EFFECT OF AUDITOR TENURE ON AUDIT QUALITY IN NIGERIA

ISITO OGHENEOCHUKO EMMANUEL & PATRICK UZOKA
Department of Accountancy
Delta State Polytechnic, Ogwashi-Uku

https://doi.org/10.37602/IJSSMR.2022.5207

ABSTRACT

In Nigeria, the study looked into the link between auditor tenure and audit quality. We hypothesized that audit quality would rise with audit firm tenure due to increased auditor competence and fall with audit firm tenure due to decreased independence. Whether the link between audit firm tenure and audit quality is a concave, convex, or linear function of audit firm tenure is determined by the overall effect of these two counterbalancing factors across audit firm tenure. Data was gathered from annual reports of selected Nigerian listed companies from 2000 to 2018. The connection between auditor tenure and audit quality was investigated using the regression approach. In this study, the Quadratic Model was used. Firm size, operating cash flow, firm growth, auditor type, firm age, and client relevance were all included as control variables alongside auditor tenure. According to the findings, audit quality improves with auditor tenure. The coefficient on long auditor tenure, on the other hand, was determined to be both negative and significant. As a result, we urge that auditors be encouraged to learn about their client's businesses and industries and that policies be put in place to promote independence, objectivity, and professional skepticism.

Keywords: Auditor Tenure, Audit Quality, Firm Size, Operating Cash Flow, Firm Growth, Auditor Type, Firm Age, Client Relevance

1.0 INTRODUCTION

The main objective of the study is to ascertain if there is a positive relationship between audit quality and auditor tenure in Nigeria. Firms play a significant role in a country's economic development, and their expansion has a favorable impact on the economy as a whole. Firms rely on a range of investors to fund their expansion. As a matter of assurance, these investors prefer believable financial statements that have been inspected and confirmed by independent auditors. This is because audits provide financial information provided by management more credibility and help to reduce investor information risk (Watts & Zimmerman, 1986; Johnson, Khurana & Reynold 2002; Mansi, Maxwell & Miller 2018).

Quality Auditing aids in the verification and validation of activity quality. Audit quality is a key feature of auditing, as it decreases information risk by increasing the quality and integrity of financial reporting. Audit quality is typically thought to be positively related to the financial reporting integrity of firms and adversely related to firm-specific information risk.

In general, independence and competency are seen to have an impact on audit quality. First and foremost, audit quality is determined by the auditor's understanding of the client's company operations and accounting systems. Second, it is determined by the likelihood that...
the auditor will report any found wrongdoing, which serves as a gauge of the auditor's independence from the client. This second element is mentioned while calling for mandatory auditor rotation after a certain number of years in order to strengthen the auditor's independence.

According to Carey and Simnett (2006), Chi and Huang (2005), the quality of audits declines as auditor tenure grows. In a similar line, the Central Bank of Nigeria established a policy requiring banks' external auditors to be rotated in order to provide trustworthy financial reports (Ujah, 2006). Mandatory auditor rotation, on the other hand, may have a detrimental impact on audit quality by altering the competence element. Because organizations' activities are complicated and broad, the information gained during an engagement may be lost too soon if the maximum term of auditor tenure is set so low, significantly impacting audit quality (ACCA, 2011).

The risk of audit failure is higher in the first years of a new audit engagement since there is less client-specific expertise. As a result, requiring periodic audit rotation may have the opposite and unintended consequence. According to previous studies, audit tenure has a beneficial impact on audit quality. Shorter tenure is associated with lower audit quality, according to Johnson et al. (2002), Geiger and Raghunandan (2002), Kyriakou and Dimitras (2018).

This study adds to previous research by using a basic conceptual structure as a guide to empirically analyze the turning point when audit quality begins to decline, and this structure may be used to reconcile mixed findings in the literature and guide the empirical investigation in the future.

2.0 LITERATURE REVIEW

2.1 Auditor Tenure and Audit Quality

Recent occurrences and challenges have prompted academics to conduct additional research into the relationship between audit quality and firm tenure.

