

AUDITOR TENURE AND AUDIT FEE: A GRANGER CAUSALITY ANALYSIS APPROACH

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ABSTRACT

This paper focused on auditor tenure and audit fee with emphasis on the degree and direction of relationship. A simple random sampling technique was employed in selecting 20 companies for the period 2013. Secondary data were retrieved from the financial statements of the sampled companies. Descriptive statistics, Partial correlation analysis and the Granger causality test were utilized as the method of data analysis. From the findings of the study, we observed that without controlling client characteristics i.e. firm size and return on equity, the relationship between audit tenure and audit fee is negative. The relationship between auditor tenure and audit fee controlling for client characteristics appeared to also be negative but stronger. It is observed from the granger- causality test results that the null hypothesis that auditor tenure does not granger-cause audit fee cannot be rejected. In addition, from the evaluation of granger-causality result, it is observed that the null hypothesis that auditor fee does not granger-cause auditor tenure is rejected and this suggest that the alternative hypothesis that auditor fee granger cause auditor tenure is accepted. The implication of the finding necessitates the recommendation that audit fee could have significant causal effects on auditor tenure and hence in attempting the model of the behavior of auditor tenure, the study recommends that considerable attention should be given to audit fee.

Key words: auditor tenure, audit fee, accounting, granger causality.

Introduction

Audit tenure and audit fee are critical variables that have been placed on the pedestal of auditing researches. The potential of these variables in influencing the independence of the auditor and consequently the financial reporting process, justifies the enormity in the level of interest that both variables have stimulated across a diverse range of researchers, policy makers, academics and management practitioners.

Auditors have a statutory duty to report on the truth and fairness of the stewardship report prepared by the management to the owners of the business. Further, stakeholders such as investors, financial institutions, governments and employees are often guided in many ways by the reports provided by management in respect of the firm's financial position as certified by the auditor (Francis, 2004, KPMG, 2008). Consequently, auditor's

independence is fundamental to public confidence in the reporting and auditing process as well as the reliability of the auditor's report.

A discourse on the conceptual underpinnings of both variables; audit tenure and audit fee, reveals that with regards to audit tenure there is a growing body of literature indicating that the length of time spent by an auditor with a client has implications on the independence and objectivity of the auditor and indeed the audit process (Johnson, Khurana, & Reynolds 2002; Ghosh & Moon 2003). Though the arguments are at polarity, two major schools of thoughts have emerged and thus provide explicit evidence on the theoretical divergences. One of the schools of thought argues that short auditor tenure has negative effect on the quality of financial reporting. According to Johnson, et al. (2002) proponents of this view interprets the empirical findings showing negative effects of tenure on the quality of the financial reporting process as a lack of client-specific knowledge in the early years of an audit and inferred that mandatory auditor rotation between audit firms may result in lower quality of audits owing to short audit-firm tenure. Jenkins and Velury (2008) also argue that longer Auditor- Tenure improves audit quality as auditors may need time to gain expertise in the business they audit and acquire client-specific knowledge over time.

The other school of thought (Mautz & Sharaf, 2002; Healy & Kim, 2003; Carcello & Nagy, 2004) is of the opinion that the trade-off between the incremental effect of learning experience and excessive familiarity has a cost-benefit consideration on the rotation debate. According to Mautz and Sharaf, (2002) if the incremental consequence of knowledge diminished at certain long-term tenure, the extreme fluency would impair audit quality in a long-lasting auditor-client relationship. Because fluency with the client has the

consequence of dipping the new point of view auditors have in early years of engagement. The Sarbanes-Oxley Act of 2002 view advocates the rotation of the front audit partner every five years so that engagement can be viewed "with fresh and skeptical eyes". The argument principally is that longer auditor- tenure tends to lead to opportunity cost of Auditor independence.

With regards to audit fee, according to DeAngelo (1981) regulators deem that auditors befall financially reliant on their clients because of the economic rents. They fear auditors will recognize remuneration from retaining clients that breed considerable economic rents to offset the anticipated costs (reputation loss and litigation costs) of sacrificing their self-rule. The result of this bonding being that they are less expected to lay down to management pressure for financial misreporting. In a viable atmosphere, the economic value of client can drastically persuade the auditor's economic reliance on client. Clients that are efficiently vital can obtain more privilege over clients that are relatively less efficient. However, several factors that could determine the audit fee have been identified and they include; competitive conditions in audit market (Ashbaugh, Lafond & Mayhew, 2003) size of the auditing firm (Palmrose 1986), the risk of the auditee (Dye, 1993), audit bond types (Palmrose 1986), the level of audit planning (Davidson, 1993) and the condition of other accounting services to the auditee (DeFond, Raghunandan & Subramanyam, 2002).

