

Determinants of Audit Quality: Evidence from Deposit Money Banks Listed on Nigeria Stock Exchange

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Abstract *The objective of this study is to ascertain the determinants of audit quality with a focus on selected Deposit Money Banks listed on the floor of Nigeria Stock Exchange from 2010-2015. This study made use of secondary data obtained from fact books, annual reports and account of selected banks under study. The relevant data were subjected to statistical analysis using Pearson coefficient of correlation, Ordinary Least Square (OLS) and Granger causality test with the aid of E-view 9.0. The result of this study revealed that there is a positive and statistically significant relationship between audit fees, audit tenure, audit firm size and audit quality. It was also empirically verified that audit fees, audit tenure, audit firm size have a statistically significant relationship with audit quality of banks listed on the floor of Nigerian Stock Exchange at 5% level of significance. The study recommends among others that auditor-client relationship should not exceed 3 years, because the auditor may develop close relationship with the client and become more likely to act in favour of management, resulting in reduced objectivity and audit quality.*

Key words Audit quality, audit fees, audit tenure, audit firm size

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1. Introduction

The Nigerian business environment has been perceived in some quarters as not too conducive to investors; both local and foreign. Adjudged reasons for this assertion include the inability of financial reports to meet the needs of this group of users. The prevalence of fraud, excessive earnings management and other financial crimes in the country has reduced the level of confidence reposed in these financial statements; and in the ability of these statements to perform their requisite functions. In light of the cost of frauds to the business and the offender, it is important to develop strategies to prevent or detect business fraud, taking a cursory look at the risk factors associated with business, giving due attention to the motives attached with it, and establishing how to effectively manage it on a daily basis (Akinjobi and Omowumi, 2010). Hence, the auditors are looked upon as ‘messiahs’ in correcting this anomaly, and thereby directly, or indirectly creating a balance in the functioning of the business environment.

Consequently, higher audit quality can be easier achieved by the larger audit firm (Francis, 2004), because of their ability to discover and detect the misstatements (Hosseinniak, 2014). But, reaching high audit quality in small size audit firms is also attainable, since because they conform to audit standards (Bauwhede and Willekens, 2004). However, because of the existence of the auditor-related specifications such as professional competence, technical ability, auditor’s liability as well as auditor independence, it is more expected to reach higher audit quality in large audit firms (Hussein and Hanefah, 2013).

Because of the important result of an audit process, the auditor must maintain quality in accordance with the generally accepted auditing standard (GAAS) when accumulating and evaluating the auditing evidence. He/she has to give the audit opinion based on professional judgment. The auditor is encouraged to have accountability on each part of an audit activity. Therefore, the purpose of an audit activity needs sufficient competent evidences so that it can run successfully (Eko, 2012).

1.1. Statement of research problem

The spate of audit failure in the world, especially in Nigeria, has brought great disappointment the user of financial report. The bane of the problem has been linked to long term of audit firm tenure which has also been linked with creative accounting. In Nigeria audit setting, the challenge of audit tenure and audit quality reporting has not attracted much empirical study beyond mere anecdotal opinions Mgbame, *et al.*, (2012). In view of these studies, auditor tenure has become the focus of much debate. Should a firm replace its auditors on a regular basis, or should the auditor be allowed to build a long term relation with the client? The production of a quality audit report is perceived to foster engendered confidence in financial reports by the users of those reports. Investors in particular tend to place better trust in financial statements that are audited; as the expected independence of the auditor boosts the assurance that important investment decisions can be made on the thrust of those statements. The increased confidence of these set of financial users tend to attract the inflow of capital which has the long-run effect of creating growth and development in the business environment.

However, inefficiencies on the part of management could lead to structured financial statements. These financial statements ordinarily do not show the true state of affairs and financial position of the organization and hence, could jeopardize the decisions of prospective investors. Adverse results on investment would reduce the credibility of the financial statements; which would in turn reduce the level of capital flow, thereby deteriorating the state of the business environment. The onus therefore rests on the auditors to address these issues through efficient and effective execution of the audit assignment, and the resultant production of a quality report. The study therefore investigates the factors that could affect the quality of the audit assignment, and analyzes the existence and degree of relationships between these factors and the achievement of high audit quality in the deposit money banks listed on Nigeria Stock Exchange.

