Audit firm size (AFS) is measured as "1" if the audit firm is in the Big4, and "0" if otherwise.
- iii. Auditor tenure (ADT) is proxied as length of auditor-client relationship using a dummy variable of "1" if 3 years + and "0" if otherwise.

### **3.4 Model Specification**

The study adopted multiple regression model was used to analyze the impact of the predictor variables on the dependent variable. The model is stated thus:

$$\text{EPS}_t = \beta_0 + \beta_1 \text{ADI}_t + \beta_2 \text{AFS}_t + \beta_3 \text{ADT}_t + e_t \quad \text{----- (1)}$$

Where;

EPS = Earnings per Share  
 ADI = Audit Independence  
 AFS = Audit Firm Size  
 ADT = Audit Tenure  
 $\beta_0$  = Constant Term  
 $\beta_1$ -  $\beta_3$  = Unknown Parameters to be estimated  
 $e_t$  = error term

**3.5 Method of Data Analysis**

Descriptive statistics was used to compute summary statistics for both the dependent and independent variables of the study. The use of descriptive statistics is important because it summarizes and enhances understanding of the data collected for analysis in a study. The study also used Pearson correlation analysis to show the nature, direction and extent of the relationship between and among the dependent and independent variables. In order to examine the effect of audit quality on shareholders’ earnings of listed industrial goods companies in Nigeria, multiple regression analysis was employed as a major technique of data analysis. **Decision rule** on the statistical significance of the parameter estimate were based on the t-statistic (t-value) and probability values (p-values).

**4.0 Descriptive and Empirical Results**

**4.1 Data Presentation**

**Table 1: Descriptive Statistics**

	EPS	ADI	AFS	ADT
Mean	2.143933	0.062667	0.696970	0.484848
Median	0.810000	0.003748	1.000000	0.000000
Maximum	11.85000	0.677935	1.000000	1.000000
Minimum	-6.370000	0.000588	0.000000	0.000000
Std. Dev	3.423349	0.171677	0.463090	0.503600

**Source:** Author’s Computation, 2019 using E-views 9.5

Table 1 presented the descriptive statistics for the dependent and independent variables (EPS = Earnings per Share, ADI = Auditor Independence, AFS =Audit Firm Size, ADT = Auditor Tenure). The standard deviation of the variables ranges from 0.17 to 3.42. ADI has the lowest standard deviation of 0.17 followed by AFS with a standard deviation of 0.46, then ADT with a standard deviation of 0.50 and finally EPS with a standard deviation of 3.42. The relatively low standard deviation for all the study variables may be an indication that the sampled data for the study is normally distributed. The table also indicated an average value of 2.14 for EPS. The minimum and maximum values of EPS during the study period are 11.85 and -6.37 respectively. These values imply that some sampled companies reported losses while others reported profits during the study period, with the average earning on shares being 214k

Similarly, the table shows that auditor independence has a mean value of 0.063 during the study period. This value implies that only about 6% of the sampled companies’ auditors during the period of the study were audited by auditors without independence, indicating that about 94% of the firms are audited by independent auditors. The minimum and maximum values of auditors independence stands at 0% and 67.8% respectively. Overall, the value indicates that most sampled firms have independent auditors.

The table further revealed an average value of 0.696970 for audit firm size. The value implies that about 70% of the sampled industrial goods companies were audited by the Big4 audit firms in Nigeria (KPMG, PWC, Ernst and Young Delloitte) during the study period. The mean value of 70% further suggests that only 30% of the sampled companies were

audited by non-Big4 audit firms in Nigeria during the period of investigation. This shows that the audit market in the sector is dominated by the Big4 audit companies in Nigeria and just a few non-Big4 audit firms audited listed industrial goods companies in Nigeria. The minimum and maximum values of audit firm size during the study period were “0” and “1” respectively. The minimum and maximum values of audit firm indicate that auditor size is measured by a dummy variable which takes the value of “1” if the company is audited by aBig4 audit firm and “0” if otherwise. Finally, the table revealed an average value of 0.4849 for audit tenure. The value implies that about 49% of the sampled industrial goods companies had auditors who audited them for more that3 years during the study period, while about 51% of the firms changed auditors within 3 years. The minimum and maximum values of audit tenure indicate that audit tenure is measured by a dummy variable which takes the value of “1” if the length of Auditor-Client relationship is 3 years + and “0” if otherwise.

