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Audit committee diligence around initial audit engagement

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ABSTRACT

Studies focusing on governance mechanisms argue that auditor monitoring is one of several governance mechanisms that exist in the firm, and these mechanisms supplement each other. Extending this argument, I examine whether firms support auditor monitoring with audit committee monitoring when auditor oversight is deemed to be weak. Prior auditing literature argues that audit quality is affected by auditors' lack of familiarity with their clients' activities. Since lack of auditor–client familiarity exists in the first year of auditor–client tenure, I examine whether firms increase their audit committee monitoring during the year of auditor change. For a sample of firms that changed auditors between 2006 and 2012, the findings show that audit committees meet more frequently in the first year of audit engagement. Further tests show that firms' past reporting behavior play a significant role in the demand for more audit committee meetings and the increase in the audit committee meetings in the initial year of auditor engagement positively affects reporting quality.

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1. Introduction

Auditor monitoring provides assurance to the financial statement users about the reliability of reported earnings. Accordingly, many studies document lower cost of capital (Hope, Kang, Thomas, & Yoo, 2009), greater reliance on reported earnings (Balsam, Krishnan, & Yang, 2003), and positive stock market response (Knechel, Naiker, & Pacheco, 2007) for firms whose auditors provide high audit quality. An auditor's quality of work, however, is not always uniform for all the clients in his or her portfolio. Several studies document that audit quality is affected by auditors' lack of familiarity of client's activities (Johnson, Kurana & Reynolds, 2002). At the same time, other studies document that the audit function works in concert with other financial reporting governance mechanisms within the firm (Ahmed, Rasmussen, & Tse, 2008). In this paper, I examine whether firms supplement periods of weak audit quality with an increased number of audit committee meetings, a governance mechanism argued to support auditor monitoring.

Many extant scholars point out that an auditor's quality of work is affected due to a lack of familiarity with his or her client's operations. Johnson, Kurana, and Reynolds (2002) document an inverse (direct) relationship between the length of the auditor–client relationship and absolute levels of unexpected accruals (accrual persistence) in earnings. Geiger and Raghunandan (2002) focus on the relationship between auditor tenure and audit quality and find evidence indicating a greater incidence of audit reporting failures in the earlier years of the auditor/client relationship than when auditors had served these clients for longer tenures. For similar reasons, many scholars and regulators opposed

the idea of mandatory auditor rotation for US firms (U. S General Accounting Office, GAO, 2003). The argument for poor audit assurance is that the auditors rely more on management estimates and representations in the initial year of audit engagement. Consequently, many firms have raised doubts about auditors' ability to put forth the sufficient effort required to audit a new client (Dunham, 2002).

One such occasion when the auditors lack familiarity of its client's activities is during the first year of auditor–client engagement. The lack of client familiarity in the initial year of audit engagement raises questions about the quality of audit assurance during this period (Beasley, Carcello, Hermanson, & Lapides, 2000). In the recent past, however, some studies have argued that the auditors' opinion in the initial year is not different from the outgoing auditors' final opinions (e.g. Krishnan, 1994; Krishnan & Stephens, 1995).¹ Other studies focusing on reporting quality in the first year of auditor tenure have documented no evidence of reporting quality being compromised (Kraub, Quosigk, & Zulch, 2014). These studies, however, provide no possible reasons for the lack of association between poor reporting quality and initial auditor engagement. I extend these studies by examining whether supporting auditor monitoring with other monitoring tools explains why no association has been documented between poor reporting quality and auditor change.

According to the literature that focuses on corporate governance, auditor monitoring is one of several mechanisms that exists in the firm (Azim, 2012). The other governance mechanisms that operate simultaneously within the firm to control agency conflict include monitoring by the board and monitoring by shareholders. The studies focusing on the interplay among the governance mechanisms argue that these

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E-mail address: kalelkarr@uhv.edu.¹ An exception is the findings of DeFond and Subramanyam (1998), which show that clients report less conservatively following the auditor switch.

governance mechanisms supplement each other. Ward, Brown, and Rodriguez (2009) focus on the relationship between internal and external monitoring mechanisms and argue that for poorly performing companies, the institutional investors can supplement the monitoring by the board of directors. More recently, Ahmed et al. (2008) document that monitoring of industry specialist auditors is less effective when alternative monitoring of board of directors and institutional investors is strong.