1.2. Objective of the study

The main objective of this study is to ascertain the determinants of audit quality in Deposit Money Banks listed on Nigeria Stock Exchange. The specific objectives are to ascertain:-

1. The relationship between Audit Fee (AUDF) and Audit Quality (AUDQ) of listed Deposit Money Banks in Nigeria.
2. The relationship between Audit Firm Tenure (AUDTEN) and Audit Quality (AUDQ) of listed Deposit Money Banks in Nigeria.
3. The relationship between Audit Firm Size (AUDFSZ) and Audit Quality (AUDQ) of listed Deposit Money Banks in Nigeria.

1.3. Research hypotheses

In line with the above research objective, the following null hypotheses guided this study:

H₀₁: There is no significant relationship between Audit Fee (AUDF) and Audit Quality (AUDQ) of listed Deposit Money Banks in Nigeria.

H₀₂: There is no significant relationship between Audit Tenure (AUDTEN) and Audit Quality (AUDQ) of listed Deposit Money Banks in Nigeria.

H₀₃: There is no significant relationship between Audit Firm Size (AUDFSZ) and Audit Quality (AUDQ) of listed Deposit Money Banks in Nigeria.

2. Literature review

2.1. Conceptual review

Audit quality

Even though research on audit quality has been widely conducted, there is no one exact definition of audit quality (Duff, 2004). Bedard *et al.*, (2010) illustrated that even seasoned professionals convening to discuss the notion of audit quality have difficulty agreeing on a common definition. The one that is broadly cited is the definition of the quality of audit services by DeAngelo in 1981 which stated that the quality of audit services is defined to be the market-assessed joint probability that a given auditor will both (a)

discover a breach in the client's accounting system, and (b) report the breach. The probability that a given auditor will discover a breach depends on the auditor's technological capabilities, the audit procedures employed on a given audit, the extent of sampling, et cetera. The conditional probability of reporting a discovered breach is a measure of an auditor's independence from a given client (DeAngelo, 1981).

However, other published definitions of audit quality emphasized another various aspects of audit quality that can be noticed in various studies of audit quality. For example, some studies focused on the impact of audit firm arrangement and processing such as audit contract type, audit tenure, audit fees, and non-audit services on audit quality (Carey and Simnett, 2006; Son, 2005). Meanwhile, other studies explored the company's characteristics such as company size, business complexity, institutional ownership and leverage, as variables that affect audit quality (Kane and Velury, 2004; Mitra, 2007; Wan Abdullah *et al.*, 2008). Some others examine the effective components of corporate governance and its relationship with audit quality (Carcello and Neal, 2000; Goodwin and Seow, 2002; Salleh and Stewart, 2006; Adeyemi and Fagbemi, 2010).

Audit fee

Audit fee as an important factor of audit quality has been used in several studies, specifically in examining the link between audit quality and the size (for instance, DeAngelo, 1981; Francis, 2004; Hay and Davis, 2004). Greater audit fees are also associated with the choice of qualified auditors (Hay and Davis, 2004). In spite of higher audit fee, some clients are more interested in using large audit firms. Clients are confident that large audit firms have greater monitoring and bonding in order to capture higher audit quality (Hay and Davis, 2004). In terms of the auditor competence and specialization, including technical information and continuing education, large audit firms hire better professionals in comparison to small size firms. So, the larger the audit firm the higher auditor's specialization (and audit quality) is expected and therefore higher audit fees is achieved (DeAngelo, 1981).

Auditor tenure

There are two opposing views on the effects of auditor tenure on audit quality. One states that as the auditor–client relationship lengthens, the auditor may develop a close relationship with the client and become more likely to act in favor of management, thus reducing audit quality. This view supports mandatory audit partner rotation. The other view is that as auditor tenure lengthens, auditors increase their understanding of their clients' business and develop their expertise during the audit, resulting in higher audit quality. The literature on auditor tenure has generally concluded that long auditor tenure does not impair audit quality.