Audit tenure and audit fee have become a critical part of the continuum of factors often analyzed by researchers, policy makers, regulatory bodies and management in attempting to address issues of auditor independence and by implication the financial reporting process. The theoretical platform for this, results from the arguments in literature that both variables often analyzed

independently can induce significant influence on the independence of the auditor and audit quality (Mgbame, Eragbe & Osazuwa, 2012; Mautz & Sharaf, 2002; Healy & Kim, 2003; Carcello & Nagy, 2004). The imperative of auditor independence lies in the fact that auditors have a statutory duty to report on the truth and fairness of the stewardship report prepared by management to owners of the business. We observe that theoretical divergences as to the relationship between audit tenure and fee is plausible based on the analysis of their separate effects (Petty & Cuganesan 1996; Geiger & Raghunandan 2002; Carcello & Nagy 2004; AICPA 1992). Thus, the existence of this divergence indicates the need for more researches in this light and hence the necessity for the study. In addition, to the best of the researcher's knowledge no existing study have examined the nature of the relationship between auditor tenure and audit fee in Nigeria. It is this gap in the body of knowledge that this research work attempts to fill.

Hypotheses of the Study

The hypotheses of the study are stated in the null (Ho) as follows;

1. There is a no positive relationship between auditor tenure and audit fee
2. Auditor tenure does not granger cause audit fee
3. Audit fee does not granger cause audit tenure

Literature Review

Audit Tenure: Concept and Issues

Ghosh and Moon (2003) note that there is a growing body of literature indicating that the length of time spent by an auditor with a client has implications on the independence and objectivity of the auditor and indeed the audit process. According to Johnson et. al, (2002) empirical findings have shown that negative effects of tenure on the quality of financial

reporting process is often interpreted as lack of client-specific awareness in the early years of an audit and incident that compulsory auditor rotation among audit firms might result in lower quality of audits due to short audit-firm tenure.

Jenkins and Velury (2008) contend that longer auditor tenure improves audit quality as auditors may well need time to gain knowledge in the business they audit and obtain client-specific information over time. This implies that audit quality is lower in the early years of the Auditor- Client bond, and audit quality increases by duration of auditor-tenure due to the decrease in information unevenness connecting Auditor and Client. Geiger and Raghunandan (2002) explain that as auditor tenure increases, auditors lay greater constraints on the level of unrestricted and present accruals acceptable by management. These outcomes imply that compulsory audit firm rotation can have an unfavorable effect on audit quality, as audit quality is lower in the earlier years of the auditor-client relationship.

However, Mautz and Sharaf (2002) are of the opinion that the exchange between the incremental effect of knowledge skill and excessive fluency has a cost-benefit concern on the auditor tenure debate. They further stated that if the incremental effect of knowledge skill diminished at certain long-lasting tenure, the excessive fluency would impair audit quality in a long-lasting auditor-client relationship. The reason is owed to the fact that familiarity with the client can reduce the fresh point of view of auditors in the early years of engagement. The Sarbanes-Oxley Act of 2002 consolidates the view as it requires the rotation of audit partner every five years so that the engagement can be viewed "with fresh and skeptical eyes". The argument principally is that longer auditor- tenure tends to upshot in an opportunity cost of Auditor independence.