In this paper, I examine whether audit committees meet more frequently to supplement auditor monitoring in the initial year of auditor engagement. I focus on audit committee monitoring because audit committee members have the knowledge to safeguard the quality of financial reports and are held responsible for reporting failure (Srinivasan, 2005). The literature on audit committees documents that audit committee can reduce the possibility of reporting failure by meeting more frequently (Abbott, Parker, & Peters, 2004). Furthermore an effective audit committee monitoring can reduce the demand for assurance from auditors (Stewart & Munro, 2007).

To conduct the analyses, I use a sample of firms that switched auditors between 2006 and 2012.² To test the audit committee diligence hypothesis, I regress audit committee meetings on auditor switch, which is a variable that takes value one for firm-years when there is an auditor switch. Consistent with my hypothesis, I find that the coefficient on *Switch* is positive and significant, thus indicating that audit committees become more active in the first year of audit engagement. The results hold after controlling for potential selection bias. Further analysis reveals that firms' past reporting behavior play a significant role in the demand for more audit committee meetings in the first year of auditor engagement. The results show that the audit committees of firms with a history of aggressive reporting are more likely to actively meet in the initial year of auditor–client engagement than the audit committees of firms that change auditors but report less aggressively. Lastly I examine whether the additional audit committee meetings in the initial year of auditor engagement affects the reporting quality. Using absolute discretionary accruals as a proxy for reporting quality, I find that the firms who switch auditors and whose audit committees meet more frequently in the initial year of auditor engagement have better reporting quality than firms who switched auditors but have fewer meetings.

I make two contributions to the literature. First, I shed light on how firms respond to the needs for additional monitoring during the initial audit engagement. Although a considerable number of studies have examined the effect of auditor switches on financial reporting, none have focused on the tactics firms use to mitigate earnings management during initial audit engagement.³ Sankaraguruswamy and Whisenand (2009) examine the possibility of poor audit services in the year of auditor switch. Using restatement to proxy for audit quality, the authors find no significant association between restatement and initial audit pricing. Kraub et al. (2014) also focus on audit quality during the first year of audit engagement using German firms and find no evidence of reporting impairment. By focusing on the audit committee's diligence in monitoring, I provide explanations to the insignificant association between impairment in audit quality and initial year of audit engagement.

Second, the findings answer the question raised by regulators and academicians about the audit committee's effectiveness. In the period prior to the passage of the Sarbanes–Oxley Act of 2002, questions were raised regarding the diligence of audit committee's monitoring role. In fact, several studies posit that audit committees exist only in appearance (Menon & Williams, 1994). As a result, reforms were passed to increase the audit committee's responsibility in ensuring that the financial reporting is reliable. The findings of this paper add to the post-Sarbanes–Oxley Act literature on audit committee effectiveness by

documenting that they react proactively to possible reduced auditor monitoring by increasing their meeting frequency.

The remainder of the paper is organized as follows. The next section presents the literature review, and Section 3 presents the hypothesis. Section 4 discusses the research design, and Section 5 explains the sample selection procedure. Sections 6 and 7 describe the results and conclusion, respectively.

2. Literature review

Auditor monitoring plays an important role in enhancing the degree of confidence of external users in the financial statements. The increased confidence of creditors and investors in the reported earnings is often seen in the form of increased reliance on financial reports for decision making and a reduction in the cost of capital for the firm. Supporting this notion, several papers in the past have reported a negative relation between audit quality and the cost of equity capital (Azizkhani, Monroe, & Shailer, 2010, 2013; Fernando, Elder, & Abdel-Meguid, 2008; Hope et al., 2009; Khurana & Raman, 2004) and the cost of debt capital (Blackwell, Noland, & Winters, 1998; Mansi, Maxwell, & Miller, 2004; Pittman & Fortin, 2004). Other studies focusing on the relationship between audit quality and investors' confidence on financial reports document that the earnings are more informative of stock price (Teoh & Wong, 1993), firms have fewer restatements (Turner & Sennetti, 2001), and the market reacts positively following the appointment of such high quality auditors (Knechel et al., 2007).