Audit tenure has been investigated as short and large audit tenures. In this regard, studies have mentioned that the shorter the auditor's tenure, the less auditor client knowledge. As a result, lower audit quality is expected. In contrast, longer audit tenure can lead to decrease auditor's professional care, and therefore reducing audit quality. On the other hand, with larger audit tenure it is more likely to discover misstatements using technical abilities and higher levels of knowledge. But the relationship between auditor and client may reduce independence and can reduce the probability of report misstatements. So, short audit tenure may involve the auditors with the risk of less technical knowledge and abilities. Therefore, the audit report quality can also be affected by audit tenure. In terms of client's perspective, maintaining auditor for next period can depend on the issuing of a clean audit report. Therefore, if auditors know that clients are considering switching them, it can influence the type of audit report (Vanstraelen, 2000).

Audit Firm Size

The size of audit firm has been used as a surrogate for audit quality, that is, large audit firms have a reputation to safeguard and therefore will ensure an independent quality audit service. Larger audit firms have better financial resources and research facilities, superior technology and more talented employees to undertake large company audits than do smaller audit firms. Their larger client portfolios enable them to resist management pressure, whereas smaller firms provide more personalized services due to limited client portfolios and are expected to succumb to management requirements (Mahdi and Ali, 2009).

Therefore, the size of audit firm is an important characteristic that reflects auditor independence. Thus, the issue of maintaining auditor independence is more crucial for smaller firms than larger firms. A large body of research examines the relationship between audit firm size and audit quality (DeAngelo 1981; Dye, 1993).

Audit fee and audit quality

Thornton and Moore (1993) in Elke and Schroé (2010) investigated how audit fees are determined and what their influences are on the auditor choice. In accordance with previous research on what determines the audit fees (for example Simunic, 1980 and 1984), they focused on three of the four generally suggested audit fee determinants, namely, weakness of internal control, business risk and audit complexity. One of their main findings is that the marginal cost of auditor quality varies inversely with the companies' internal control strength.

Audit firm tenure and audit quality

The question of whether audit firm tenure impacts audit quality has long been one of the major issues concerning auditing regulations. Some believe that lengthy auditor tenure undermines independence and objectivity, while others believe that long tenure increases auditor knowledge and competence.

Audit firm size and audit quality

Dehkordi and Makarem (2011) investigated the influence of audit firm size (Big auditors vs. non-Big auditors) and auditor type (governmental vs. private auditors) on audit quality. A sample of 224 firms was observed from the Tehran Stock Exchange (TSE) companies during the period 2002 to 2007. Discretionary accruals (DAC) were employed as representative of audit quality. A modified, cross-sectional version of the Jones' model was applied to measure DAC. Their results showed that the size of non-governmental audit firms does not affect their audit quality, and changes within private audit firms does not lead to changes in the level of discretionary accruals. Their empirical results imply that in some settings such as that of Iran, factors such as auditor type, intense competition, audit committee, and litigation risk are of greater importance than audit firm size.

2.2. Theoretical review

Agency Theory

Agency theory (Fama and Jensen, 1983; Andrew, 2013), the dominant theory in accounting and audit (Beasley *et al.*, 2009; Cohen *et al.*, 2008; Hermanson *et al.*, 2012; Tricker, 2012,) suggests contractual mechanisms such as corporate governance are put in place to monitor management to address the separation in ownership and control. Under the agency view, management are viewed as self-interested actors who behave opportunistically, favouring their own interests over those they represent even if these actions are detrimental to owners (Jensen and Meckling, 1976). Thus, two mechanisms are identified to curb this behaviour: contractual mechanisms to align management goals with the principal; and information systems introduced to reduce information asymmetry between owners and management which can also restrict opportunistic behaviour through the realization by management that they cannot deceive the monitors (Cohen *et al.*, 2008; Eisenhardt, 1989a). The agency perspective considers independence from management and expertise as the primary and central attributes of a monitor (Cohen *et al.*, 2008; Cohen *et al.*, 2002; Hermanson *et al.*, 2012).

