How does tenure of audit committee members affect audit fees in small firms?

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ABSTRACT

This study looks to tenure of audit committee members to provide insight about the governance quality of the audit committee in relation to audit fees in small firms. Large-cap companies are often governed by those with extensive public company experience. Conversely, it's not uncommon for small-cap directors to occupy their roles for the first time. To capitalize on the possibility that there is a differing effect of the governance quality for small firms, this study specifically looks at firms situated in the S&P600 SmallCap Index. A significantly positive relation is found between audit fees and tenure of the audit committee. Also, a longer tenure of audit committee is associated with a decrease in the probability of financial restatement. Findings of this study provide practical implications that placing term limits on directors of the audit committee may stifle the accumulation of the necessary skills and knowledge needed to perform the highest level of oversight and monitoring that is required of the audit committee of small firms. This study addresses certain caveats of previous studies. First, it answers the call for future studies on audit committee to consider samples of smaller firms. Second, it includes additional variables theorized to affect the level of audit fees. Third, the directors' tenure is measured by their years of service on the audit committee, rather than the years of board service used in previous studies.

Keywords: Audit Committee, Audit Fees, Director Tenure, Corporate Governance

INTRODUCTION

An effective audit committee remains the linchpin for good corporate governance. Federal regulations have focused on this committee as part of the Sarbanes Oxley Act (SOX) and supplementary regulation reforms, signaling the important influence that an effective audit committee can have on the performance and vital monitoring functions of the firm. Specifically, the Securities and Exchange Commission (SEC) and Congress expect audit committees to play a critical role in monitoring the economic relationship between management and the external auditor. It is the audit committee's duty to provide active and objective oversight over the financial reporting process by selecting the external auditor, interacting with the auditor, specifically in regard to the audit process. The amount of fees paid to the selected external auditor for services represents an important element that audit committee uses to monitor the economic relationship between management and the external auditor.

Certain characteristics of audit committee can influence how effectively an audit committee provides active and objective oversight over the financial reporting process through interacting with the external auditor in the audit process. Prior studies in the area of audit fees research measure audit committee quality by focusing on the specific traits of audit committee independence and audit committee accounting and/or financial expertise (Carcello, Hermanson,and Neal, 2002; Abbott, Parker, Peters, and Raghunandan, 2003; Lee and Mande, 2005; Krishnan and Visvanathan, 2009; Chan, Liu, and Sun, 2013; Sultana, Singh and Rahman, 2019; Ghafran and Yasmin, 2018). A few studies have included tenure of audit committee members as a factor that may also contribute to an effective audit committee in the discussion.

According to the 2018 Spencer Stuart Board Index, on almost two-thirds (64%) of S&P 500 boards, the average tenure of independent directors is between six and 10 years, and the longest average board tenure is 20 years. The annual corporate governance survey by Spencer Stuart also reveals that tenure of audit committee is one of the top issues raised among shareholders. Specifically, proxy access is a top concern at 22% while board composition and director tenure make up approximately 27% (14% and 13%, respectively) of shareholder concerns (Spencer Stuart, 2015). Governance groups and investors are also questioning how tenure may impact the audit committee's execution of its duties involving oversight of the relationship between management and the external auditor (Deloitte, 2015).

Prior literature supplies two opposite perspectives regarding the tenure of audit committee members: the management friendliness hypothesis and the expertise hypothesis. The variety of papers that analyze the impact of tenure of the audit committee have produced mixed results. Some studies suggest that longer tenure compromises the effectiveness of the audit committee and as such the execution of audit committee responsibilities, consistent with the management friendliness hypothesis (Sharma and Iselin, 2012; Rickling, 2014). Others find that longer tenure among the audit committee members has positive ramifications in support of the expertise hypothesis (Barua, Rama, and Sharma, 2010; Dhaliwal, Naiker, and Navissi, 2010; Yang and Krishnan, 2005; Chan et al., 2013).

Research in audit fees offers two explanations for the audit fees: the demand effect from audit committee and the supply effect from external auditor. Following the demand effect, directors of longer tenure on audit committee would have obtained greater experience, firm-specific knowledge, and reputational capital. They would demand more external audit assurance to prevent fraud and to protect their reputational capital (Goodwin-Stewart and Kent, 2006). Directors may also demand more coverage for other reasons such as to avoid legal liability and

to promote shareholder interests (Hay, Knechel, and Wong, 2006; Knechel and Willekens, 2006; Carcello et al., 2002; Goodwin-Stewart and Kent, 2006). The demand for more audit coverage ultimately results in higher audit fees.

Taking on the supply view, auditors have incentives to supply high audit quality to reduce their reputation risk and litigation risk. A good corporate governance mechanism, such as an effective audit committee, is perceived by auditors to improve the control environment of the firm so that auditors will reduce the audit scope and time (Collier and Gregory, 1996; Goddard and Masters, 2000). Defond and Zhang (2014) find that audit committee with long tenure directors poses a higher audit risk to external auditors due to the impairment of directors' independence and professional skepticism, and consequently auditors will charge the firm with higher audit fees.

This study intends to provide insight about the effectiveness of audit committee and financial reporting quality using audit committee tenure and audit fees as the measures. Focusing on smaller firms which are generally lack of alternative monitoring mechanisms and rely more on the monitoring functions of audit committee, the study contributes to the literature by providing further evidence on the impact of the tenure of audit committee members on audit fees. Also, an alternative measure of average audit committee tenure is introduced in this study. Different from previous studies (Sharma and Iselin, 2012; Chan et al., 2013; Dhaliwal et al., 2010; Barua et al., 2010) that use average board tenure of audit committee members to measure audit committee tenure, this study uses the actual length of service on the audit committee to determine audit committee tenure. The rationale is that a close relationship is likely to be developed between individual directors and external auditor over time when directors serve on audit committee. In contrast, directors gain expertise from serving on audit committee. Thus the actual length of service on the audit committee serves as a better measure than the average board tenure in testing the management friendliness hypothesis and the expertise hypothesis.

Based on a sample of 482 firms in the S&P SmallCap 600 Index from 2011-2012, the results show a significantly positive relation between the audit fees and the tenure of the audit committee. Moreover, the tenure of audit committee is negatively associated with the probability of financial restatement. These results hold for both single and simultaneous equation estimates. The findings lend support for the expertise hypothesis that valuable knowledge and financial expertise increase with longer tenure, leading to a more effective audit committee that demands a higher level of assurance of audit quality. This higher level of demand is reflected in the higher level of audit fees, which leads to a decrease in financial restatement.

This study provides implications for policy makers and investors, many of which are particularly focused on director tenure and different approaches to "refreshment and succession planning" (Katz and McIntosh, 2016). Based on the results of this study, placing tenure limits may have unintended negative consequences. Specifically, seasoned directors on the audit committee are more likely to have developed confidence and competence in their roles, as well as enhanced firm-specific knowledge and financial expertise. Knowledgeable audit committees are better equipped to understand auditor judgments and discern the substance of disagreements between management and the external auditor (DeZoort, 1998; DeZoort and Salterio, 2001). Placing term limits on directors of audit committee may stifle the accumulation of the necessary knowledge and expertise needed to perform the highest level of oversight and monitoring that is required of audit committee.

LITERATURE REVIEW

Audit Fees

Audit fees, a measure of auditor-client contracting features, are used to proxy for audit quality because they are expected to measure the auditor's effort level, which is intuitively related to audit quality. Srinidhi and Gul (2007) predict a positive relationship between audit fees and audit quality. Mande and Son (2015) examine the moderating effect of SOX on the association between audit fees and accruals quality. They first confirm the findings of Srinidhi and Gul (2007) that in the pre-SOX period, higher audit fees imply higher auditor's effort and accruals quality. However, in the post-SOX period, the authors find the positive relationship between audit fees and accruals quality weakens. Using an experimental setting to address how audit fees are perceived and whether this coincides with established relationships between audit characteristics and audit fees, Beck, Fuller, Muriel and Reid (2013) find that investors perceive high audit fees to be related to high audit quality, auditor effort, and auditor independence.