Although firms may hire the best auditor, the audit quality is not always strong enough to safeguard a firm's reporting quality. One strand of literature focusing on auditor's oversight ability argues that understanding the client's nature of operation is necessary for auditors to perform audits efficiently (Brown & Knechel, 2013). The studies further state that the auditor's familiarity with his or her client's activities increases with auditor's tenure with the client. Consequently, many studies document a positive association between auditor–client tenure and reporting quality. Johnson et al. (2002) document an inverse (direct) relationship between the length of the auditor–client relationship and absolute levels of unexpected accruals (accrual persistence) in earnings.⁴ Similarly, Chung and Kallapur (2003) find a negative association between the length of auditor–client relationship and the abnormal accruals (also see, Myers, Myers, & Omer, 2003). Using the earnings response coefficient from the earnings–returns regression, Ghosh and Moon (2005) focus on the impact of auditor tenure on investors' perception of earnings. The authors find that the investors' perception of earnings increases with auditor tenure. In a similar study, Geiger and Raghunandan (2002) focus on the relationship between auditor tenure and audit quality and find evidence indicating a greater incidence of audit reporting failures in the earlier years of the auditor/client relationship than when auditors had served these clients for longer tenures.

Auditor oversight, however, is a mechanism that exists in the firm to ensure that the reported earnings are not manipulated. The other governance mechanisms that exist simultaneously in the firm include monitoring by the board of directors and shareholders. Literature on firm governance indicates that these governance mechanisms that operate simultaneously within the firm to keep agency conflict in control can substitute for and/or complement each other (Azim, 2012; Coles, McWilliams, & Sen, 2001).⁵ For instance, Rediker and Seth (1995) examine the interplay among governance mechanisms operating simultaneously in the firm, and find a negative association between monitoring of outside directors and monitoring of large outside shareholders, inside directors, and CEO equity incentives. The authors conclude that firms

² Auditor switch includes both auditor-initiated and client-initiated switch.

³ Studies on auditor switches focus on audit fee discounting (Ettredge & Greenberg, 1990; Simon & Francis, 1988), possible reasons for auditor switch (Weiss & Kalbers, 2008), and market responses to auditor switch (DeFond, Ettredge, & Smith, 1997; Wells & Loudder, 1997).

⁴ Other studies that report similar results are from Chi and Huang (2004), Shafie, Wan Hussin, Md Yusof, and Md Hussain (2009), and Srinidhi, Leung, and Gul (2010).

⁵ The few studies that focus on the complementary role between the governance mechanisms include Ward et al. (2009), Boo and Sharma (2008), Schepker and Oh (2013), and Rutherford, Buchholtz, and Brown (2007).

have substantial flexibility in selecting governance mechanisms to deal with their specific organizational and environmental contexts.

Using simultaneous equations, Bathala, Moon, and Rao (1994) examine the interplay between the institutional investors' monitoring and the managerial ownership, and find an inverse relationship between the two. Michelon, Beretta, and Bozzolan (2009) use 160 European firms and find that disclosure on internal control systems substitutes the monitoring of institutional investors, independent directors, and accounting expert members on the audit committee. Fernandez and Arrondo (2005) analyze Spanish firms and find that monitoring of outside directors substitutes the managerial and large blockholders' ownership stakes. More recently, Ahmed et al. (2008) document that the benefit of using an industry specialist auditors is high when the strength of alternate monitoring, proxied by monitoring of boards of directors and institutional shareholders, is weak.

The above literature on governance mechanisms suggests that auditor oversight can be supplemented through use of alternate monitoring tools that exist in the firm. The current auditing studies – while focusing on the effect of governance on audit quality – mostly examine how the firm's demand for quality audit is affected by firm governance. In this paper, I add to the auditing literature by focusing on whether firms undertake proactive measures to ensure that reporting quality is not compromised when auditor monitoring is deemed to be weak.