#### 4.2 Data Analysis

This section contains empirical results from the correlation analyses

**Table 2: Correlation Matrix**

	EPS	ADI	AFS	ADT
EPS	1.000000 ----			
ADI	0.725599 0.0000	1.000000 ----		
AFS	0.266711 0.0304	0.228284 0.0652	1.000000 ----	
ADT	-0.62808 0.6164	0.005723 0.9636	-0.349832 0.0040	1.000000 ----

**Source:** Authors’ Computation, 2019 using E-views 9.5

Table 2 presents correlation values between dependent and independent variables and the correlation among the independent variables themselves. These values are generated from Pearson Correlation Output. Auditor independence is positively correlated with EPS (0.726) of listed industrial goods companies in Nigeria during the study period. The high positive coefficient between auditor independence and EPS of the sampled firms in Nigeria suggests that auditor independence is associated with improved and reliable EPS of firms. The table also revealed a positive correlation coefficient between audit firm size and EPS (0.2667) of the sampled firms in Nigeria during the period of investigation. The significant positive coefficient between audit firm size and EPS of the sampled companies is an indication that audit firm size is associated with reliable EPS figure of listed industrial goods companies during the study period. This relationship is not surprising because Big4 audit firms have the resources and capacity to perform high quality audit that is capable of producing reliable reported earnings firms.

Similarly, auditor tenure is negatively associated with the EPS figure of sampled firms (-0.0628). the negative relationship between Auditor Tenure and EPS of industrial goods companies in Nigeria shows that auditor tenure is associated with decrease in EPS figure credibility. This relationship is expected because lengthy link between the auditor and his client may threaten unconventionality given developed familiarity. This may lead to less caution and compromise on the part of the auditor. Besides, a lengthy engagement may bring about less effort to signal the failings of internal control and risk sources. Finally, it is observed that among the independent variables of the study, AFS positively correlates with ADI by a positive significant coefficient of 0.228. There is no relationship among ADT and ADI, while ADT and AFS are negatively correlated with a significant coefficient of -0.350.

### 4.3 Regression Results and Discussion

Table 3: Average coefficient, t-statistics and p-value from annual cross section regressions of EPS and Audit Quality proxies of industrial goods firms in Nigeria from 2012-2017.

**Table 3: Regression Result**

	Intercept	ADI	AFS	ADT	Adj. R-Squared
Coefficient	0.891	14.045	0.695	-0.231	0.516
(t-statistics)		(7.911)	(1.990)	(-0.367)	
<i>p-value</i>		0.0000	0.0362	0.7150	

**Source:** Authors' Computation, 2019 using E-views 9.5

Table 3 reports multivariate regressions results estimated to test the effect of audit quality measures on shareholders' earnings. The intercept, coefficients, t-statistics, p-values and adjusted r-squared are highlighted in the result.

#### 4.3.1. Audit Firm Size (AFS) Effect on Earnings per Share (EPS)

The regression results for AFS effect on EPS revealed that AFS has a positive effect on EPS figure of industrial goods firms listed in the NSE. Stated differently, the larger the audit firm size, the higher the dependence on reported EPS of firms in the industrial goods sector, revealed by a positive coefficient of 0.695. This is because large audit firms have more resources to conduct high quality audits, have a large client base which makes them less dependent on any one client that could make them compromise their audit quality and also have more investment in reputation capital which is at stake if they are found to have compromised audit quality than small audit firms. This therefore enhances market confidence on reported EPS figures of industrial goods firms in Nigeria. The t-statistics value of  $1.990 > 1.96$  and *p-value* of  $0.0362 < 0.05$  level of significance, show that the effect is statistically significant. Thus, audit firm size has significant effect on EPS of industrial goods companies in Nigeria.