Stewardship Theory

Stewardship theory suggests the motives of audit quality actor are aligned with objectives of the organisation (Trotman, 2013) and the actor has a focus on promoting value and organisational improvement (Beasley *et al.*, 2009; Davis *et al.*, 1997). Stewardship theory incorporates alternative behavioural principles than agency theory by suggesting behaviour does not depart from the organisations interests (Davis *et al.*, 1997). The behavioural principles are based on two premises: first, that the steward

is naturally honest and trustworthy motivated to do the best for the organisation and not for personal gain; and second, actors behave in an entrusting manner to not jeopardize their reputation (Nicholson and Kiel, 2007). Therefore this theory challenges the agency theory perspective (Nordberg, 2011) and the distinction is that motivation under an agency perspective is extrinsic, versus intrinsic motivation under stewardship (Davis *et al.*, 1997).

3. Methodology of research

Research Design

This study adopts ex-post facto research design. Ex-post facto research design is used to establish a cause and effect relationship among the variables that correlate.

Population of the Study

The population of this study comprises all the fifteen (15) deposit money banks listed on the Nigeria Stock Exchange (NSE) fact book and published in the Nigeria Stock Exchange website as at 31st December, 2015 (See Table 1).

Table 1. Nigeria Stock Exchange (Quoted Banks As At 31st December, 2015)

A) Population of the Study	B) Sample Size of the Study
1) Access Bank Plc	1) Access Bank Plc
2) Diamond Bank Plc	2) Diamond Bank Plc
3) Eco Bank Plc	3) Eco Bank Plc
4) FCMB Bank Plc	4) Fidelity Bank Plc
5) Fidelity Bank Plc	5) Guaranty Trust Bank Plc
6) First Bank Plc	6) Skye Bank Plc
7) Guaranty Trust Bank Plc	7) Sterling Bank Plc
8) Skye Bank Plc	8) Union Bank Plc
9) Stanbic IBTC Plc	9) United Bank of Africa Plc
10) Sterling Bank Plc	10) Unity Bank Plc
11) Union Bank Plc	11) Wema Bank Plc
12) United Bank of Africa Plc	
13) Wema Bank Plc	
14) Zenith International Plc	
15) Unity Bank Plc	

Sample Size and Sampling Method

Non-probability method was adopted to determine the sample size. This research adopted judgmental sampling technique based of the availability and up-to-date annual financial statements. In view of this, eleven (11) deposit money banks listed on the floor of NSE were selected amongst the deposit money banks listed on Nigeria stock Exchange. The eleven (11) listed deposit money banks represents the sample size for this study, for a six (6) year period spanning from 2010-2015. The six (6) years period is chosen in order to have a fairly, reasonably, reliable and up-to-date available financial data.

Source of Data

This study made use of secondary data precisely. The data were sourced from publication of the Nigeria Stock Exchange (NSE) and the annual report and accounts of the listed deposit money banks as well as their respective notes to the accounts.

Measurement of Variables

Independent Variables

The surrogates for the independent variable are:

i. Audit Fees (AUDF)

AUDF: this is the amount of money paid to external auditors of the banks. It was measured using natural logarithms of audit fees of the banks.

ii. Audit Tenure (AUDTEN)

AUDTEN: measured in terms of number of years spent as auditor for sample banks. If greater than 3, we assign 1, else 0.

iii. Audit Firm Size (AUDFSZ)

AUDFSZ: dummy variable, 1 if the company is audited by one of the Big 4 audit firms (Akintola Williams Deloitte, PricewaterhouseCoopers, Ernst and Young, KPMG) and 0 if otherwise.

Dependent Variables

Audit quality (AUDQ) is the dependent variable contained in this study.