Audit fees are also used as a measure of the effectiveness of governance mechanisms to proxy for board and audit committee effectiveness. If a good corporate governance mechanism serves as a substitute for an external audit, an effective audit committee should be associated with lower audit fees (Hassan, Hijazi and Naser, 2017). In contrast, audit committees may serve as a complement to external auditors in monitoring management. Following this notion, audit fees are positively related to the audit committee effectiveness (Carcello et. al., 2002). Empirical findings, however, are not conclusive about whether audit committees and external auditors are substitutes or complements.

Prior studies approach audit fees from two different perspectives: a supply (production) and a demand view. Simunic (1980) models audit fees from a supply view. Specifically, audit fees are associated with a number of work-related factors such as firm size, number of segments, and risk-related variables of the client. These work-related factors drive an auditor to carry out more (less) audit work which leads to higher (lower) audit fees. Also, under the supply view external auditors have incentives to provide high audit quality to reduce their engagement risk which arises from litigation, reputation and regulation risk. A weak corporate governance structure of the client would weaken its control environment and in turn, increase the need for external auditing and increase audit fees. Following this logical reasoning, several studies find empirical evidence to support the supply view. For instance, Boo and Sharma (2008) report a negative association between audit committee independence and audit fees, implying that external auditors reduce their effort and thus audit fees in the presence of an independent audit committee because they perceive that such committee reduces control and financial reporting risks. In addition, Habib, Bhuiyan and Rahman (2018) find that the presence of "problem" directors on boards and audit committees is associated with higher audit fees, implying an increase in the perceived audit risk that arises from attributes of directors.

Other studies approach audit fees from a demand view as an alternative way to model audit fees. Defond and Zhang (2014) model the demand for audit quality as a function of the firm's incentives to demand audit quality, and its competency in meeting this demand. Similarly, Stewart and Kent (2006) suggest that directors demand more audit coverage and greater audit assurance to protect certain reputational capital from occurrence of fraud. The demand for more assurance ultimately increases the work and scope of the auditor, resulting in higher audit fees. This in turn produces a higher quality audit (Knechel et al., 2013). Findings of audit committee

studies show that more effective audit committees, measured by independence and financial experts demand higher audit quality and would pay higher audit fees (Abbott et al., 2003). Using audit and compensation committee overlap as a proxy for weak corporate governance structure, a recent study by Karim, Robin and Suh (2016) finds a significantly negative relationship between audit and compensation committee overlap and audit fees. Carcello et al. (2002) also find a significantly positive relationships between desirable board characteristics, such as independence, diligence, and expertise, and a higher level of audit fees.

Audit Committee Tenure

Many prior studies relating corporate governance to audit fees focus on audit committee characteristics. The most prominent characteristics examined in the literature are audit committee independence and expertise. A few studies have included audit committee tenure in the discussion as a corporate governance factor. It is questionable as to whether tenure increases or decreases the effectiveness of the audit committee. Specifically, two perspectives are represented in the literature as it pertains to tenure; the management friendliness hypothesis and the expertise hypothesis.

The management friendliness hypothesis posits that longer tenure makes directors resemble traditional corporate insiders (Vafeas, 2003). Directors gather intimate knowledge of the corporation and develop an attachment to the corporate culture as they build intimate connections over time with peer directors and company executives. The argument follows that seasoned directors are more likely to befriend, and less likely to monitor. Over time, levels of familiarity might cause erosion of independence and professional skepticism (Casterella and Johnston, 2013). Carter and Lorsch (2004) suggest that independence decreases rather than increases as director tenure grows because directors become more emotionally attached to the firm the longer they stay.

Sharma and Iselin (2012) explore concerns about the demand for objective oversight may be compromised if directors have a long board service association with management. The authors use financial misstatements as a proxy for financial reporting quality and find a positive association between the board tenure of audit committee members and financial misstatements in the post-SOX period. The results suggest that increasing tenure is associated with a greater likelihood of misstatement. The authors posit that an enduring association with management compromises the effectiveness of independent directors' oversight responsibilities because directors with longer tenure do not exercise independent judgement and do not monitor effectively.

Another paper by Rickling (2014) also investigates whether busyness and tenure influences the effectiveness of the audit committee. The argument extends that a director that is closely affiliated with management is less likely to challenge management's decisions. Long tenured directors, as opposed to those with shorter tenure, build this affiliation over time. To test this theory, the author uses the likelihood of a company repeatedly engaging in a meet/beat strategy of earnings management. To capture tenure, the author uses the ratio of the number of members serving on the audit committee for more than seven consecutive years. Per the author's results, firms having an audit committee with a higher portion of long tenured directors have a higher likelihood of repeatedly engaging in a meet/beat strategy. The author suggests, consistent with the management-friendliness hypothesis, long tenured directors become friendly with management thereby creating a less stringent oversight environment.

A different perspective, the expertise hypothesis suggests that directors with long-term engagements are associated with greater experience, commitment and competence because of the accumulation of important knowledge about the firm and its business environment. Vancil (1987) presents that longer-term members have more firm-specific capital and knowledge. They are well established in their communities and social circles to the point that they will take actions to protect certain reputational capital rather than actions of self-interest. Additionally, long-serving directors, through their accumulated experience and standing, may be in a better position to effectively oversee powerful members of management (Vancil, 1987). As member tenure grows, confidence, networking and knowledge of the company may in fact make the director more independent of management.

To enlighten the possibility of the positive effects of long tenure directors, the results in Beasely (1996) suggest that as outside director's tenure on the board increases, the likelihood of financial statement fraud decreases. When comparing fraud to non-fraud firms in the 1980 – 1991 sample period, the author analyzed certain characteristics of outside directors including average tenure. The notion follows that directors who are more senior are less susceptible to pressures to conform. More recently, Yang and Krishnan (2005) explore whether certain audit committee characteristics curb the ability of managers to engage in quarterly earnings management. A measure of tenure, the average years of director's board service, is also investigated in their study. It is suggested that a longer serving director accumulates knowledge of the firm and its practices, which better equips him to help protect shareholder interests and improve firm performance. This would further suggest that long tenured directors are more effective. Their results support their hypothesis by revealing a negative association between average tenure and earnings management behavior. The authors use two models of discretionary accruals, the Jones (1991) model and the Teoh, Welch and Wong (1998) model and argue that on-the-job experience, represented by longer tenure, has positive monitoring effects. Similarly, Dhaliwal et al. (2010) use data from 2004 – 2006 and provide evidence suggesting firm-specific knowledge gained by longer-tenured audit committee members enhances their ability to monitor the financial reporting process. Collectively, these studies suggest positive ramifications of having longer tenured directors on the audit committee. The implications of prior results are that longer tenure increases the effectiveness of the audit committee, which could support a positive association between average audit committee tenure and audit quality.

A more recent study by Chan et al. (2013) looks into the relationship between audit committee tenure and audit fees. Their argument is that longer tenured members have less of a need for increased auditor effort because they can effectively oversee the financial reporting process themselves. This falls in line with the production (supply) view discussed in the audit fees literature that an effective audit committee should reduce auditor's risk assessment, resulting in less testing, and lower audit fees. This argument also suggests that directors on the audit committee and the external auditor are substitutes. When the tenure of the audit committee is long, internal monitoring is stronger, and thus, there is less need for external monitoring of the auditor leading to lower levels of audit fees. This line of reasoning is supported by their results. Using 2005-2006 firm data from the Institutional Shareholder Services (ISS) Directors database, the authors employ average length of board service of audit committee members as their tenure variable. They find a negative association between the proportion of members on the audit committee with long board tenure (10 years or more) and audit fees.

Despite the logic in Chan et al. (2013) and the supporting evidence, regulations (e.g., PCAOB Auditing Standard No. 16 (AS 16)) suggests that the nature of the relationship between

the audit committee and the external auditor is more complementary than substitutive. For instance, the auditor submits their report to the audit committee whereby both parties must discuss important issues in the report (e.g., management errors, irregularities, problems with internal controls, etc.). The audit committee needs pertinent information from the auditor in order to execute its duties successfully, and the auditor needs to ensure that the audit committee understands the stages of the audit cycle. Such collaboration and frequent, open communication between the audit committee and the external auditor are essential for audit performance. The competence of the external auditor or audit committee alone is not sufficient to ensure a high-quality audit. Much of the prior literature supports this complementary view (see Hay et al., 2006 for a complete overview; Ettredge, Reed, and Stone, 2000). For example, Abbott et al. (2003) present evidence that the level of audit fees is positively associated with audit committee characteristics of independence, financial expertise and meeting frequency. In essence, a "good" audit committee, one with a higher proportion of independent members, a higher number of financial experts, and meets more frequently, demands more work from the auditor and hence is associated with a higher level of audit fees.