#### 4.3.2. Audit Tenure (ADT) Effect on Earnings per Share (EPS)

The regression results for ADT effects on EPS revealed that ADT is a negative predictor of the EPS figure of industrial goods firms in Nigeria stated differently, the longer the tenure of an audit firm, the less reliable the EPS figure reported in the financial statement, by a negative coefficient of 0.427. This result implies that long auditor tenure is associated with less EPS figure reliability by shareholders of the sampled firms in Nigeria. The result is expected because as the length of Auditor-Client relationship increases, familiarity with the audited firm may cause compromise, which threatens the reliability of reported EPS, through earnings management. The t-statistics value of  $-0.503 < 1.96$  and *p-value* of  $0.6164 > 0.05$  level of significance shows that the effect is statistically insignificant. Based on the result, ADT has a negative yet insignificant effect on EPS.

### 4.4 Discussion of Findings

In all, the findings are consistent with prior empirical works in other industries. Particularly, the positive effect of audit firm size and auditor independence on shareholders' earnings conforms to Aliyu et al (2016), Ajekwe and Ibiamke (2017) and Olabisi (2017) who found that larger audit firm and more independent auditors restrain earnings management, which impacts positively on the reliability of the EPS figure of reporting firms.

The results of the negative effect of auditor tenure on shareholders' earnings also conform to the results of Zayol et al (2017), Olabisi et al (2017) and Tyokoso and Tsegba (2017) who found that lengthy audit periods reduce the quality of earnings, as lengthy audit tenures are mechanisms adopted by managers to influence auditors' objectivity as stated in the above empirical reviews guiding the study above.

## 5.0 Conclusion

The study provided empirical evidence on the association between audit quality (proxied by auditors' independence, audit firm size and auditor tenure) and shareholders' earnings (proxied by EPS) of listed industrial goods companies in Nigeria. Specifically, the study concluded that auditors' independence and audit firm size have positive and significant effect on EPS figure of industrial goods companies listed in the Nigeria Stock Exchange, indicating that auditors' independence and audit firm size constrain earnings management of the sampled firms, resulting in quality, credible and reliable EPS figure reported by the sampled firms. The correlation analysis also supports this finding, with positive significant correlation coefficients results found between the said variables. Thus, the first and second null hypotheses are rejected.

## 6.0 Recommendations

Based on the findings of this study, the following recommendations were made.

1. Public companies (and more specifically the industrial goods firms) should ensure that auditors they hire are independent in order to have quality EPS, which in turn can affect their share pricing.
2. The study recommends that firms that require public trust and want to reap the advantage conferred by shareholders should hire the services of larger audit firms. This would inspire public trust and confidence in the annual reports.
3. The study concluded that lengthy audit tenures were mechanisms adopted by firm managers to influence auditors' objectivity in the course of audit assignment. Therefore, the study recommends that lengthy audit tenure be discouraged.