AUDQ = LOG of total number of staff in audit firms

Control variables

The following control variables were used:

(a) Leverage (LEV)

LEV: the total liabilities divided by total assets

(b) Growth (GRT)

GRT = price to book value

Models Specification

The following models will be used to test the hypotheses as follows:

$$AUDQ_{it} = \beta_0 + \beta_1AUDF_{it} + \beta_2LEV_{it} + \beta_3GRT_{it} + E_{it} - (H_{01})$$

$$AUDQ_{it} = \beta_0 + \beta_1AUDTEN_{it} + \beta_2LEV_{it} + \beta_3GRT_{it} + E_{it} (H_{02})$$

$$AUDQ_{it} = \beta_0 + \beta_1AUDFSZ_{it} + \beta_2LEV_{it} + \beta_3GRT_{it} + E_{it} (H_{03})$$

Where:

β_0 = Constant term (intercept);

β_{it} = Coefficients to be estimated for firm i in period t;

E_{it} = Error term/unexplained variable(s) for firm i, in period t.

Table 2. Correlation Matrix

	AUDQ	AUDTEN	AUDF	AUDFSZ	LEV	GRT
AUDQ	1.0000	0.4995	0.2236	0.1829	-0.5069	-0.4234
AUDTEN	0.4995	1.0000	0.5754	0.2017	-0.3710	-0.3693
AUDF	0.2236	0.5754	1.0000	0.3793	-0.4335	0.4389
AUDFSZ	0.1829	0.2017	0.3793	1.0000	0.1069	0.2845
LEV	-0.5069	-0.3710	-0.4335	0.1069	1.0000	0.1261
GRT	-0.4234	-0.3693	0.4389	0.2845	0.1261	1.0000

Source: Researcher's computation using E-View 9.0, 2017

It is indicated in table 2 that AUDQ has a moderate positive association with AUDTEN(0.4995), AUDF(0.2236) and AUDFSZ(0.1829) since the degree of relationship is above 10% but less than 70% but relates negatively with LEV (-0.5069) and GRT(-0.4234).

Test of hypotheses

Test of Null Hypothesis 1

H₀₁: Audit fees has no significant association with audit quality of listed deposit money banks on NSE

Model Specification

$$AUDQ_{it} = \beta_0 + \beta_1AUDF_{it} + \beta_2LEV_{it} + \beta_3GRT_{it} + E_{it} \text{ (H}_{01}\text{)}$$

Table 3. OLS Regression Analysis showing the association between AUDF, LEV, GRT and AUDQ

Dependent Variable: AUDQ
 Method: Panel Least Squares
 Date: 02/14/17 Time: 17:49
 Sample: 2010 2015
 Periods included: 6
 Cross-sections included: 11
 Total panel (balanced) observations: 66

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.792002	1.301911	2.912643	0.0050
AUDF	2.129602	0.146006	0.887649	0.0032
LEV	1.025793	0.031841	0.810074	0.0210
GRT	2.130331	3.480133	1.761522	0.0031
R-squared	0.680448	Mean dependent var		2.582320
Adjusted R-squared	0.623373	S.D. dependent var		1.552966
S.E. of regression	1.534710	Akaike info criterion		3.753252
Sum squared resid	146.0308	Schwarz criterion		3.885958
Log likelihood	-119.8573	Hannan-Quinn criter.		3.805690
F-statistic	1.518530	Durbin-Watson stat		1.449552
Prob(F-statistic)	0.000000			

Source: Researcher’s computation using E-View 9.0, 2017

Interpretation of Regressed Result

The regressed coefficient correlation result in table 3 shows the existence of a positive and statistically significant relationship between AUDF ($\beta_1=2.129602$), LEV ($\beta_2=1.025793$), GRT ($\beta_3=2.130331$) at 5% significant level. The probability value for the slope coefficient shows that $P(x_1=0.0032 < 0.05; x_2=0.0210; x_3=0.0031)$. This implies that AUDF, LEV and GRT have a statistically significant relationship with AUDQ at 5% significance level. The coefficient of determination obtained is 0.62 (62%), which is commonly referred to as the value of adjusted R². The cumulative test of hypothesis using adjusted R² to draw statistical inference about the explanatory variables employed in this regression equation, shows that 62% of the systematic variations in the dependent variable can be jointly predicted by the independent variable while 38% was explained by unknown variables that were not included in the model. The Durbin-Watson statistic of 1.449552 indicates that there is no auto-correlation problem. The overall significance of the model Prob > F-statistic (0.000000) is statistically significant at 5%.