The perspective of this paper follows the logic of both the demand and supply effect. The level of audit fees is an outcome of both demand and supply view of audit efforts. From demand view, it is suggested that higher audit fees are commensurate with an effective audit committee which demands for higher audit quality. A more effective audit committee proxied by longer tenure of audit committee members will be associated with higher audit quality proxied by the level of audit fees. Alternatively, following the logic of supply view, higher audit fees indicate higher audit risk assessed by external auditor. Since longer tenure of audit committee members is perceived by external auditors as impairing the independence and professional skepticism of the audit committee, it will pose higher audit risk to the external auditors as evidenced by higher audit fees.

Based on these premises, the following hypothesis is formed:

H1: Audit committee tenure is positively related to the level of audit fees.

METHODOLOGY

Empirical Model

Empirically, this study differentiates from others of its kind by addressing certain caveats of previous studies. The prior studies of Chan et al. (2013), Dhaliwal et al. (2010), Rickling (2014), and Sharma and Iselin (2012) discuss the fact that while they analyze data on audit committees of larger firms, their results may not hold for small firms. A suggestion for future studies on audit committees is to consider samples of smaller firms. The reasoning is that in small firms, the importance of the audit committee is higher due to a lack of alternative monitoring mechanisms, such as analyst following. To capitalize on the possibility that there is a differing effect for small firms, we specifically look at firms situated in the S&P600 SmallCap Index.

Furthermore, the previous study of Chan et al. (2013) controls for many audit committee characteristics and general control variables, but note that they are confined to the IRRC Directors Database. Thus, some governance quality-related variables such as tenure of directors serving on the audit committee were omitted from their model. This study expands the previous model to include additional variables theorized to affect the level of audit fees.

Perhaps the most distinguishing empirical contribution of this study is the utilization of a distinct tenure variable that specifically captures the years of service of directors on the audit committee, rather than the years of board service of audit committee members. Prior studies use average *board* tenure of audit committee members to reflect audit committee tenure (Sharma and Iselin, 2012; Chan et al., 2013; Dhaliwal et al., 2010; Barua et al., 2010). Using the length of board tenure of audit committee members as their numerator, previous authors then divide by the number of audit committee members to arrive at average tenure. The potential issue with this measure is that during a member's board service he/she may sit on many different board committees for varying amounts of time. For instance, board service reflects 10 years, but of those 10 years, that particular director could have spent only 3 years on the audit committee and 7 years on the compensation committee. Thus, to use board tenure in this instance, average audit committee tenure may be misstated.

For this study, to determine average audit committee tenure, we hand-collect data and count the number of consecutive years of service on the audit committee of each individual member on the audit committee. We sum individual audit committee members' service and divide by the size of the audit committee to end with an average audit committee tenure. A recent article supports the notion that it is more relevant to focus on average tenure rather than focusing on simply the longest tenured directors. (Katz and McIntosh, 2016). The measure used in this study specifically captures tenure as it relates to service on the audit committee, not the board.

These changes provide the opportunity to take a more comprehensive look at the effect of audit committee tenure on audit fees. Since SOX requires financial expert on audit committee and firms tend to retain directors with financial expertise on audit committee, one would expect that audit committee tenure is positively associated with financial expert on audit committee. We test the hypothesis by regression models estimated using ordinary least squares (OLS) and the simultaneous equation models estimated using two-stage least squares (2SLS). Utilizing both statistical techniques allows us to address potential endogeneity concerns that arise in audit committee tenure, financial expert and audit fees.

$$\begin{aligned} LNAF = \ & \alpha + \beta_1 AVG\_TEN + \beta_2 LNTA + \beta_3 RECInv + \beta_4 SQSEG + \beta_5 FOREIGN + \beta_6 ROA \\ & + \beta_7 LEV + \beta_8 GC + \beta_9 MW + \beta_{10} BIG4 + \beta_{11} RESTATE + \beta_{12} MTG \\ & + \beta_{13} BRDMTG + \beta_{14} BRDCOMP + \beta_{15} LOSS + \beta_{16} NAF_{RATIO} + \beta_{16} AUChange \\ & + \beta_{17} CEOTurn + \beta_{18} ACAttend + \beta_{19} YrDum + \beta_{20} INDUSTRY + \varepsilon \end{aligned}$$

where

LNAF	=	natural logarithm of audit fees and audit-related fees;
AVG_TEN	=	number of consecutive years of service of audit committee members on the audit committee, divided by the number of audit committee members in year t;
EPERRT	=	Proportion of financial experts on the audit committee;
LNTA	=	natural log of firms total assets;
RECInv	=	(total inventory + total A/R) / total assets;
SQSEG	=	square root of the number of business segments reported on Compustat;
FOREIGN	=	1 if foreign segments are reported, 0 otherwise;
ROA	=	return on assets;
LEV	=	total liabilities / total assets

GC	=	1 if audit report is modified for going concern; 0 otherwise;
MW	=	1 if there is a material weakness reported in internal controls; 0 otherwise;
BIG4	=	1 if auditor is one of the Big 4, 0 otherwise;
RESTATE	=	1 if the firm has a restatement; 0 otherwise;
MTG	=	the number of audit committee meetings held in the year;
BRDMTG	=	the number of board meetings held in the year;
BRDCOMP	=	the number of nonemployee directors on the board;
LOSS	=	1 if there is a reported net loss. 0 otherwise;
NAF_RATIO	=	the ratio of non-audit fees to total fees.
AUChange	=	1 is there was an auditor change in year 2011 or 2012, 0 otherwise;
CEOTurn	=	1 if there was a new CEO in years 2011 or 2012, 0 otherwise;
ACAttend	=	1 if all audit committee members attended more than 75% of meetings, 0 otherwise. ;
YrDum	=	1 if the year is 2011, 0 otherwise;
Industry	=	Industry dummies.

The dependent variable is measured as the natural logarithm of total audit and audit-related fees. Information gathered from the Audit Analytics database is used for this measure. The primary independent variable is *AVG_TEN.* This captures the average tenure of the audit committee at fiscal year-end. For this study, to determine average audit committee tenure, a count of the number of consecutive years of service on the audit committee of each individual member on the audit committee at fiscal year-end is used. Then, the sum of individual audit committee members' service is divided by the size of the audit committee. This data are hand-collected from the SEC's EDGAR service on each firm's published DEF14A.

When utilizing 2SLS, financial expertise of the audit committee (*EXPERT*) is used as an instrument for average tenure. This construct is measured as the proportion of audit committee members that qualify as the definition of "financial experts" by the SEC. Based on the theory of expertise explained above, we expect a positive association between expertise and average tenure of the audit committee.

The control variables in this model are variables conventionally used in both the audit fees (see Whisenant, Sankaraguruswamy, and Raghunandan, 2003; Hay et al., 2006; Hay, 2013) and audit committee literature (see Abbott, Parker, and Peters, 2004; Raghunandan and Rama, 2007; Sharma, Naiker, and Lee, 2009; Abbott, Parker, and Peters, 2010). The natural logarithm of total assets, (*LnTA),* represents size, which is expected to have a positive relationship with audit fees. *RECInv* represents the inherent risk in an engagement, measured by the sum of total inventory and receivables divided by total assets. This is expected to have a positive relationship with audit fees because certain parts, namely inventory and receivables, are frequently cited as being difficult to audit, have a higher risk of errors, and may require specialized audit procedures (Simunic, 1980). It is also likely that the more complex a client, the harder it is to audit and more time-consuming the audit; resulting in higher fees. Both the square root of the number of business segments (*SQSEG)* and an indicator variable for the company's foreign business segments (*FOREIGN)* capture complexity. In addition, *ROA, LOSS,* and *LEV* serve as indicators of profitability and leverage, respectively. Generally, the worse the performance of the organization, the higher the audit risk and the audit fees. A negative relationship is expected with *ROA*, while a positive relationship is expected with *LOSS* and *LEV*. Auditor quality is also