Hills (2012) claims that in order to maintain and improve audit quality, auditors must be kept for extended periods of time. Similarly, Carcello and Nagy (2014) discovered that there is no evidence that auditor tenure affects audit equality. This is because the auditor is new to the client in the early years and has little expertise in the client's business, operations, controls, accounting policies, and systems.

Long audit tenures, according to Myers, Rigsby, and Boone (2007), have a favorable link with improved earnings quality. They believe that prolonged audit tenure results in improved audit quality.

Mandatory auditor rotation, on the other hand, necessitates that the auditor rotate. Long audit tenures, according to Casterella (2002), are negatively associated with audit quality. She claims that because auditor tenure is longer, audit quality is lower.
This is consistent with the assumption that auditor rotation would prevent auditors from being motivated by personal benefit from their clients, hence reducing the chance of biased reports in favor of the clients' management.

In the same vein, Aamir and Farooq (2011) posit that it would develop an effective peer-review system that would discourage creative accounting practices by encouraging critical reviews upon each auditor turnover. Moreover, conflicts of interest can arise during the long-tenured auditor-client relationship would be averted. Many studies such as Healey and Kim (2003); Carcello and Nagy (2004) audit firm rotation as a way of enhancing auditor independence and of improving audit quality. The Sarbanes-Oxley Act of 2002 consolidates these views as it requires rotation of the lead audit partner every five years so that the engagement can be viewed “with fresh and skeptical eyes”. The argument basically is that longer auditor tenure tends to result in an opportunity cost of auditor independence (Enofe, Okunega, and Ediae, 2013).

This increasing auditor expertise improves the auditor's ability to detect both purposeful and unintentional major misstatements in financial statements, resulting in higher audit quality.

The Learning Effect is a positive factor linked to auditor experience that increases audit quality over time but has a diminishing incremental effect. This is consistent with the incumbent auditor's "learning curve," which gives him an advantage in the marketplace (DeAngelo 1981; Chen & Manes 1985).

Whether the auditor has the independence to report the identified material misstatements is determined by the trade-off between the auditor's incentives to please the client for future quasi-rents and his incentives to protect his reputation and avoid litigation costs over time.

As a result, auditor independence decreases as tenure increases, as the rationale for obligatory auditor rotation suggests. Extensive personal relationships to the point of creating loyalty or emotional bonds will consciously or subconsciously affect the auditor's independence and objectivity, causing the auditor to lose his or her professional skepticism and objectivity, causing the auditor to lose his or her professional skepticism and objectivity (Carey & Simnett 2006; Hoyle 1978). The Bonding Effect is a long-term detrimental effect associated with auditor independence that lowers audit quality.

The loss in auditor independence, like the learning curve, cannot continue indefinitely since the auditor's reputation, professional standards, quality control systems, and the possibility of lawsuit drive the auditor to maintain a minimum level of auditor independence and impartiality. As a result of the Bonding Effect, auditor independence is first great and then gradually falls, although the decrease in auditor independence eventually evens out.

Throughout the auditor-client interaction, the Learning Effect connected with auditor experience and the Bonding Effect associated with auditor independence work together to determine audit quality. As a result, audit quality is determined by auditor independence and experience, both of which are determined by tenure.

2.2 Perception of investors and information intermediaries about auditor tenure
For independent rating agencies and financial analysts, long-term auditor tenure is critical. Independent rating organizations provide information on issuer creditworthiness, and credit ratings play a significant part in investment decisions. Existing research reveals a correlation between earnings and debt rating/stock rankings published by independent rating agencies, implying that earnings quality perceptions may be a key factor in determining ranks/ratings (Bhojraj and Sengupta, 2003, cited in Ghosh and Moon, 2005).

If auditor tenure is thought to improve earnings quality, the impact of reported earnings on rankings/ratings and earnings forecast is projected to grow as auditor tenure increases, because reported earnings are thought to be more informative about future earnings. If information intermediaries believe that longer auditor tenure degrades earnings quality, the opposite is true. The length of an auditor's stay has a significant impact on the quality of results, stock rankings, and debt ratings. Investors and financial analysts believe that the quality of earnings improves as the auditor's term increases.