Model Specification

$$AUDQ = 3.792002 + 2.129602AUDF$$

The model shows that for there to be one unit increase in AUDQ, there will be 2.129602 multiplying effect of AUDF. The implication of the finding is that an increase in AUDF will definitely lead to an increase in AUDQ.

Decision Rule:

Accept the null hypothesis (H₀) if the p-value of the test is greater than 0.05, otherwise reject.

Decision:

The P-value of the test is 0.000000 which is less than 0.05. Hence, reject H₀ and Accept H₁.

Conclusion:

Since the p-value of the test is less than 0.05, then there exists enough evidence to reject the null hypothesis and conclude that AUDF has a statistically significant relationship with AUDQ at 5% significant level.

Table 4. Granger Causality Test showing the Causality between AUDQ and AUDF

Pairwise Granger Causality Tests
 Date: 02/14/17 Time: 17:51
 Sample: 2010 2015
 Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
AUDF does not Granger Cause AUDQ	44	3.07486	0.0012
AUDQ does not Granger Cause AUDF		0.17069	0.8437

Source: Researcher’s computation using E-View 9.0, 2017

Decision Rule:

If the F-value of the causality test is statistically significant at 5%, then causality is established. This implies that the Independent variable granger causes the dependent variable. Hence, H_1 is accepted, otherwise accept H_0 .

Interpretation of Post Regression Analysis

Table 4 shows that there is a unilateral causality between AUDF and AUDQ since the P-value (0.0012) is statistically significant at 5% level. Moreover, at two (2) lags there is a statistically significant relationship between AUDF and AUDQ. On the other hand, there is no “reverse causation” from AUDQ to AUDF. This reinforces the fact that AUDF Granger Causes AUDQ. Consequently, the null hypothesis is rejected for the alternative which states that AUDF has a statistically significant relationship with AUDQ of listed banks in Nigeria.

Test of Null Hypothesis II

H_{02} : Audit tenure has no significant association with audit quality of listed deposit money banks on NSE

Model Specification

$$AUDQ_{it} = \beta_0 + \beta_1 AUDTEN_{it} + \beta_2 LEV_{it} + \beta_3 GRT_{it} + E_{it} \quad (H_{02})$$

Table 5. OLS Regression Analysis testing the association between AUDTEN, LEV, GRT and AUDQ

Dependent Variable: AUDQ
 Method: Panel Least Squares
 Date: 02/14/17 Time: 17:53
 Sample: 2010 2015
 Periods included: 6
 Cross-sections included: 11
 Total panel (balanced) observations: 66

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.454852	0.322239	7.618112	0.0000
AUDTEN	1.721920	0.463416	1.557823	0.0004
LEV	2.027361	0.031347	0.872868	0.0001
GRT	4.870682	3.447372	1.412868	0.0000
R-squared	0.692145	Mean dependent var	2.582320	
Adjusted R-squared	0.648216	S.D. dependent var	1.552966	

S.E. of regression	1.515064	Akaike info criterion	3.727485
Sum squared resid	142.3160	Schwarz criterion	3.860191
Log likelihood	-119.0070	Hannan-Quinn criter.	3.779923
F-statistic	2.097609	Durbin-Watson stat	1.782385
Prob(F-statistic)	0.000000		