represented by *BIG4,* which is an indicator variable that equals one if the firm's auditor is one of the Big 4 accounting firms, and zero otherwise. Extant literature strongly supports that higher audit fees are expected when the auditor is recognized to be of superior quality (Hay et al., 2006). *RESTATE, MW,* and *GC* are each expected to be positively associated with audit fees based on prior literature (Huang, Raghunandan, and Rama, 2009; Hay, 2013). Other predominate audit committee and board characteristics, meeting frequency of the audit committee (*MTG*) and board (*BRDMTG*), are included in the model as control variables. Prior literature, however, provides mixed evidence as to whether a positive or negative relationship is to be expected with audit fees (Abbott et al., 2003; Hay et al., 2006). *BRDCOMP* measures the number of non-employee directors on the board. Because this is a measure of independence, a positive association is expected between *BRDCOMP* and audit fees (Carcello et al., 2002; Abbott et al., 2003; Carcello, Hermanson and Ye, 2011). *NAF_RATIO* is the ratio of non-audit fees to total fees. Prior research lends support for the notion that non-audit fees compromise independence and as such lowers audit committee effectiveness (Abbott et al., 2003b). *ACAttend* is another variable that relates to diligence and is equal to one if all members of the audit committee attend at least 75% of the meetings. Because it is possible that audit fees may change if there is an auditor change, *AUChange* is included as an indicator variable equal to one if the firm changes auditor in the sample years. *CEOTurn* is also included in this model due to the idea that if tenure results in a "friendly" relationship with management, this may be mitigated if there is a change in management.

Sample and Data

The sample selection for this study is guided by factors present in prior literature (Raghunandan and Rama, 2007; Thiruvadi, 2012). First, a manageable sample size is used because the audit committee tenure and audit committee control variables are hand-collected from proxy statements. Second, the study is aimed at firms where the monitoring of the audit committee is highly demanded; mostly indicative of smaller firms where alternative monitoring mechanisms would be less strong. Third, since the scandals that led to the creation of Sarbanes-Oxley Act of 2002 (SOX), and more recently the economic crisis of 2008, increased scrutiny has revolved around the effectiveness of the audit committee. The impact presents a myriad of challenges and opportunities to the auditing profession. Firms with an identical fiscal year-end in 2011 and 2012 are chosen because the post-Sox era continues to see changes in regards to the board and audit committee. Some of those changes include an increase in the percentage of independent directors on the board (79% in 2002 to 84% in 2012). The financial literacy of the audit committee has increased in the post-SOX era as well. In 2003 only 21% of audit committees reported having a financial expert, versus 100% in 2012. In addition, turnover on the board and committees has declined. The number of new appointees dropped 12% over the last five years (since 2007) and by 27% over the past 10 years (since 2002), suggesting director's terms are extending (SpencerStuart, 2015).

Based on the criteria above, the sample includes all firms with a December 31 fiscal year-end in the S&P SmallCap 600 index. Table 1 (Appendix) summarizes the sample selection procedure. The process begins with merging Compustat data and Audit Analytics data for all firms in the S&P SmallCap 600 index for the year 2011 and 2012. Then the focus is on firms with a December fiscal year end. Hand-collected audit committee data from each of the firm's proxy statements (DEF14A) available from the SEC EDGAR website is collected. The final

sample size is 482 firm-year observations. The data collection process is very labor-intensive, and every effort is made to diligently identify and extract the proper information for the purpose of this paper.

Table 2 (Appendix) presents the industry distribution of the sample firms based on the Fama-French industry classification. Most observations (97, or 20.12%) are within the business equipment industry, followed by 92 (19.09 %) in the other category which includes specific mining, construction, transportation, hotel, and business services. The manufacturing and healthcare, medical equipment, and drug industries have the third and fourth highest representation of 83 (17.22%) and 72 (14.94%), respectively.

RESULTS

Descriptive Statistics

Table 3 (Appendix) provides descriptive data for the sample. The mean (median) of audit fees, is $1.39 ($1.16) million. The mean (median) of financial experts on the audit committee is .53 (.33). The mean (median) of average audit committee tenure is 7.28 (6.75) years. The mean (median) of average board tenure is slightly higher at 8.55 (8.00) years. In comparison with previous studies that use average board tenure of audit committee members, we observe an increase in average tenure. For instance, Yang and Krishnan (2005) report the mean (median) board tenure of audit committee members as 7.84 (7.00) years for a sample period during 1996 – 2000. Dhaliwal et al. (2010) report average (median) tenure for firms in 2004-2006 as 7.953 (7.111) years. Sharma and Iselin (2012) look at both the pre-Sox and post-Sox era of 2001 – 2007 and report pre-Sox average (median) tenure of non-misstatement firms as 7.85 (6.50) years and average (median) tenure of post-Sox non-misstatement firms as 8.10 (8.00) years. Because these studies did not specifically focus on audit committee tenure, as is the case in this study, there is no comparison data available for the main variable of interest.

With respect to the other control variables, the mean (median) of the number of audit committee meetings held is 6.99 (6.00) meetings, the mean (median) of the number of board meetings is 7.77 (7.00) meetings, and the mean (median) of the number of non-employee directors that are on the board is 7.12 (7.00). The number of firms that have an auditor that is part of the Big 4 is 401 (83.20%). Firms that have a going concern, material weakness, or restatement is approximately 47 (9.75%), 18 (3.73%), and 53 (11.00%), respectively. Only 69 firms (14.32%) report a net loss. All but three firms have audit committee members attend at least 75% of audit committee meetings. During the sample period, 10 firms (2.07%) change auditor and 43 firms (8.92%) change CEO.

Table 4 (Appendix) presents univariate tests of differences for variables in the model. The sample is split into long tenure and short tenure group, which is based on the median average audit committee tenure of the industry. First, each industry is classified by their respective two-digit SIC code. The median for average audit committee tenure for each industry is computed. Long tenure group (233 observations) includes those that are greater than the industry median for average tenure. Short tenure group (249 observations) includes those that are less than or equal to the industry median for average tenure. The long tenure group has a higher level of audit fees ($p < .05$), longer average audit committee tenure ($p < .01$) and average board tenure ($p < .01$), and more inherent risk ($p < .01$). The long tenure group holds less board meetings ($p < .05$), has less non-employee directors on the board ($p < .05$), and is less likely to

report a net loss ($p < .01$). There are no significant differences between the two groups in terms of the proportion of experts on the audit committee, likelihood of restatement, receiving a going concern opinion, or reporting a material weakness.

Table 5 (Appendix) provides information on the Pearson (Spearman) correlations among the explanatory variables. All correlations are considerably below the 0.80 multicollinearity threshold (Gujarati, 2003). All explanatory variables, with the exception of *GC, NAF_RATIO,* and *LOSS,* are correlated with the natural log of audit fees. The highest variance inflation factor (VIF) among all variables is less than 1.9, which is substantially lower than the threshold in which multicollinearity becomes a concern (Gujarati, 2003).

Regression Results

Results of the OLS and 2SLS regression of audit fees on average tenure and control variables are presented in Table 6 (Appendix). Model 1 is the full OLS model with all explanatory variables included. Because of endogeneity concerns between *AVG_TEN* and *EXPERT,* Model 2 eliminates *EXPERT* from the OLS regression. Furthermore, Model 3 presents the first and second stage results of 2SLS using *EXPERT* as the instrumental variable. Across all three models, *AVG-TEN* is positively associated with audit fees, indicating that firms with longer tenured directors on audit committee pay significantly higher audit fees. Furthermore, most of the conventional variables have the expected signs. In Model 1 and 2, the coefficients for *EXPERT, LNTA*, *RECINV*, *SQSEG, LEV, MW, RESTATE, BIG4,* and *BRDCOMP* are all positive and significant, consistent with prior research (Hay et al., 2006). The coefficient estimate for *MTG* is positive and significant in Model 1 ($t = 2.44$) and Model 2 ($t = 2.43$), and *BRDCOMP* is positive and significant in both Model 1 ($t = 2.35$) and Model 2 ($t = 2.61$) as well. These results are consistent with those of Abbott et al. (2003). Both Model 1 and Model 2 present a significantly positive association between average tenure and audit fees ($t = 1.64$) and ($t = 2.00$), indicative of higher audit committee effectiveness (audit quality) associated with longer audit committee tenure.