Financial analysts, too, play an important role in capital markets as information intermediaries because of their ability to include value-relevant information in their published reports, which influences asset prices.

Analysts rely on earnings releases to project future earnings, according to prior research, which means that estimated future earnings may change depending on views of earnings quality (Barron, Byard, Kile and Reidl, 2002, cited in Ghosh and Moon, 2005).

With longer tenure, the pressure of reported earnings on stock rankings grows stronger, whereas the influence of reported earnings on debt ratings remains constant (Ghosh and Moon, 2005).

2.3 Learning Curve Theory

According to Li (2011), Herman Ebbinghaus, a German Psychologist, initially proposed the learning curve idea in 1885. In 1934, psychologist Arthur Bills presented a more complete account. According to the learning curve idea, a learner's efficiency in a task improves with time as the learner performs more of the task. The term "learning curve" is frequently used in casual conversation to represent the amount of time and effort required to learn something difficult.

When measuring the real rate of progress for completing a certain job versus time, the learning curve hypothesis is appropriate. The task must be repeatable, measurable, and contain only one variable within a technique; it cannot be used to measure the entire procedure. The learning curve idea is most typically employed in organizational or industrial management to boost production through enhancing the human workforce's performance. The industrial and corporate sectors have used the theory for a number of performance enhancement applications.

Learning is most challenging in the early years of auditing, and the increase in new information is greatest after the first familiarity and gradually evens out in later years, implying that each subsequent audit engagement has less new information. As a result, the
relationship between audit quality and auditor tenure can be approximated as a concave growing function of tenure with a flattened curve once it reaches its maximum point.

2.4 Agency Theory

Jensen and Meckling established the agency theory in 1976. The theory investigates the interaction between business agents and principals. There are two parties in an agency relationship: the agent and the principal, with the former acting and making decisions on behalf of the latter. The theory centers on their connection and the challenges that may arise as a result of their differing risk views and commercial objectives. The most talked-about agency connection, according to Borad (2019), occurs between shareholders and executives of a firm, where the top brass is elected to operate in the interests of the company's owners.

In an agency setting, Jensen and Meckling (1976) find a knowledge asymmetry between shareholders and executives of firms, which might provide a moral hazard since executives would pursue their own self-interest at the expense of shareholders.

In the context of this study, an independent audit can benefit both the agents (management) and the principals (shareholders) in terms of reducing moral hazards, because an independent audit can reduce information asymmetry and improve information about the client's performance.

As a result, auditors are utilized as a third party to try to align the interests of agents and principals, as well as to allow principals to evaluate and regulate their agents' behavior and enhance trust in them.

This, on the other hand, introduces a new concept of auditors as agents, resulting in a violation of confidence, as well as risks to objectivity and independence. Under this regard, the ICAEW (2005) believes that auditor independence and audit quality are both in doubt. The goal of this study is to explore how auditor tenure affects audit quality.

3.0 METHODOLOGY

The research design for this work was historical and descriptive. The reason for this decision is related to the study's goal, which is to determine whether long-term client-auditor relationships influence audit quality in a positive or negative way.

To do this, cross-sectional and time-series data were collected from fifty (50) companies selected at random from the 169 listed companies.

A great deal of attention was taken to ensure that the sample was representative of the entire population. As a result, out of the 169 listed companies that made up the study's population, a simple random sampling procedure was employed to select a sample of 50 organizations.

The sample selection procedure was as follows:

\[ n = \frac{Z^2_{\alpha/2, p, q, N}}{e^2(N-1) + Z^2_{\alpha/2, p, q}} \]
Where: \( n = \text{Sample Size} \)

\( Z^{2\alpha/2} = 1.96 \) (as per table of area under normal curve since the confidence level is 95%)

\( P = 0.05 \) (based on the result of a pilot study)

\( q = 1-p \)

\( N = 169 \)

\( e = 0.05 \) (since the estimate is within 5% of the true value)

\[
\begin{align*}
\frac{\sqrt{(1.96)^2(0.05)(1-0.05)(169)}}{(0.05)^2(169-1) + (1.96)^2(0.05)(1-0.05)}
\end{align*}
\]

\[n = 50\]

3.1 Operational measures of variables

The accruals quality was used as a proxy for audit quality in the study. Due to the fact that audit quality is not observable, earlier research has tended to use accruals quality as a proxy for audit quality (Li, 2011). The most often utilized proxy for audit quality is discretionary accruals (Bing et al, 2014). Managers frequently utilize discretionary accruals to alter earnings. Because earnings management is negatively associated with audit quality and discretionary accruals are positively related to earnings management, higher discretionary accruals predict lower audit quality when all other factors are equal (Bing et al, 2014).