Carcello and Nagy (2004) arguing against extended auditor tenure notes that pressures faced by the incumbent auditor to retain the audit client coupled with the auditor's comfort level with management developed over time can adversely affect auditor independence and audit quality. They maintained that longer auditor tenure could have a negative effect on audit independence because auditor objectivity is reduced with the passage of time and that mandatory audit-firm rotation helps reduce undue influence from management on auditors and thus can enhance audit quality. According to Turner (2002), opponents of mandatory audit-firm rotation believe that mandatory audit-firm rotation will increase costs incurred by both audit firms and auditee companies. In addition, they contend that mandatory audit-firm rotation may result in an increased likelihood of audit failures due to new auditors' lack of client-specific knowledge of risk, operations and financial reporting practices and the time needed to acquire that knowledge. Consistent with this view, academic research and professional studies find that audit failures are much more likely to occur in the first one or two years (Petty and Cuganesan 1996; Geiger and Raghunandan 2002; Carcello and Nagy 2004; AICPA 1992) and that auditor litigation risk is higher in the early years of an engagement (e.g., Palmrose 1986; 1991)

Copley and Doucet (1993) investigated the relationship between the quality of audit services and auditor tenure. A relationship that is vital to appraise the effectiveness of rotation. They portray and test a statistical model that is, a regression between the dependent variable "audit quality" and other independent variables, of which the most important is "tenure". The dependent variable is dichotomous, implying that, it indicates whether the audit is of deplorable quality or not. The empirical results confirm a positive indication for the expected consideration of

"tenure". This means that the possibility of getting a shoddy quality audit increases with the extent of the auditor – client relationship. This means the longer the period of engagement, the higher the risk that the quality of audit services might decrease.

Audit Fee: Concept and Issues

At the crux of most studies whether conceptual or empirical on the need to improve the audit service as a "product" is the audit fee. Thus, audit fee studies have been seen as a rift of the general study area apprehensive with issues of auditor independence and audit quality. Audit fee is seen as compensation for auditor services that relates directly and mainly to the audit purpose. Thus, audit fees have often been distinguished from non-audit fees which typify fees relating to non-audit services provided by the auditor. Following works by Simunic (1984) on pricing of audit services, numerous studies have recognized that a major part of fees can be taken to be determined by a "cost-plus" method linked to auditing effort, the force of different considerations have also been examined. These factors include: viable circumstances in audit market (Francis & Stokes 1986, Moizer & Turley 1989, Roberts, et.al. 1990), size of the auditing firm (Palmrose 1986), the risk of the auditee (Dye, et.al. 1990), audit contract types (Palmrose, 1989), the extent of audit planning (Davidson & Gist 1995) and the provision of other accounting services to the auditee (Simunic 1984, Palmrose 1986, Abdel-Khalik 1990). We shall examine a number of these factors;

Client Risk

Audit risk is considered an essential factor in determining the level of audit fees. The influence of firm risk on audit fees has been investigated by many previous authors and strong relationship between client risk and audit fees is evident. Several scholars posit

that audit risk together with materiality needs to be considered in defining audit work (Francis & Simon, 1987; Francis & Stokes 1986; Collier & Gregory 1996). Such that they consider the effect of auditee risk on audit in that higher auditee risk lead to more efforts by auditors to decrease litigation risk in the future. According to Sandra and Patrick (1996), audit firms may base their fees on the perceived risk of audit failure and they measure client risk using gearing and liquidity ratio and conclude that gearing and liquidity were found to have an important bearing on audit fees.

- **Complexity**

When business operations are complex and having foreign operations, it implies that audit work will also be complex. Complexity is one important factor to be considered in the study of audit fees. Prior studies (Sandra and Francis, 1996; Francis & Simon, 1987; Francis & Stokes 1986; Collier & Gregory 1996) documented empirical evidence that audit fees are significantly influenced by the level of the audit client complexity. Hypothetically, they state that it is expect that as the audit client becomes more complex, more time and effort is required to perform the external audit work. A more complex audit client means a more diverse organizational structure, and difficult to review transactions. This increased audit effort is expected to lead to an increase in the level of audit fees. Studies which sustain the complexity variable as a determinant of audit fee include Langendijk (1997), Collier and Gregory (1996), Sandra and Patrick (1996), and Taylor and Baker (1981).

- **Profitability**

Profitability is viewed as an indicator of management performance and its efficiency in allocating available resources. The direction of the relationship between audit fees and profitability can be positive or negative. Some might argue more audit fees would be

incurred by companies reporting high level of profits subject to rigorous audit testing to related revenue and expenses (Joshi & AL Bastaki 2000). Others make the point that underperforming companies are more likely to control their overheads and this would result in less audit work (Chem et al 2002). Nevertheless, it must be remembered that cost cutting may result in reduced internal control and engender more audit control. Studies conducted by Simunic (1984) found that profitability has a significant consequence on the level of audit fees while Francis and Simon (1987) did not find a significant relationship between these variables.