To further examine this relationship and address endogeneity concerns, 2SLS is used with *EXPERT* as the instrumental variable. The first stage regression for 2SLS regresses average audit committee tenure on all exogenous variables. The predicted values from the first stage are then used in the second stage regression with audit fees as the dependent variable. In the first stage there is a statistically significant relationship between average audit committee tenure and financial expertise ($t = 2.92$), suggesting a larger proportion of experts is associated with longer tenured audit committees. Results from the second stage regression further indicate a significantly positive association between average audit committee tenure and audit fees. The results suggest that expertise increases with tenure, which is associated with a higher level of audit fees. This higher level of audit fees is perceived to mean that audit committees having longer tenured directors serve as a complement to external auditors in assuring high audit quality. An alternative explanation for the findings is that audit committees with longer tenured directors are perceived as risker by auditors and for this reason audit firms demand higher fees to assure quality of financial reporting.

Sensitivity Analysis

Several additional tests were performed to ensure the validity of the results. First, different measures of the main independent variable, audit committee tenure is utilized. Table 7 (Appendix) replicates the three models in Table 6 (Appendix) but uses *PERCABOVE* as the independent variable of interest. This variable is the percentage of a firm's audit committee members with individual tenure above the average tenure of the entire sample (7.28 years). To compute, the number of members with tenure above the sample average is divided by the total number of members of the audit committee. This measure is used because it might happen that varying levels of each members' tenure can influence the average tenure metric. For example, the average tenure of an audit committee with three members who each have seven consecutive years of experience may be potentially different from an audit committee with three members who each have two years, six years, and thirteen years of consecutive service, respectively. Although the computed average tenure is equal for both committees, it may reflect different underlying relationships among members. The results using percentage above average as the measure for audit committee tenure are reported in Table 7 (Appendix). Findings in Table 7 (Appendix) are consistent with the findings in Table 6 (Appendix). When percentage above median to measure is used to measure the audit committee tenure, the findings are virtually the same as the results in Tables 6 and 7 (Appendix).

Since prior studies use board tenure (years serving on board) to measure the tenure of audit committee members, additional tests are performed by using the average *board* tenure as used in previous studies (Sharma and Iselin, 2012; Dhaliwal et al., 2010; Chan et al., 2013). Average board tenure is calculated by summing individual audit committee member's board service and then divide by the number of audit committee members. As previously discussed in the descriptive statistics section, the average board tenure of the sample is higher than the average audit committee tenure: mean (median) of audit committee tenure is 7.28 (6.75) years, compared with mean (median) of board tenure 8.55 (8.00) years. This lends support for the notion that using average board tenure may overstate the actual tenure of the director specifically attributable to the audit committee rather than the board. As such, the OLS results prove a stronger positive relationship between average board tenure and audit fees, as seen in Table 8 (Appendix). However, there is no significant relation found between average board tenure and financial expert in the first stage regression of Model 3 in Table 8 (Appendix).

A third transformation of the independent variable is explored by disaggregating the average audit committee tenure variable into lengths of short versus long tenure. The SHORT tenure variable is equal to one if the average tenure is less than or equal to three years. The LONG tenure variable is equal to one if the average tenure is greater than thirteen years. These cutoffs have been used in previous literature (e.g., Sharma and Iselin, 2012; Chan et al., 2013). The results are shown in Tables 9 and 10 (Appendix).

Across all models in Table 9 (Appendix), a negative relationship is evident between *SHORT* and the natural log of audit fees. Table 10 (Appendix) shows that *LONG* continues to have a positive relationship with audit fees. This suggests that audit committees with average tenure of less than or equal to three years have less financial expertise on audit committees, and thus result in lower demand of scope/coverage from the auditor and lower audit fees. In contrast, audit committees with average tenure of more than three years have more financial expertise on the audit committees, and thus result in higher demand of audit efforts and higher audit fees.

When placing both *SHORT* and *LONG* into the same model, the results still hold (un-tabulated results).

Furthermore, different measures of audit committee effectiveness/financial reporting quality is employed as the dependent variable. One such measure is that of restatement. *RESTATE* equals one if the firm has a restatement and zero otherwise. If an audit committee is more effective, the incidence of restatement should be fewer (Abbott et al., 2004). Results of the effect of audit committee tenure on restatement are presented in Table 11 (Appendix). No significant association is found between audit fees and *AVE-TEN* in models 1 and 2 of Table 11 (Appendix). Nevertheless, the findings show a positive relationship between *AVG_TEN* and *EXPERT*, and a negative relationship between *AVG_TEN* and *RESTATE*. The findings suggest that a larger proportion of financial experts on audit committees is associated with longer tenured directors on audit committees, which in turn decrease the incidence of financial restatements. The results provide support for the argument that director tenure of audit committees contributes to the effectiveness of the audit committees and assurance of audit quality.

CONCLUSION

Providing objective, active, oversight over the financial reporting process by interacting with the external auditor, specifically in regards to the audit process, is pertinent. Certain characteristics of the audit committee, as well as having an appropriate incentive to do so, can influence how well this is accomplished. The motivation for this study stems from the fact that governance groups and investors are questioning how tenure may affect the audit committee's execution of its duties. Some suggest that longer tenure compromises the effectiveness of the audit committee because over time, levels of familiarity might cause erosion of independence and professional skepticism (Casterella and Johnston, 2013). Others suggest that directors with long-term engagements are associated with greater experience, commitment, and competence that allows them to excel in their committee assignment.

This study examines the relationship between audit committee tenure and audit fees. Findings present that the tenure of audit committee has a significantly positive relationship with audit fees. The results suggest that audit committees with longer tenure are more effective in monitoring financial reporting. Audit committees with longer tenure, on average, have more expertise. This leads to a higher demand of scope/coverage from the auditor which in turn, leads to higher audit quality and higher audit fees. The basis of these results supports the notion that long tenure directors on the audit committee are assets to the effective functioning of the committee. The expertise and organizational memory that long-serving directors have acquired over their service term perhaps leads to a more effective audit committee as a whole.

Findings of this study provide evidence that average tenure of the audit committee plays a significant role in enhancing the effectiveness of the audit committee with respect to audit quality.

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APPENDIX

Table 1

Summary of Sample Selection

All firms in the S&P600 Small Cap Index for period Jan 1, 2011 to Dec 31, 2012	1,200
Less: Firms lost after merged Audit Analytics and Compustat	(410)
Less: Firms without December 31 fiscal year end	(213)
Less: Missing data in Compustat/Audit Analytics	(85)
Less: Missing proxy information	(8)
Less: Firms in utilities/financial industries	(2)
Total Sample Size	482

Table 2

Industry Distribution

Fama-French Industry Classification	Number of Observations	Percent
Consumer Nondurables	16	3.31
Consumer Durables	16	3.31
Manufacturing	83	17.22
Oil, Gas and Coal Extraction	16	3.32
Chemicals and Allied Products	21	4.36
Business Equipment	97	20.12
Telephone and Television Transmission	14	2.90
Wholesale, Retail, and Services	55	11.41
Healthcare, Medical Equipment, Drugs	72	14.94
Other	92	19.09
TOTAL	482	100

Table 3
Descriptive Statistics (N = 482)

Panel A: Descriptive Statistics for Continuous Variables

Variable Name	Mean	Median	Standard Deviation	25th Percentile	75th Percentile
AUDIT_FEES (in millions)	1.39	1.16	1.05	0.68	1.67
EXPERT	0.53	0.33	0.33	0.33	0.67
AVG_TEN	7.28	6.75	3.07	5.00	9.25
ASSETS (in millions)	938.39	636.05	936.45	353.45	1,144.11
RECInv	0.27	0.25	0.16	0.15	0.35
SQSEG	2.15	2.00	0.79	1.73	2.65
LEV	0.44	0.43	0.21	0.26	0.58
ROA	0.05	0.05	0.09	0.02	0.09
MTG	6.99	6.00	2.58	5.00	9.00
BRDMTG	7.77	7.00	3.66	5.00	9.00
BRDCOMP	7.12	7.00	1.91	6.00	8.00
NAF_RATIO	0.15	0.10	0.14	0.04	0.22
AVGBRDTEN	8.55	8.00	4.16	5.60	10.67

Panel B: Mean, Median, and Frequencies for Dichotomous Variables

Variable Name	Mean	Standard Deviation	Number of Firms Coded "1"	Number of Firms Coded "0"
BIG4	0.83	0.37	401	81
GC	0.10	0.30	47	435
MW	0.04	0.19	18	464
FOREIGN	0.34	0.47	164	318
RESTATE	0.11	0.31	53	429
LOSS	0.14	0.35	69	413
ACAttend	0.99	0.08	479	3
CEOTurn	0.09	0.28	43	439
AUChange	0.02	0.14	10	472

Variable definitions are given on pages 14-15.