A number of control factors were added, in line with empirical investigations by Myers, Myers, and Omer (2003): firm size, operating cash flow, firm growth, firm age, auditor type, and client importance. We account for business size because the quality of accruals improves as the firm grows in size due to greater stability and diversification of its portfolio of activities (Dechow & Dichev, 2002). We take into account operating cash flow because companies with higher operating cash flow are more likely to perform well (Frankel, Johnson & Nelson, 2002). Growth is mentioned since accruals are positively connected to business growth (Defond & Jiambalvo, 1994).

Because previous research implies that major audit firms tend to minimize severe accruals, the kind of auditor is included (Defond & Subremanym, 1998). Because accruals alter with changes in the firm's life cycle, age is included (Dechow, Hutton, Meulbroek & Sloan, 2001). We account for client significance since previous research has indicated that organizations with high client importance auditors have superior earnings quality (Li, 2010).

3.2 The variables are as measured below:

\( AQ = \text{accrual quality, measured as } (-1)* \text{absolute value of the residual from the} \)

Dechow and Dichen (2002) model was modified by McNichols (2002).

\( T = \text{the number of consecutive years that a firm has retained the auditor.} \)

\( T^2 = \text{the square of } T. \)
Size (Size2) = the market value (Square of the market value) of equity.

OCF = Cash flow from operations scaled by average total assets.

Growth = Sales growth, calculated as (Salesi,t –Salesi,t-1)/Salesi,t

Lit = Indicator variable that takes the value of 1 if the firm operates in a high litigation industry and 0 if otherwise.

Age (Age2) = the number of years (square of the number of years) the company has been quoted on the Nigerian Stock Exchange.

Export = the ratio of foreign sales to total sales.

SEG = the natural log of the number of the geographical segments.

BigN = A dummy variable that equals 1 if the auditor is a Big4 auditor, and 0 if otherwise.

CI = Client importance, calculated as the ratio of a client’s total assets to the sum of the total assets of all the clients of the auditor

3.3 Model Specification

In order to estimate the various parameters in the model below, the Quadratic Model was used:

\[ AQ = B_0 + B_1T + B_2T^2 + B_3\text{Size} + B_4\text{Size}^2 + B_5\text{OCF} + B_6\text{Growth} + B_7\text{lit} + B_8\text{Age} + B_9\text{Age}^2 + B_{10}\text{Export} + B_{11}\text{SEG} + B_{12}\text{BigN} + B_{13}\text{CI} + e \]

The quadratic model was chosen because of its capacity to loosen the linear model's monotonic growing function assumption and the piece-wise linear model's fixed turning point of audit quality assumption. It also has the advantage of capturing the deterioration of audit quality at a later stage of audit tenure, even if the moment at which audit quality deteriorates varies between firms and years. Another advantage of utilizing the quadratic model is that as the second-order effect decreases to zero, the core of a linear model remains. The econometric technique was carried out using SPSS 26.

4.0 DATA ANALYSIS

Table 1. The Effect of Auditor Tenure on Audit Quality: A Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pooled Regression Coefficient</th>
<th>Mean</th>
<th>Fama-MacBeth Regression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>tValue</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.061 ***</td>
<td>-0.0526</td>
<td>.2836</td>
</tr>
<tr>
<td>T</td>
<td>0.049 ***</td>
<td>0.0259</td>
<td>3.04</td>
</tr>
<tr>
<td>T²</td>
<td>-0.001 ***</td>
<td>-0.0038</td>
<td>-3.93</td>
</tr>
</tbody>
</table>
AQ is the dependent variable. The lower and upper bounds of the estimations at the 95 percent confidence level are referred to as the LowCL and UpCL, respectively. Unless otherwise stated, all tests are two-tailed. The negative ratio of the coefficient on T to 2*coefficient on T2 (-(coefficient on T)/(2*coefficient on T2 ) is used to determine OT, which is estimated by year and averaged over all years.