3. Hypothesis

Like auditors, audit committees are the monitors of the financial reporting quality and are severely penalized for the reporting failure. Srinivasan (2005) examines abnormal director turnover following reporting failure. He finds that the audit committee directors of 409 firms that announced restatements between 1997 and 2002 hold fewer board seats and face higher turnover compared to non-restating firms. In a related study, Arthaud-day, Certo, Dalton, and Dalton (2006) document that outside directors of restating firms are more likely to leave their respective firms compared to directors of non-restating firms. Fich and Shivdasani (2007) also focus on the consequences of securities class action lawsuits on directors of such firms. For a sample of firms from 1998 to 2002, the authors find that directors whose firms are involved in litigation are more likely to lose their board positions compared to the control sample. In a recent study on director accountability in securities class action lawsuits, Brochet and Srinivasan (2014) document that audit committee members are held more accountable in the class action lawsuits compared to other directors of the sued firms.

Audit committee members can reduce the incidence of reporting failures by being more diligent in their monitoring of financial reports. For instance, Xie, Davidson, and DaDalt (2003) find that more active boards, measured by the number of audit committee meetings, experience lower earnings management. The authors conclude that board and audit committee activities are vital factors in constraining the propensity of managers to engage in earnings management. Abbott et al. (2004) use 44 restated firms and document a negative association between audit committee activity and the occurrence of restatement. Chtourou, Bédard, and Courteau (2001) find that firms whose audit committees meet more than twice per year manage earnings less.

Following the above evidence I examine if audit committee meets more frequently in the initial year of auditor engagement. In the initial of auditor engagement auditor's oversight is hampered by the auditor's lack of complete knowledge about the client's activities, thus increasing the possibility of reporting failure. Considering the severity of penalty for reporting failure for audit committee directors, I assume that audit committees would consider the initial period of auditor–firm engagement as a period of crisis, and therefore meet more frequently to minimize any occurrence of reporting failure.⁶

⁶ Vafeas (1999) demonstrates that boards meet more often during periods of turmoil, and that financial management improves the more often they convene.

H1. Audit committees increase monitoring in the first year of auditor engagement.

4. Research design

To test the effect of initial audit engagement on audit committee meetings, I adopt the model specification from Raghunandan and Rama (2007). The model used is as follows:

$$ACmeet = \alpha_0 + \alpha_1 * Switch + \alpha_2 * BDmeet + \alpha_3 * Size + \alpha_4 * Ceoown + \alpha_5 * InstiHoldgs + \alpha_6 * Lev + \alpha_7 * Loss + \alpha_8 * M2B + \alpha_9 * Litigious + \alpha_{10} * Finance + \alpha_{11} * ACSize + \alpha_{12} * \%AcctExpert + \alpha_{13} * CeoChr + \alpha_{14} * BoardSize + \alpha_{15} * BoardInd + \sum_j \beta_j Year_j + \sum_k \beta_k Industry_k + \varepsilon \quad (1)$$

where:

| | |
|--------------------|---|
| <i>ACmeet</i> | the number of audit committee meetings ⁷ ; |
| <i>Switch</i> | 1 for the firm-years when the firm change auditor and 0 otherwise; |
| <i>BDmeet</i> | the number of board meetings; |
| <i>Size</i> | natural log of total assets; |
| <i>Ceoown</i> | percentage of common shares owned by CEO; |
| <i>InstiHoldgs</i> | percentage of common shares owned by institutional investors; |
| <i>Lev</i> | debt-to-assets ratio as of the year-end; |
| <i>Loss</i> | 1 if a firm had a negative earnings, otherwise 0; |
| <i>M2B</i> | ratio of market value to book value of equity; |
| <i>Litigious</i> | 1 if a firm is in any of the following sectors: pharmaceuticals (SIC codes 2833–2836), computers (3570–3577), electronics (3600–3674), retail (5200–5961), or software (7370), 0 otherwise; |
| <i>Finance</i> | 1 if the number of common shares outstanding or the long-term debt increased by at least 10%, otherwise 0; |
| <i>ACSize</i> | logarithm of number of audit committee members; |
| <i>%AcctExpert</i> | percentage of accounting expert on the audit committee; |
| <i>CeoChr</i> | 1 if CEO is also the chair of the board, otherwise 0; |
| <i>BoardSize</i> | logarithm of number of board directors; |
| <i>BoardInd</i> | proportion of independent directors on the board; |
| <i>Year</i> | Year controls; and |
| <i>Industry</i> | Industry controls. |

In the above model, *ACmeet* is the number of audit committee meetings. The main variable of interest is auditor switch, *Switch*, which takes value of 1 for firm-years when firms change auditors. As hypothesized above in H1, if audit committees increase the frequency of their meetings in response to the possibility of poor audit assurance in the initial year of auditor–client engagement, the coefficient on *Switch* will be positive and significant.