Table 4
Univariate Tests of Differences (N = 482)

	Long Tenure Group (N = 233)		Short Tenure Group (N = 249)		p-value from tests of differences
Variable	**Mean**	**St. Dev**	**Mean**	**St. Dev**	
AUDIT_FEES (in millions)	1.48	1.15	1.30	0.93	.053**
EXPERT	0.52	0.37	0.53	0.28	.617
AVG_TEN	9.72	2.54	5.00	1.20	<.0001***
ASSETS (in millions)	919.7	826.4	955.9	1,030.2	.672
RECInv	0.29	0.16	0.24	0.15	.001***
SQSEG	2.20	0.78	2.10	0.79	.161
LEV	0.42	0.22	0.45	0.21	.174
ROA	0.06	0.09	0.05	0.10	.263
MTG	6.93	2.52	7.05	2.64	.595
BRDMTG	7.36	3.13	8.16	4.07	.016**
BRDCOMP	6.91	1.87	7.32	1.92	.016**
NAF_RATIO	0.14	0.13	0.15	0.14	.610
AVGBRDTEN	10.91	3.79	6.35	3.17	<.0001***
FOREIGN	0.32	0.47	0.36	0.48	.412
GC	0.10	0.30	0.10	0.30	.932
MW	0.05	0.22	0.02	0.15	.113
BIG4	0.82	0.39	0.84	0.36	.489
RESTATE	0.12	0.32	0.10	0.31	.688
LOSS	0.10	0.29	0.19	0.40	.001***
ACATTEND	0.99	0.07	0.99	0.09	.603
CEOTURN	0.07	0.26	0.10	0.31	.227
AUCHANGE	0.03	0.16	0.02	0.13	.457

*, **, *** Represent statistical significance at the p <.10, p < .05, and p < .01, respectively. Two sided p-values are reported. This table present univariate tests of differences between 233 observations with long audit committee tenure and 249 observations of with short audit committee tenure. Long Tenure represents observations where the average audit committee tenure is greater than the median audit committee tenure for the industry (based on two-digit SIC code). Short Tenure represents observations where the average audit committee tenure is less than or equal to the median audit committee tenure for the industry (based on two-digit SIC code).

Table 5

Pearson (Spearman) Correlation Matrix, N = 482

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LNAF (1)		**0.111**	**0.668**	**0.139**	**0.455**	**0.161**	**0.331**	**-0.216**	*0.075*	0.021
Avg_Ten (2)	0.067		0.072	**0.117**	0.058	-0.019	*-0.083*	0.029	0.057	-0.031
LnTa (3)	**0.659**	0.069		0.034	**0.281**	0.056	**0.516**	**-0.226**	-0.001	0.043
RECInv (4)	**0.149**	**0.143**	0.004		**0.193**	**0.122**	0.008	0.072	0.044	**-0.129**
SQSEG (5)	**0.483**	0.070	**0.289**	**0.217**		**0.308**	0.022	*-0.088*	-0.036	0.031
FOREIGN (6)	**0.158**	-0.013	0.064	**0.149**	**0.282**		-0.060	-0.041	-0.049	0.030
LEV (7)	**0.341**	-0.070	**0.539**	-0.005	0.046	*-0.087*		**-0.252**	0.040	0.004
ROA (8)	**-0.283**	0.017	**-0.336**	**0.142**	*-0.077*	0.016	**-0.350**		0.028	-0.004
MW (9)	0.061	0.060	-0.014	0.046	-0.038	-0.049	0.035	0.003		*0.083*
GC (10)	0.042	-0.009	0.033	**-0.130**	0.034	0.030	0.010	-0.034	*0.083*	
RESTATE (11)	**0.107**	-0.013	0.068	0.014	0.021	*-0.084*	0.030	-0.068	-0.034	0.019
BIG4 (12)	**0.288**	0.022	**0.330**	**-0.137**	0.076	0.042	**0.140**	**-0.199**	-0.058	0.073
MTG (13)	**0.209**	0.000	**0.134**	0.007	0.029	0.060	0.032	**-0.128**	0.017	0.035
BRDMTG (14)	**0.214**	**-0.120**	**0.126**	-0.067	**0.160**	0.073	0.073	**-0.157**	0.040	0.011
BRDCOMP (15)	**0.274**	**-0.114**	**0.244**	-0.033	**0.131**	-0.020	**0.261**	**-0.165**	-0.050	0.069
LOSS (16)	0.054	**-0.111**	0.014	**-0.125**	-0.069	-0.043	**0.120**	**-0.607**	-0.049	0.025
NAF_RATIO (17)	**0.121**	-0.009	**0.105**	**-0.090**	0.045	0.000	0.038	**0.106**	0.018	**0.089**
AUCHANGE (18)	0.036	0.010	*0.080*	0.053	-0.022	0.018	0.044	-0.042	0.048	0.001
CEOTURN (19)	0.049	-0.072	0.037	*0.077*	-0.011	0.067	0.062	-0.061	-0.062	0.044
ACATTEND (20)	-0.037	0.020	0.010	*0.087*	-0.043	0.001	0.048	0.005	0.016	-0.063

Pearson (Spearman) coefficients are reported above (below) the diagonal. Correlations significant at the p <.01 and p < .05 are in bold, and p < .10 are italicized.

(continued on the next page)

	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
LNAF (1)	**0.093**	**0.319**	**0.204**	**0.132**	**0.263**	0.043	0.055	0.020	0.060	-0.029
Avg_Ten (2)	-0.013	0.021	-0.025	**-0.103**	**-0.102**	**-0.109**	0.002	0.006	-0.070	0.023
LnTa (3)	0.044	**0.337**	**0.137**	**0.105**	**0.239**	0.024	0.069	*0.085*	0.038	0.007
RECInv (4)	0.014	**-0.101**	0.018	-0.069	-0.009	**-0.143**	-0.046	0.039	**0.090**	*0.076*
SQSEG (5)	0.015	0.060	0.034	**0.115**	**0.134**	*-0.079*	0.027	-0.024	0.008	-0.029
FOREIGN (6)	*-0.084*	0.042	0.060	0.049	0.001	-0.043	-0.057	0.018	0.067	0.001
LEV (7)	0.027	**0.134**	0.030	**0.102**	**0.250**	**0.120**	0.069	0.055	0.063	0.046
ROA (8)	**-0.090**	**-0.166**	**-0.144**	**-0.185**	**-0.111**	**-0.630**	**0.095**	-0.061	*-0.075*	0.001
MW (9)	-0.034	-0.058	0.035	0.024	-0.035	-0.049	0.024	0.048	-0.062	0.016
GC (10)	0.019	0.073	0.031	0.011	0.067	0.025	0.054	0.001	0.044	-0.063
RESTATE (11)		-0.002	-0.022	0.047	0.016	0.046	0.009	0.042	0.006	0.028
BIG4 (12)	-0.002		**0.257**	**0.108**	**0.224**	0.025	0.059	0.026	*0.082*	-0.036
MTG (13)	-0.017	**0.298**		**0.195**	**0.140**	0.015	0.061	**0.119**	0.007	0.000
BRDMTG (14)	0.021	**0.156**	**0.200**		-0.069	**0.131**	-0.063	0.009	**0.147**	-0.012
BRDCOMP (15)	0.021	**0.227**	**0.165**	-0.007		*0.077*	0.054	-0.002	0.041	0.019
LOSS (16)	0.046	0.025	0.015	**0.110**	*0.081*		-0.026	0.024	0.059	0.032
NAF_RATIO (17)	0.031	**0.111**	0.065	*-0.075*	0.053	-0.041		**0.147**	-0.058	-0.038
AUCHANGE (18)	0.042	0.026	**0.108**	0.012	-0.003	0.024	**0.095**		-0.046	0.012
CEOTURN (19)	0.006	*0.082*	0.012	**0.143**	0.039	0.059	-0.036	-0.046		-0.068
ACATTEND (20)	0.028	-0.036	-0.005	-0.033	0.018	0.032	-0.060	0.012	-0.068	

Pearson (Spearman) coefficients are reported above (below) the diagonal. Correlations significant at the p <.01 and p < .05 are in bold, and p < .10 are italicized.