Source: Researcher’s computation using E-View 9.0, 2017

Interpretation of Regressed Result

The regressed coefficient correlation result in table 5 shows the existence of a positive and statistically significant relationship between AUDTEN ($\beta_1=1.721920$), LEV ($\beta_2=2.027361$), GRT ($\beta_3=-4.870682$) at 5% significant level. The probability value for the slope coefficient shows that $P(x_1=0.0004 < 0.05$; $x_2=0.0001$; $x_3=0.0000$). This implies that AUDF, LEV and GRT have a statistically significant relationship with AUDQ at 5% significance level. The coefficient of determination obtained is 0.65 (65%), which is commonly referred to as the value of adjusted R^2 . The cumulative test of hypothesis using adjusted R^2 to draw statistical inference about the explanatory variables employed in this regression equation, shows that 65% of the systematic variations in the dependent variable can be jointly predicted by the independent variable while 35% was explained by unknown variables that were not included in the model. The Durbin-Watson statistic of 1.782385 indicates that there is no auto-correlation problem. The overall significance of the model Prob > F-statistic (0.000000) is statistically significant at 5%.

Model Specification

$$AUDQ = 2.454852 + 1.721920AUDTEN$$

The model shows that for there to be one unit increase in AUDQ, there will be 1.721920 multiplying effect of AUDTEN. The implication of the finding is that an increase in AUDTEN will definitely lead to an increase in AUDQ.

Decision Rule:

Accept the null hypothesis (H_0) if the p-value of the test is greater than 0.05, otherwise reject.

Decision:

The P-value of the test is 0.000000 which is less than 0.05. Hence, reject H_0 and Accept H_1 .

Conclusion:

Since the p-value of the test is less than 0.05, then there exists enough evidence to reject the null hypothesis and conclude that AUDTEN has a statistically significant relationship with AUDQ at 5% significant level.

Table 6. Granger Causality Test showing the Causality between AUDQ and AUDTEN

Date: 02/14/17 Time: 17:54
Sample: 2010 2015
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
AUDTEN does not Granger Cause AUDQ	44	3.35960	0.0002
AUDQ does not Granger Cause AUDTEN		0.21604	0.8067

Source: Researcher’s computation using E-View 9.0, 2017

Interpretation of Post Regression Analysis

Table 6 shows that the there is a unidirectional causality between AUDTEN and AUDQ since the F-value is statistically significant at 5% level. Moreover, at two (2) lags there is a statistically significant relationship between AUDTEN and AUDQ. On the other hand, there is no “reverse causation” from AUDQ to AUDTEN. This reinforces the fact that AUDTEN Granger Causes AUDQ. Consequently, the null hypothesis is rejected for the alternative which states that AUDTEN has a statistically significant relationship with AUDQ of listed banks in Nigeria.

Test of Null Hypothesis III

H₀₃: Audit tenure has no significant association with audit quality of listed deposit money banks on NSE

Model Specification

$$AUDQ_{it} = \beta_0 + \beta_1AUDFSZ_{it} + \beta_2LEV_{it} + \beta_3GRT_{it} + E_{it} \quad (H_{03})$$

Table 7. OLS Regression Analysis testing the association between AUDFSZ, LEV, GRT and AUDQ

Dependent Variable: AUDQ
 Method: Panel Least Squares
 Date: 02/14/17 Time: 17:56
 Sample: 2010 2015
 Periods included: 6
 Cross-sections included: 11
 Total panel (balanced) observations: 66

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.773392	0.317134	8.745180	0.0000
AUDFSZ	3.413130	0.442868	0.932852	0.0000
LEV	1.022873	0.031559	0.724768	0.0013
GRT	6.016947	3.461467	1.738265	0.0000
R-squared	0.769667	Mean dependent var		2.582320
Adjusted R-squared	0.724651	S.D. dependent var		1.552966
S.E. of regression	1.533705	Akaike info criterion		3.751942
Sum squared resid	145.8396	Schwarz criterion		3.884648
Log likelihood	-119.8141	Hannan-Quinn criter.		3.804381
F-statistic	3.547607	Durbin-Watson stat		1.699315
Prob(F-statistic)	0.000000			