Audit Timing

Audits peak period is the painstaking period in which most companies' accounts are audited. For example, the annual year-end of most companies in Nigeria is December 31st. As greater part of companies commence their audits after this date. The most common method of determining the audit fee is based on the amount of time involved in the audit work. Such time is of course a function of other factors. Sandra and Patrick (1996) establish a positive and significant association between audit fees, the month of the audit and auditor delay.

Industry Effect

Craswell, et. al, (1995) document the cause of industry specialty on audit fees. Nevertheless, in their study no effort have been made to study cross-sectional version in fees by industry, apart from Anderson and Zeghal (1994) whose results were incomplete because of the small number of sample size. Given that the choice of auditing dealings and approach are determined by the type of industry the specific auditee company is in, the total of fees charged across industries for likewise sized companies ought to be

dissimilar (Simunic 1984 & Craswell, *et al.* 1995).

The Granger-Causality Test

In examining causality between variables there is a possibility that there could exist a situation of dual causality where there are theoretical justifications that the variables are found to induce effects on themselves. Example, X influences Y but Y also influences X. According to Obadan and Odusola (2008), the frequently used causality tests in econometric modeling are Granger and Sims tests. While the former uses the lagged values of a meticulous variable to explain the behaviour of one or more variables, the latter uses lead values. The loss of degrees of freedom often associated with the use of the Sims approach makes its submission limited. Therefore, this study employs the Granger causality test. The standard Granger causality test examines whether precedent changes in one variable, X (say, audit fees) help to elucidate the present changes in another variable Y (e.g. auditor tenure), over and above the clarification provide past changes in Y. If, otherwise, then one concludes that X (audit fee) does not Granger cause Y (auditor tenure). To determine whether causality runs in the other direction, from Y to X (tenure to fee), one simply repeats the test, but with X and Y interchanged. Hence, this study employs the Granger causality test.

Methodology

This study adopts a cross-sectional research design. With regards to the methodology, it would suffice to state here that the study intends to examine the nature of the relationship between auditor tenure and audit fee and the direction of causality. As mentioned earlier, intuitively, one may not be able to say clearly if audit fee influences audit tenure or the reverse holds as there are This can further be expressed as:

theoretical justifications and explanations to expect both possibilities. Where such possibilities exist between two variables, it therefore introduces a special case of dual causality indicating the methodological necessity of granger causality test. A simple random sampling technique was employed in selecting the 20 quoted companies for the study from the 200 quoted companies as at 2013. Krejcie and Morgan (1970) in Amadi (2005) assent with the sample as estimated the population percentage of 0.05 as sufficient to give the maximum sample size necessary for generality. The method matched for determining the sample participants as it provides an equal likelihood of choice and as such minimizes choice bias. Secondary data is used for the study. The data were extracted from the audited annual report and accounts of the sampled companies for 2013 financial year.

Model Specification

As noted earlier, intuitively, one may not be able to say clearly if audit fee influences audit tenure or the reverse holds and as such there may be a case of ambiguity in specifying the direction of causality as there is the possibility that there could exist a situation of dual causality where the variables are found to induce effects on themselves e.g. X influences Y but Y also influences X. The granger specification is employed to analyze the direction of causality between Audit tenure and Audit fee. Basically, the usual Granger causality test review whether changes in one variable, X (say, audit fee) help to clarify the present changes in another variable Y (e.g. auditor tenure), over and beyond the clarification provided by past changes in Y. The granger specification to test if Audfee is determined by Audit tenure is stated thus;

$$\text{Audfee} = f(\text{Audt}, \text{Audt}_{-1}, \text{Audfee}_{-1}, \mu) \quad \text{--- (1)}$$

$$\text{Audfee} = B_0 + B_1 \text{Audt} + B_2 \text{Audt}_{-1} + B_3 \text{Audfee}_{-1} + \mu \quad (2)$$

The granger specification to test if on the contrary Audit tenure is determined by Audit fee is stated thus;

$$\text{Audt} = f(\text{Audfee}, \text{Audt}_{-1}, \text{Audfee}_{-1}, \mu) \quad (3)$$

This can further be expressed as:

$$\text{Audt} = B_0 + B_1 \text{Audfee} + B_2 \text{Audt}_{-1} + B_3 \text{Audfee}_{-1} + \mu \quad (4)$$

Where;

Audt=Audit tenure

Audt₋₁= one period lag of Audit tenure

Audfee₋₁ = one period lag of Audit fee

u=error term

Variable measurement

Audit tenure: This is depicted as a dummy variable which assumes a value of 1 if the company has had the same auditor for the last five years beginning from the study year. This view is consistent with the Sarbanes-Oxley Act of 2002 that requires rotation of the lead audit partner every five years. If the company had changed auditors within this period, we assign 0.