Table 6

The Effect of Audit Committee Tenure on Audit Fees (Average Audit Committee Tenure)

		Model 1		Model 2		Model 3			
						First Stage		Second Stage	
		Coeff	t-stat	Coeff	t-stat	Coeff	t-stat	Coeff	t-stat
AVG_TEN	+	0.01	1.64*	0.01	2.00**			0.14	2.89***
Instrument									
EXPERT	+	0.16	2.65***			1.25	2.92***		
Control variables									
LnTA	+	0.39	13.31***	0.39	13.32***	0.47	2.29**	0.33	8.65***
RECInv	+	0.69	4.53***	0.68	4.43***	3.72	3.51***	0.21	0.89
SQSEG	+	0.20	6.75***	0.20	6.66***	0.03	0.12	0.20	6.62***
FOREIGN	+	0.01	0.19	0.01	0.16	-0.21	-0.67	0.04	0.78
LEV	+	0.23	1.97**	0.24	2.00**	-1.46	-1.78*	0.42	3.08***
ROA	-	-0.03	-0.10	0.06	0.22	-3.22	-1.54	0.39	1.22
MW	+	0.35	3.35***	0.34	3.23***	1.09	1.49	0.21	1.79*
GC	?	-0.01	-0.12	0.00	-0.06	-0.05	-0.11	0.00	-0.02
RESTATE	+	0.11	1.65*	0.11	1.77*	-0.28	-0.63	0.14	2.20**
BIG4	+	0.22	3.72***	0.23	3.89***	0.18	0.44	0.20	3.24***
MTG	?	0.02	2.44**	0.02	2.43**	-0.06	-0.97	0.03	3.15***
BRDMTG	?	0.00	0.44	0.00	0.64	-0.07	-1.81*	0.01	1.84*
BRDCOMP	+	0.03	2.35**	0.03	2.61***	-0.18	-2.32**	0.05	3.67***
LOSS	?	0.05	0.66	0.06	0.74	-1.10	-2.09**	0.19	2.11**
NAF_RATIO	?	0.06	0.44	0.06	0.38	0.43	0.42	0.01	0.06
AUCHANGE	?	-0.17	-1.23	-0.17	-1.21	0.17	0.17	-0.19	-1.38
CEOTurn	?	0.08	1.12	0.08	1.17	-0.62	-1.25	0.16	2.09**
ACATTEND	?	-0.28	-1.10	-0.30	-1.18	1.23	0.70	-0.44	-1.71
Fixed effects:									
Industry			Yes		Yes		Yes		Yes
Year			Yes		Yes		Yes		Yes
Model F, p value			26.48 p < .0001		26.79 p < .0001		2.41 p < .0001		27.20 p < .0001
Adjusted R^2			0.6138		0.6086		0.0783		0.6123

*, **, *** Represent statistical significance at the p <.10, p < .05, and p < .01, respectively. Two sided p-values are reported. Variable definitions can be found in Table 1. *AVG_TEN* is the sum of the consecutive years of service of each audit committee member divided by the number of members of the committee. *EXPERT* is the proportion of financial experts on the audit committee. Model 1 is the full OLS model including *EXPERT*. Model 2 is the OLS model with the exclusion of *EXPERT*. Model 3 utilizes 2SLS technique and uses *EXPERT* as the instrumental variable.

Table 7

The Effect of Audit Committee Tenure on Audit Fees (Percentage above Average)

		Model 1		Model 2		Model 3			
						First Stage		Second Stage	
		Coeff	t-stat	Coeff	t-stat	Coeff	t-stat	Coeff	t-stat
PERCABOVE	+	0.11	1.90**	0.13	2.25**			1.29	2.89***
Instrument									
EXPERT	+	0.16	2.63***			0.14	2.81***		
Control variables									
LnTA	+	0.39	13.38***	0.40	13.40***	0.04	1.74*	0.34	9.78***
RECInv	+	0.70	4.62***	0.69	4.53***	0.30	2.49**	0.35	1.73*
SQSEG	+	0.20	6.69***	0.20	6.60***	0.02	0.71	0.18	5.84***
FOREIGN	+	0.01	0.21	0.01	0.18	-0.03	-0.83	0.04	0.94
LEV	+	0.22	1.86*	0.22	1.86*	-0.02	-0.19	0.24	2.03**
ROA	-	-0.05	-0.16	0.04	0.14	-0.15	-0.65	0.13	0.45
MW	+	0.35	3.31***	0.34	3.19***	0.14	1.67*	0.18	1.52
GC	?	-0.01	-0.09	0.00	-0.03	-0.02	-0.39	0.02	0.27
RESTATE	+	0.10	1.62*	0.11	1.73*	-0.01	-0.15	0.11	1.76*
BIG4	+	0.22	3.73***	0.23	3.91***	0.01	0.26	0.21	3.43***
MTG	?	0.02	2.39**	0.02	2.37**	0.00	-0.29	0.02	2.65***
BRDMTG	?	0.00	0.46	0.00	0.65	-0.01	-1.74*	0.01	1.84*
BRDCOMP	+	0.03	2.31**	0.03	2.56***	-0.01	-1.45	0.04	3.39***
LOSS	?	0.05	0.61	0.05	0.68	-0.07	-1.22	0.13	1.62
NAF_RATIO	?	0.08	0.53	0.07	0.48	-0.07	-0.59	0.16	1.06
AUCHANGE	?	-0.17	-1.24	-0.17	-1.22	0.03	0.26	-0.21	-1.47
CEOTurn	?	0.08	1.09	0.08	1.12	-0.04	-0.66	0.12	1.66*
ACATTEND	?	-0.30	-1.21	-0.33	-1.30	0.37	1.85*	-0.74	-2.49**
Fixed effects:									
Industry			Yes		Yes		Yes		Yes
Year			Yes		Yes		Yes		Yes
Model F, p value			26.56 p < .0001		26.89 p < .0001		1.86 p < .0048		27.20 p < .0001
Adjusted R^2			0.6146		0.6095		0.0494		0.6123

*, **, *** Represent statistical significance at the p <.10, p < .05, and p < .01, respectively. Two sided p-values are reported. Variable definitions can be found in Table 1. *PERCABOVE* is the ratio of the number of members above the average tenure of the sample divided by the number of members of the committee. *EXPERT* is the proportion of financial experts on the audit committee. Model 1 is the full OLS model including *EXPERT*. Model 2 is the OLS model with the exclusion of *EXPERT*. Model 3 utilizes 2SLS technique and uses *EXPERT* as the instrumental variable.