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**APPENDIX**

**Raw Data used for Analysis**

COM	YEAR	SALES	EPS	Audit Fee	AFS	ADT	ADI
PREMIUM	2018	190,510	-0.44	1260	1	1	0.006613826
	2017	234,908	-0.13	15,000	1	0	0.063854786
	2016	170,635	-0.20	15,000	1	0	0.087906936
	2015	365,378	-0.17	4500	1	0	0.012316012
	2014	279,977	-0.25	4500	1	0	0.016072749
	2013	257,886	-0.82	4500	1	0	0.017449571
	2012	236,655	-0.67	3600	1	0	0.015437665
PORTLAND	2018	1,657,898	0.10	8100	1	1	0.004885705
	2017	1,267,819	-0.08	8100	1	1	0.006388925
	2016	2,168,480	-0.58	10,735	1	0	0.004950472
	2015	2,798,165	0.37	10,000	1	0	0.003573771
	2014	1,354,171	0.15	3500	1	0	0.002584607
	2013	1,466,334	0.22	6000	1	0	0.004091837
	2012	2,206,168	0.23	2400	0	0	0.000468812
MEYER	2018	1,097,061	-0.54	4100	0	1	0.003737258
	2017	1,091,000	-0.75	4100	0	1	0.00375802
	2016	1,187,236	0.18	4000	0	1	0.00336917
	2015	1,340,104	-0.12	4000	0	1	0.002984843
	2014	1,187,612	0.16	4000	0	1	0.002519507
	2013	1,487,484	-0.08	4000	0	1	0.002689105
	2012	1,446,540	-0.08	3580	0	1	0.003476203
LAFARGE	2018	267,234,239	-6.37	221,262	1	0	0.000872797
	2017	260,810,463	3.15	202,037	1	0	0.000774651
	2016	267,234,239	6.29	157,180	1	0	0.000588173
	2015	260,810,463	7.67	156005	1	0	0.000598155
	2014	15,198,000	1.93	670,000	1	0	0.044084748
	2013	15,816,000	1.92	740,000	1	0	0.046788063
	2012	15,682,000	1.90	736,004	1	0	0.038366254
FISRT ALU	2018	7,878,319	0.10	12,660	0	1	0.001606942
	2017	9,154,586	0.08	11,000	0	1	0.001201584
	2016	10,478,233	0.05	12,000	0	1	0.001145231
	2015	8,901,618	0.02	12,000	0	1	0.00134807
	2014	7,862,542	0.18	12,000	0	1	0.00125634
BERGER PAINTS	2018	141,890,498	3.61	102,741	0	0	0.000724087
	2017	138,993,752	3.36	96,920	0	0	0.000697298
	2016	3,022,264	0.75	16,500	1	1	0.005459483
	2015	3,082,930	0.75	16,500	1	1	0.005352051
	2014	2,708,448	0.87	96,000	1	0	0.035444653
	2013	2,513,664	0.88	96,000	1	0	0.038191262
	2012	2,461,587	0.85	95,642	1	0	0.024267164
CAP	2018	7,113,950	2.14	19,530	1	0	0.00274531
	2017	6,813,984	2.29	19,530	1	0	0.002866165
	2016	7,056,876	2.49	20,575	1	0	0.002915596
	2015	6,987,604	2.37	21,060	1	0	0.003013909
	2014	6,195,824	2.02	21,000	1	0	0.00338938

	2013	5,231,330	1.99	17,000	1	0	0.003249652
	2012	4,322,653	1.93	16,520	1	0	0.002365424
GREIF	2018	768,603	2.02	12,980	1	1	0.016887782
	2017	434,304	1.37	1,313	1	1	0.003023228
	2016	805,370	0.58	5,250	1	1	0.006518743
	2015	787,582	1.02	5,250	1	1	0.006665973
	2014	795,200	0.72	5,250	1	1	0.006602113
	2013	748,664	0.91	5,250	1	1	0.007012492
	2012	725,450	0.83	5,000	1	1	0.006714532
DANGOTE CEMENT	2018	805,582	11.65	508,000	1	1	0.630599989
	2017	615,103	8.78	417,000	1	1	0.67793524
	2016	491,725	10.86	285,000	1	1	0.579592252
	2015	391,639	9.42	239,000	1	0	0.610255873
	2014	386,177	11.85	191,981	1	0	0.497132144
	2013	298,454	8.52	174,417	1	0	0.584401616
	2012	285,456	8.68	182,342	1	0	0.463423521
BETA	2018	14,876,040	6.07	24,048	1	1	0.001616559
	2017	13,340,989	8.67	22,356	1	1	0.001675738
	2016	15,952,224	3.98	22,272	1	1	0.001396081
	2015	16,632,879	4.78	20,527	1	0	0.001234122
	2014	14,096,123	2.93	19,184	1	0	0.001360942
	2013	12,932,549	2.66	19,184	1	0	0.001483389
	2012	12,841,445	1.82	18,267	1	0	0.001134557
AUSTIN LAZ	2018	312,730	0.00	3,210	0	1	0.010264445
	2017	217,428	-0.14	3,000	0	1	0.013797671
	2016	261,055	-0.04	3,000	0	1	0.011491831
	2015	615,730	-0.11	3,000	0	1	0.004872265
	2014	667,332	5.04	3,000	0	1	0.004495513
	2013	686,911	4.06	1,000	0	0	0.001455793
	2012	584.612	3.18	1.000	0	0	0.oo3466582

**Source:** Authors' Computation from Individual Companies Annual Reports.