Audit fee: This is seen as remuneration for auditor services that relates directly and primarily to the audit function (Simunic 1984). This is a scale data type and is retrieved from financial statement of the companies.

Presentation and Analysis of Result

Table 1. Descriptive statistics

	Mean	Standard deviation	Maximum value	Minimum Value	Jacque-Bera	P-value
AUDTEN	0.95	0.223	1	0	245.66	0.00
AUDFEE	83.687	1.101	2.28E+08	9000000	4.5069	0.105
ROE	22.15%	16.77	69.00%	0.00	10.613	0.004
TOASSTS	4.93E+08	3.59E+09	1.07E+09	1.11E+08	2.699	0.259

Source: eviews 7.0

Where AUDTEN= Auditor tenure, AUDFFE= Audit fee, ROE= Return on equity, TOASSTS= Total Assets.

Table 1 above presents the descriptive statistics of the variables. As observed Audten has a mean value of 0.95 suggesting that about 95% of the companies had the same auditor within five years. The standard deviations stood at 0.223 while the Jacque-Bera statistic of 245.00 with a p-value of 0.000 indicates that the series is normal and suggest the unlikelihood of outliers. Audfee for the period under review shows a mean value of 83.687m which represent the average amount of audit fee paid within the stated period and a standard deviation of 1.101 which revealed that the deviation of the variable from the mean is relatively high. The maximum and minimum values

stood at 2.28E+08 and 9m respectively. The Jacque-Bera statistic of 4.5069 with a p-value of 0.105 suggests the non-normality of the series. The mean and standard deviation for ROE stood at 22.15% and 16.77 while the maximum and minimum values were 69% and 0.00% respectively. The Jacque-Bera statistic appeared to be significant with a value of 10.613 and p-value of 0.004 which indicates that the series is normal and suggest the unlikelihood of outliers. To assets for the period under review indicates a mean of 4.93E+08 and standard deviation of 3.59E+09. The maximum and minimum values stood at 1.07E+09 and 1.11E+08 respectively. The Jacque-Bera statistic of 2.699 with a p-value of 0.259 suggests the non-normality of the series.

Table 2 Pearson partial correlation result

Control Variables		Audfee	Tenure	tot assets	Roe
-none ^a	Audfee	1.000	-.086	-.372	-.101
	Tenure	-.086	1.000	-.122	.086
	Totassets	-.372	-.122	1.000	.070
	Roe	-.101	.086	.070	1.000
Totassets & roe	Audfee	1.000	-.136		
	tenure	-.136	1.000		
a. Cells contain zero-order (Pearson) correlations.					

Source: eviews 7.0

The partial correlation technique is used to examine the relationship between two variables while being able to control additional variables suspected to influence the relationship between the variables of interest. In this case, the zero order partials indicates that without controlling firm size and return on equity, the relationship between audit tenure and audit fee is negative as indicated by the correlation coefficient of -.086. Audit fee was also observed to inversely related with total assets and return on equity (ROE) as indicated by the correlation coefficients of -.372 and -.101 respectively. Furthermore, auditor tenure was also observed to be inversely related with total assets of the client but positively related with return on equity (ROE) of the client as depicted by the correlation coefficients of -.122 and 0.86 respectively. The relationship between auditor tenure and audit fee controlling for client characteristics such as return on equity (ROE) and total assets appeared to have an effect on the correlation coefficient which stood at -.136 as against the correlation coefficient of -.086 obtained without controlling for client characteristics. This could suggest that relationship between audit fee and tenure is influenced by client characteristics. However, correlation analysis does not indicate causality. Hence we examine the granger-causality test which provides an insight into the cause-effect relationship.