Table 8

The Effect of Audit Committee Tenure on Audit Fees (Average Board Tenure)

						Model 3			
		Model 1		Model 2		First Stage		Second Stage	
		Coeff	t-stat	Coeff	t-stat	Coeff	t-stat	Coeff	t-stat
AVGBRDTEN	?	0.01	2.41**	0.01	2.45**			0.65	2.89***
Instrument									
EXPERT	+	0.17	2.86***			0.27	0.46		
Control variables									
LnTA	+	0.39	13.42***	0.40	13.47***	0.40	1.41	0.14	1.45
RECInv	+	0.69	4.52***	0.68	4.45***	4.17	2.87***	-1.99	-2.09**
SQSEG	+	0.19	6.61***	0.19	6.52***	0.38	1.33	-0.05	-0.53
FOREIGN	+	0.01	0.31	0.01	0.27	-0.67	-1.55	0.44	2.80***
LEV	+	0.23	2.00**	0.24	2.00**	-1.56	-1.39	1.24	3.33***
ROA	-	-0.03	-0.09	0.07	0.23	-3.31	-1.16	2.10	2.71***
MW	+	0.37	3.52***	0.36	3.41***	-0.33	-0.33	0.58	4.44***
GC	?	-0.01	-0.13	0.00	-0.07	0.02	0.03	-0.02	-0.29
RESTATE	+	0.10	1.61	0.11	1.72*	0.02	0.03	0.09	1.39
BIG4	+	0.22	3.76***	0.24	3.96***	0.00	0.00	0.22	3.71***
MTG	?	0.02	2.51**	0.02	2.48**	-0.10	-1.20	0.08	3.55***
BRDMTG	?	0.00	0.56	0.00	0.75	-0.13	-2.28**	0.08	2.93***
BRDCOMP	+	0.02	2.10**	0.03	2.33**	0.09	0.84	-0.04	-1.44
LOSS	?	0.05	0.71	0.06	0.76	-1.28	-1.78*	0.88	2.94***
NAF_RATIO	?	0.07	0.48	0.06	0.41	0.02	0.02	0.05	0.37
AUCHANGE	?	-0.17	-1.25	-0.17	-1.23	0.40	0.30	-0.43	-2.59***
CEOTurn	?	0.08	1.14	0.08	1.17	-0.65	-0.96	0.49	3.07***
ACATTEND	?	-0.29	-1.18	-0.31	-1.24	2.62	1.09	-1.97	-3.10***
Fixed effects:									
Industry			Yes		Yes		Yes		Yes
Year			Yes		Yes		Yes		Yes
Model F, p value			26.76 p < .0001		26.98 p < .0001		1.97 p < .0023		27.20 p < .0001
Adjusted R^2			0.6164		0.6103		0.0552		0.6123

*, **, *** Represent statistical significance at the p <.10, p < .05, and p < .01, respectively. Two sided p-values are reported. Variable definitions can be found in Table 1. *AVGBRDTEN* is the average *board* tenure of audit committee (sum of the total years of board service of audit committee members / number of audit committee members). *EXPERT* is the proportion of financial experts on the audit committee. Model 1 is the full OLS model including *EXPERT*. Model 2 is the OLS model with the exclusion of *EXPERT*. Model 3 utilizes 2SLS technique and uses *EXPERT* as the instrumental variable.

Table 9

The Effect of Audit Committee Tenure on Audit Fees (Short vs. Long Tenure)

		Short Tenure				Long Tenure			
		First State		Second Stage		First Stage		Second Stage	
		Coeff	t-stat	Coeff	t-stat	Coeff	Chi-Square	Coeff	t-stat
SHORT	?			-1.05	-3.13***				
LONG	?							1.27	2.39**
Instrument									
EXPERT	+	-0.87	0.54			0.92	3.06*		
Control variables									
LnTA	+	-1.10	5.13***	0.36	11.45***	-0.05	0.02	0.40	13.49***
RECInv	+	-4.78	2.88*	0.65	4.21***	2.14	1.63	0.63	3.99***
SQSEG	+	0.69	2.20	0.21	7.05***	0.13	0.13	0.20	6.62***
FOREIGN	+	-1.18	2.07	-0.01	-0.29	0.40	0.54	-0.02	-0.38
LEV	+	1.34	0.64	0.28	2.34**	-0.44	0.08	0.27	2.25**
ROA	-	-4.54	0.84	-0.15	-0.48	-7.25	3.21*	0.31	0.96
MW	+	0.28	0.05	0.36	3.45***	0.34	0.08	0.33	3.15***
GC	?	-1.14	0.61	-0.02	-0.22	-0.61	0.31	0.01	0.10
RESTATE	+	-0.29	0.10	0.12	1.88*	0.16	0.05	0.11	1.70*
BIG4	+	-1.95	5.72***	0.15	2.24**	-0.25	0.13	0.24	4.03***
MTG	?	-0.06	0.17	0.02	2.22**	-0.11	1.23	0.03	3.04***
BRDMTG	?	0.08	1.36	0.01	1.21	-0.03	0.16	0.00	0.54
BRDCOMP	+	0.08	0.18	0.03	2.66***	-0.12	0.67	0.03	2.64***
LOSS	?	-0.86	0.40	0.04	0.50	-1.67	1.92	0.11	1.33
NAF_RATIO	?	-4.34	2.44	-0.03	-0.20	2.79	2.66*	-0.08	-0.53
AUCHANGE	?	2.30	2.40	-0.09	-0.66	0.90	0.52	-0.23	-1.63
CEOTurn	?	0.02	0.00	0.06	0.89	-0.74	0.46	0.10	1.44
ACATTEND	?	8.29	0.00	-0.28	-1.12	10.71	0.00	-0.33	-1.32
Fixed effects:									
Industry			Yes		Yes		Yes		Yes
Year			Yes		Yes		Yes		Yes
Model F, p value					27.33 p < .0001				26.95 p < .0001
Adjusted R^2					0.6135				0.6101

*, **, *** Represent statistical significance at the p <.10, p < .05, and p < .01, respectively. Two sided p-values are reported. Variable definitions can be found in Table 1. *SHORT* equals 1 if the average audit committee tenure is less than or equal to 3 years, 0 otherwise. LONG equals 1 if the average audit committee tenure is greater than 13 years, 0 otherwise. *EXPERT* is the proportion of financial experts on the audit committee. Model 1 is the full OLS model including *EXPERT*. Model 2 is the OLS model with the exclusion of *EXPERT*. Model 3 utilizes 2SLS technique and uses *EXPERT* as the instrumental variable.

Table 10

The Relationship between Average Audit Committee Tenure and Restatement

	Model 1		Model 2		Model 3			
					First Stage		Second Stage	
	Coeff	Chi-Square	Coeff	Chi-Square	Coeff	t-stat	Coeff	Chi-Square
AVG_TEN	-0.04	0.54	-0.02	0.16			-1.86	11.96***
Instrument								
EXPERT	0.53	1.38			1.25	2.92***		
Control variables								
LnTA	0.24	0.88	0.24	0.91	0.47	2.29**	1.11	9.74***
RECInv	2.38	3.77**	2.24	3.38*	3.72	3.51***	8.84	14.50***
SQSEG	-0.10	0.17	-0.10	0.19	0.03	0.12	-0.11	0.19
FOREIGN	-0.81	4.45**	-0.80	4.39**	-0.21	-0.67	-1.11	7.59***
LEV	-1.16	1.40	-1.13	1.32	-1.46	-1.78*	-3.61	8.42***
ROA	-5.55	4.68**	-5.10	4.06	-3.22	-1.54	-10.06	11.01***
MW	-1.19	1.17	-1.29	1.35	1.09	1.49	0.45	0.66
GC	0.51	0.93	0.50	0.91	-0.05	-0.11	0.48	0.15
RESTATE					-0.29	-0.63		
BIG4	-0.39	0.62	-0.02	-0.35	0.49	0.44	0.14	0.07
MTG	-0.02	0.11	0.05	-0.02	0.11	-0.97	-0.11	2.37
BRDMTG	0.04	0.85	0.04	0.05	1.30	-1.81*	-0.07	1.67
BRDCOMP	0.03	0.14	-0.67	0.04	0.22	-2.32**	-0.29	4.69**
LOSS	-0.73	1.46	0.64	-0.67	1.26	-2.09**	-2.62	9.60***
NAF_RATIO	0.80	0.43	0.67	0.64	0.29	0.42	1.01	0.69
AUCHANGE	0.71	0.59	-0.14	0.67	0.53	0.17	0.78	0.69
CEOTurn	-0.17	0.09	9.63	-0.14	0.06	-1.25	-1.12	3.12*
ACATTEND	9.64	0.00	0.24	9.63	0.00	0.70	11.66	0.00
Fixed effects:								
Industry		Yes		Yes		Yes		Yes
Year		Yes		Yes		Yes		Yes

*, **, *** Represent statistical significance at the p <.10, p < .05, and p < .01, respectively. Two sided p-values are reported. Variable definitions can be found in Table 1. *RESTATE* is the dependent variable, and equals 1 if there was a restatement during the year, and zero otherwise. Model 1 is the full OLS model including *EXPERT*. Model 2 is the OLS model with the exclusion of *EXPERT*. Model 3 utilizes 2SLS technique and uses *EXPERT* as the instrumental variable.