Source: Researcher’s computation using E-View 9.0, 2017

Interpretation of Regressed Result

The regressed coefficient correlation result in table 7 shows the existence of a positive and statistically significant relationship between AUDFSZ ($\beta_1=3.413130$), LEV ($\beta_2=1.022873$), GRT ($\beta_3=6.016947$) at 5% significant level. The probability value for the slope coefficient shows that $P(x_1=0.0000 < 0.05$; $x_2=0.0013$; $x_3=0.0000$). This implies that AUDFSZ, LEV and GRT have a statistically significant relationship with AUDQ at 5% significance level. The coefficient of determination obtained is 0.77 (77%), which is commonly referred to as the value of adjusted R². The cumulative test of hypothesis using adjusted R² to draw statistical inference about the explanatory variables employed in this regression equation, shows that 77% of the systematic variations in the dependent variable can be jointly predicted by the independent variable while 23% was explained by unknown variables that were not included in the model. The Durbin-Watson statistic of 1.699315 indicates that there is no auto-correlation problem. The overall significance of the model Prob > F-statistic (0.000000) is statistically significant at 5%.

Model Specification

$$AUDQ = 2.773392 + 3.413130AUDFSZ$$

The model shows that for there to be one unit increase in AUDQ, there will be 3.413130 multiplying effect of AUDFSZ. The implication of the finding is that an increase in AUDFSZ will definitely lead to an increase in AUDQ.

Decision Rule:

Accept the null hypothesis (H₀) if the p-value of the test is greater than 0.05, otherwise reject.

Decision:

The P-value of the test is 0.000000 which is less than 0.05. Hence, reject H₀ and Accept H₁.

Conclusion:

Since the p-value of the test is less than 0.05, then there exists enough evidence to reject the null hypothesis and conclude that AUDFSZ has a statistically significant relationship with AUDQ at 5% significant level.

Table 8. Granger Causality Test showing the Causality between AUDQ and AUDFSZ

Pairwise Granger Causality Tests
 Date: 02/14/17 Time: 17:57
 Sample: 2010 2015
 Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
AUDFSZ does not Granger Cause AUDQ	44	3.42677	0.0356
AUDQ does not Granger Cause AUDFSZ		0.14038	0.8695

Source: Researcher’s computation using E-View 9.0, 2017

Interpretation of Post Regression Analysis

Table 8 shows that there is a unidirectional causality between AUDFSZ and AUDQ since the F-value is statistically significant at 5% level. Moreover, at two (2) lags there is a statistically significant relationship between AUDFSZ and AUDQ. On the other hand, there is no “reverse causation” from AUDQ to AUDTEN. This reinforces the fact that AUDFSZ Granger Causes AUDQ. Consequently, the null hypothesis is rejected for the alternative which states that AUDFSZ has a statistically significant relationship with AUDQ of listed banks in Nigeria.

4. Findings

The findings of the study include:

- 1) It was found that audit fees have a positive and statistically significant relationship with audit quality of deposit money banks listed on the floor of NSE at 5% level of significance.
- 2) It was found that audit tenure has a positive and statistically significant relationship with audit quality of deposit money banks listed on the floor of NSE at 5% level of significance.
- 3) It was found that audit firm size has a positive and statistically significant relationship with audit quality of deposit money banks listed on the floor of NSE at 5% level of significance.

5. Conclusions

This study assesses the determinants of audit quality in deposit money banks listed on the floor of Nigeria stock exchange. The study also examined whether audit fees, audit tenure and audit firm size influence auditor audit quality. Based on the analysis conducted this present study concludes that audit fees, audit tenure and audit firm size are found to be some of the major factors influencing the quality of audit in Nigeria banks. The study also found that audit fees, audit tenure and audit firm size have a positive and statistically significant relationship with audit quality at 5% level of significance.

6. Recommendations

1. From the findings of this study, it follows that auditor fees is directly proportional to audit quality. Thus, Audit firms should ensure that their staff is adequately remunerated as this is likely to enhance audit quality.
2. Since audit tenure is directly proportional to audit quality, auditor-client relationship should not exceed 3 years, because the auditor may develop close relationship with the client and become more likely to act in favour of management, resulting in reduced objectivity and audit quality.
3. Banks in Nigeria, should always employ the services of one of the big audit firms since it results to improved audit quality, allows for greater earnings quality and lower earnings management.

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