Table 3 Pairwise Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.
TOASSETS does not Granger Cause AUDFEE	19	2.29312	0.1495
AUDFEE does not Granger Cause TOASSETS		0.42961	0.5215
ROE does not Granger Cause AUDFEE	19	1.42833	0.2495
AUDFEE does not Granger Cause ROE		0.06389	0.8037
TENURE does not Granger Cause AUDFEE	19	0.05393	0.8193
AUDFEE does not Granger Cause TENURE		7.02428	0.0175
ROE does not Granger Cause TOASSETS	19	0.04164	0.8409
TOASSETS does not Granger Cause ROE		0.98919	0.3347
TENURE does not Granger Cause TOASSETS	19	0.60066	0.4496
TOASSETS does not Granger Cause TENURE		1.12734	0.3041
TENURE does not Granger Cause ROE	19	12.5868	0.0027
ROE does not Granger Cause TENURE		0.04659	0.8318

Source: eviews 7.0

From the table above, it is observed from the granger- causality test results that the null hypothesis that auditor tenure does not granger-cause audit fee is accepted as the probability value [0.819] of the f-statistic [0.054] exceeds the 0.05 critical value at 5% and this suggest that the alternative hypothesis that auditor tenure granger-cause audit fee is rejected. On the other hand, the null hypothesis that auditor fee does not granger-cause auditor tenure is rejected as the probability value [0.018] of the f-statistic [7.024] is less than the 0.05 critical value at 5% and this suggest that the alternative

hypothesis that auditor fee granger cause auditor tenure is accepted.

For the other variables examined, the null hypothesis that total assets does not granger-cause Audfee is accepted as the probability value [0.1495] of the f-statistic [2.293] is less than the 0.05 critical value at 5%. The null hypothesis that Audfee does not granger-cause total assets is also accepted as the probability value [0.522] of the f-statistic [0.429] exceeds the 0.05 critical value at 5%. The null hypothesis that ROE does not granger-cause Audit fee is accepted as the probability value [0.249] of the f-statistic [1.428] exceeds the 0.05 critical value at 5%.

The null hypothesis that Audit fee does not granger-cause ROE is also accepted as the probability value [0.804] of the f-statistic [0.063] exceeds than the 0.05 critical value at 5%. The null hypothesis that a total asset does not granger-cause ROE is accepted as the probability value [0.335] of the f-statistic [0.989] exceeds the 0.05 critical value at 5%.

The null hypothesis that ROE does not granger-cause Total assets is also accepted as the probability value [0.841] of the f-statistic [0.042] exceeds the 0.05 critical value at 5%. The null hypothesis that Auditor tenure does not granger-cause total assets is accepted as the probability value [0.449] of the f-statistic [0.601] exceeds the 0.05 critical value at 5%. The null hypothesis that total asset does not granger-cause auditor tenure is accepted as the probability value [0.304] of the f-statistic [0.127] exceeds the 0.05 critical value at 5%. The null hypothesis that Auditor tenure does not granger-cause ROE is rejected as the probability value [0.0027] of the f-statistic [12.586] is less than the 0.05 critical values at 5%. Finally, the null hypothesis that ROE does not granger-cause Auditor tenure is accepted as the probability value [0.832] of the f-statistic [0.046] exceeds the 0.05 critical value at 5%.

Hypotheses Testing

The following hypotheses were specified for the purpose of the study;

1. H0: there is a positive relationship between auditor tenure and audit fee

The partial correlation analysis the relationship between audit fee and auditor tenure is examined. The zero order partials indicates that without controlling for client characteristics i.e. firm size and return on equity, the relationship between audit tenure and audit fee is negative as indicated by the correlation coefficient of -.086. The

relationship between auditor tenure and audit fee controlling for client characteristics also appeared to also be negative as depicted by the correlation coefficient which stood at -.136. Therefore, the null hypothesis of no there is positive relationship between auditor tenure and audit fee audit tenure is rejected.

H0: auditor tenure does not granger cause audit fee.

From the analysis, it is observed from the granger- causality test results that the null hypothesis that auditor tenure does not granger-cause audit fee is accepted as the probability value [0.819] of the f-statistic [0.054] is less than the 0.05 critical value at 5% and this suggest that the alternative hypothesis that auditor tenure granger-cause audit fee is rejected.

H0: audit fee does not granger cause audit tenure.