Table 2 Regression Analysis: The impact of auditor tenure on audit quality—High client importance versus low client importance

<table>
<thead>
<tr>
<th>Variable</th>
<th>High Client Importance</th>
<th>Low Client Importance</th>
<th>High vs Low Client Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>379</td>
<td>377</td>
<td>2</td>
</tr>
<tr>
<td>AdjRSq</td>
<td>16.09%</td>
<td>9.34%</td>
<td>6.75%</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.0510 ***</td>
<td>-0.1052 ***</td>
<td>0.0542 ***</td>
</tr>
<tr>
<td>T</td>
<td>0.0384 ***</td>
<td>-0.0058 ***</td>
<td>0.0442 ***</td>
</tr>
<tr>
<td>T²</td>
<td>-0.0014 ***</td>
<td>0.0053 ***</td>
<td>-0.0067 ***</td>
</tr>
<tr>
<td>Size</td>
<td>0.0015 ***</td>
<td>-0.1967 ***</td>
<td>0.1982 ***</td>
</tr>
<tr>
<td>Size²</td>
<td>-0.0176 ***</td>
<td>0.2836 *</td>
<td>-0.3011 **</td>
</tr>
<tr>
<td>OCF</td>
<td>0.0235 ***</td>
<td>0.0299 ***</td>
<td>-0.0065 ***</td>
</tr>
<tr>
<td>Growth</td>
<td>-0.0046 **</td>
<td>-0.0032 ***</td>
<td>-0.0015 ***</td>
</tr>
<tr>
<td>Age</td>
<td>0.0372 ***</td>
<td>0.0668 ***</td>
<td>-0.0296 ***</td>
</tr>
<tr>
<td>Age²</td>
<td>-0.0035 ***</td>
<td>-0.0093 ***</td>
<td>0.0058 **</td>
</tr>
<tr>
<td>Export</td>
<td>-0.0043 *</td>
<td>-0.0053 *</td>
<td>0.0011</td>
</tr>
<tr>
<td>SEG</td>
<td>0.0015 ***</td>
<td>-0.0639 ***</td>
<td>0.0654 **</td>
</tr>
<tr>
<td>BigN</td>
<td>0.0178 ***</td>
<td>0.0332 ***</td>
<td>-0.0154 ***</td>
</tr>
</tbody>
</table>
4.1 Hypotheses Testing and Discussion of Findings

**H01:** Due to a learning effect, audit quality is not likely to improve in the early years of an auditor's tenure, and it is not likely to decline in the latter years of an auditor's tenure due to a bonding effect.

**H11:** Due to a learning impact, audit quality is likely to improve in the early years of auditor tenure and deteriorate in the latter years of auditor tenure due to a bonding effect.

**H02:** The audit quality turning point is at least ten years away.

**H12:** The audit quality turning point is less than ten years away.

**H03:** The turning point of audit quality is no longer for high importance clients than for low importance clients.

**H13:** The turning point of audit quality is longer for high-importance clients than for low-importance clients.

Table 1 shows the results of the pooled regression in the first column and the results of the Fama-Macbeth regression in the second column. Let's start with the pooled regression results. T and AQ have a positive relationship (the coefficient on T is 0.049), indicating that accrual quality improves with tenure. T2 has a negative coefficient (-0.001). The statistically substantial positive sign on T and negative sign on T2 support alternative hypothesis one (H11), which states that accrual quality improves with tenure early on but declines with tenure later on. The results of the Fama-Macbeth regression are comparable to those of the pooled regression.

The average coefficient on T (0.0259) is positive and significant, with a 95% confidence interval of 0.0081 to 0.0437, whereas the average coefficient on T2 (-0.0038) is negative and significant, with a 95% confidence interval of -0.0059 to -0.0018.