From the evaluation of granger-causality result, it is observed that the null hypothesis that auditor fee does not granger-cause auditor tenure is rejected as the probability value [0.018] of the f-statistic [7.024] is less than the critical 0.05 value at 5% significance level and this suggest that the alternative hypothesis that auditor fee granger cause auditor tenure is accepted.

Conclusion and Recommendations

Findings of the study indicate that without controlling for client characteristics i.e. firm size and return on equity, the relationship between audit tenure and audit fee is negative. The relationship between auditor tenure and audit fee controlling for client characteristics also appeared to also be negative. In addition, the granger causality analysis reveals that the null hypothesis that auditor tenure does not granger-cause audit

fee while the alternative hypothesis that auditor fee granger cause auditor tenure is accepted.

In line with the study findings, the following recommendations are suggested:

Firstly, the study recommends that it may be critical for policy makers, management and stakeholders in general to take into consideration the effect of client specific characteristics in evaluating the relationship between audit fee and auditor tenure as this

will be very crucial in regulating the audit profession. The study suggests that a stronger relationship is observed when these characteristics are controlled for. Secondly, the implication of the granger-causality finding necessitates the recommendation that audit fee could have significant causal effects on auditor tenure and hence in attempting the model the behaviour of auditor tenure, the study recommends that considerable attention be given to audit fee.

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APPENDIX 1

Pairwise Granger Causality Tests

Date: 07/15/14 Time: 10:25

Sample: 1 20

Lags: 1

Null Hypothesis:	Obs	F-Statistic	Prob.
TOASSETS does not Granger Cause AUDFEE	19	2.29312	0.1495
AUDFEE does not Granger Cause TOASSETS		0.42961	0.5215
ROE does not Granger Cause AUDFEE	19	1.42833	0.2495
AUDFEE does not Granger Cause ROE		0.06389	0.8037
TENURE does not Granger Cause AUDFEE	19	0.05393	0.8193
AUDFEE does not Granger Cause TENURE		7.02428	0.0175
ROE does not Granger Cause TOASSETS	19	0.04164	0.8409
TOASSETS does not Granger Cause ROE		0.98919	0.3347
TENURE does not Granger Cause TOASSETS	19	0.60066	0.4496
TOASSETS does not Granger Cause TENURE		1.12734	0.3041
TENURE does not Granger Cause ROE	19	12.5868	0.0027
ROE does not Granger Cause TENURE		0.04659	0.8318

APPENDIX 2

	AUDFEE	TOASSETS	ROE	TENURE
Mean	83687500	4.93E+08	22.15000	0.950000
Median	80250000	3.11E+08	18.50000	1.000000
Maximum	2.28E+08	1.07E+09	69.00000	1.000000
Minimum	9000000.	1.11E+08	0.000000	0.000000
Std. Dev.	61654837	3.59E+08	16.76863	0.223607
Skewness	1.101335	0.648856	1.458984	-4.129483
Kurtosis	3.746006	1.752775	5.054569	18.05263
Jarque-Bera	4.506903	2.699691	10.61316	245.6602
Probability	0.105036	0.259280	0.004959	0.000000
Sum	1.67E+09	9.86E+09	443.0000	19.00000
Sum Sq. Dev.	7.22E+16	2.45E+18	5342.550	0.950000
Observations	20	20	20	20

APPENDIX 3

Partial Correlations

Control Variables			AUDFEE	AUDTEN	TOTASST	ROE
-none ^a	AUDFEE	Correlation	1.000	-.086	-.372	-.101
		Significance (2-tailed)	.	.939	.068	.672
		df	0	18	18	18
	AUDTEN	Correlation	-.086	1.000	-.122	.086
		Significance (2-tailed)	.939	.	.617	.776
		df	18	0	18	18
	TOTASST	Correlation	-.372	-.122	1.000	.070
		Significance (2-tailed)	.068	.617	.	.017
		df	18	18	0	18
	ROE	Correlation	-.101	0.86	.070	1.000
		Significance (2-tailed)	.672	.776	.017	.
		df	18	18	18	0
TOTASST & ROE	AUDFEE	Correlation	1.000	-.136		
		Significance (2-tailed)	.	.815		
		df	0	16		
	AUDTEN	Correlation	-.136	1.000		
		Significance (2-tailed)	.815	.		
		df	16	0		

a. Cells contain zero-order (Pearson) correlations.