These findings support previous research (Myers et al, 2003; Mansi et al, 2004; Ghosh & Moon, 2005; Gul et al, 2009; Geiger & Raghunandan, 2002; Johnson, Khurana & Reynolds, 2002), which suggests that audit quality is linked to auditor tenure.
The findings of the study, however, differ from those of Barbadillo and Aguilar (2009), who found that auditor tenure and audit quality are inversely associated.

As indicated in table 1 of the pooled regression, the audit quality turning point, OT, is about 16 years. Two arguments in favor of the null hypothesis (H02). We discover a positive relationship between AQ and OCF, size, age, BigN, and CI, and a negative relationship between AQ and Growth, Lit, and Export, which is consistent with previous research. Size2 and Age2 follow the same trend as T2 and are both negative and significant. The average audit quality turnaround point is 12 years, with a lower bound of 10 years and a higher range of 14 years.

In accordance with the CBN Code of Corporate Governance for Banks and earlier research (for example, Gul, Jaggi, and Krishnan (2007) define the long term as a period longer than 10 years), 10 years was utilized as a threshold for the turning point of audit quality. The CBN Code of Corporate Governance for Banks mandates that banks' external auditors be rotated after tenure of no more than ten years.

The fact that the audit quality turning point in the pooled regression is 16 years illustrates that audit quality remains quite high for a long time after it begins to decline.

This finding calls into question the need for mandatory auditor rotation. These findings are similar to those of Carey and Simnett (2006).

The results of the hypothesis three test are presented in Table 2. The results suggest that the High Client Importance group's optimal tenure is roughly 14 years, about 8 years longer than the Low Client Importance group's (around 6 years). Alternative hypothesis three is supported by the fact that the difference in ideal tenure between these two groups is substantial at the 1% level (H13). For the High client importance group, the beneficial influence of economic incentives to be independent is approximately as important as the negative impact of the Bonding Effect due to cognitive bias associated with long tenure.

These findings support previous research that claims that large business auditors are more likely to remain independent due to client visibility and reputation preservation (for example, Reynolds & Francis, 2000; Larcker & Richardson, 2004, Barton, 2005). As a result, the auditor's incentives to conduct a high-quality audit are larger for large clients, owing to the greater danger of reputational harm and lawsuit if the auditor fails to do his job well. However, the Enron Arthur Anderson audit failure contradicts this, implying that customer importance has a detrimental impact on audit quality.

The goal of this study was to see if there was a link between auditor tenure and audit quality as defined by accrual quality. In the Nigerian setting, the study tried to provide empirical data. The study's findings found that:

1) Audit quality increases with auditor tenure.
2) The turning point of audit quality is 16 years.
3) Audit quality has a positive correlation with operating cash flow, firm size, firm age, Big4 audit firms, and client importance, but a negative correlation with sales growth, litigation, and export.
4) The optimal audit tenure for the high client importance group is about 14 years while that for the low client importance group is about 6 years.

5.0 CONCLUSION

Our data suggest that where the Bonding Effect is small, such as in firms examined by specialist auditors (Big4), profits quality rises with auditor tenure.

Furthermore, with an estimated average audit quality turning point of 16 years, obligatory auditor rotation after 10 years of service may not be essential. The predicted turning point can be used by regulators and audit committees to decide whether it is suitable to require mandatory or voluntary audit firm rotation.

Third, our research shows that audit quality remains quite high for a long time after it reaches a turning point. As a result, comparing audit quality for short and long tenure using a set turning point as a cut-off will obstruct researchers' capacity to detect the detrimental impact of long tenure.

6.0 RECOMMENDATIONS

On the basis of our study’s findings, we recommend as follows:

Regulators and audit committees should consider whether imposing mandatory or voluntary audit firm rotation is acceptable based on the expected turning point of audit quality of 16 years.

Auditors should be encouraged to gain industry knowledge in order to strengthen objectivity and professional skepticism while also increasing their independence.

Auditors should be forbidden from accepting overly large clients relative to their client portfolios.

REFERENCES