The other variables used in the model control for other factors that affect audit committee meetings. Raghunandan and Rama (2007) argue that the determinants of audit committee meetings are explained by the demand for monitoring, propensity of fraud and error, probability of litigation, and audit committee, board and CEO characteristics. Following Raghunandan and Rama (2007), I use firm size (*Size*), CEO ownership (*Ceoown*), and ownership by institutional investors (*InstiHoldgs*) to proxy for the firm's demand for monitoring. Prior studies argue that larger firms are engaged in complex activities and thus require additional monitoring (Raghunandan & Rama, 2007). The authors further argue that CEO stock ownership encourages CEOs to manipulate earnings, thereby increasing the need for additional monitoring. Lastly, several studies focus their attention on

⁷ Following Raghunandan and Rama (2007) I do not include telephone meetings in the calculations of the number of audit committee meetings. The results for H1 remain unchanged if I include telephone meetings in the calculations of the audit committee meetings.

institutional investors monitoring and argue that due to their larger investments in a company, institutional investors are more likely to pressure the board to improve corporate governance and financial reporting quality (Smith, 1996). Therefore, I expect *Size*, *Ceoown*, and *InstiHoldgs* to be positively associated with *ACmeet*.

To control for the firm's propensity for fraud and error, I use leverage (*Lev*), firm loss (*Loss*), and growth (*M2B*). A few studies have shown that a firm's poor performance increases its likelihood to engage in fraud or error (Beasley, 1996; Dechow, Sloan, & Sweeney, 1996). Therefore, I expect the audit committees of such loss-making firms to increase monitoring to provide assurance to external agents about the quality of financial reporting. Raghunandan and Rama (2007) argue that high leverage and high growth firms are more likely to engage in earnings management, thereby increasing the need for stronger monitoring. I expect a positive association between firm loss, leverage and growth, and audit committee meetings. A firm's probability of litigation increases with its membership to certain industries (*Litigious*). The probability of litigation also increases with new financing (*Finance*). Raghunandan and Rama (2007) argue that firms would conduct more meetings following an increase in the probability of litigation. Therefore, I expect *ACmeet* to increase with *Litigious* and *Finance*.

Lastly, Raghunandan and Rama (2007) control for governance characteristics, which include audit committee size (*ACSize*), audit committee accounting expert (*%AcctExpert*), board size (*Boardsize*), percentage of independent directors on board (*BoardInd*), board meetings (*BDmeet*), and CEO duality (*CeoChr*). Raghunandan and Rama (2007) argue that audit committee size, board size, board independence, board meetings, and the presence of accounting expert on the audit committee affect the demand for audit committee meetings. Lastly, Raghunandan and Rama (2007) argue that CEO duality adds to CEO power and weakens the firm's governance strength. Therefore, I expect audit committee meetings to decrease in frequency when the CEO is also the chair of the board.

5. Sample selection

I focus on the post-Sarbanes–Oxley Act period and start my analysis with 13,707 firms from Compustat with complete information for the period 2006 to 2012.⁸ I use Audit Analytics data to construct *Switch* and lose 8195 firms while merging Compustat firms with Audit Analytics. To test H1, I control for CEO characteristics and board monitoring in the model. The ExecuComp dataset provides comprehensive CEO-specific information, while Risk Metrics provides detailed information about the company's board. I first merge my Compustat–Audit Analytic data with ExecuComp and lose 3840 firms in the merge. Then I merge Risk Metrics with my dataset, which further reduces my sample to 1507 firms. I obtain institutional holdings from Thomson Reuters.

To test the hypothesis, I use a research design that tracks a firm over time. Specifically, I concentrate on firms that switched auditors during the sample period. This reduces the sample by 1380 firms. I delete firms that switch more than once and had fewer than one year observation in the pre- and post-change periods. This reduces the sample to 103 firms. Lastly, I delete all financial institutions and utilities from the sample. The final sample used for the analysis consists of 83 firms with 368 firm-year observations. The dependent variable used to test H1, *ACmeet*, is hand-collected from the proxy statements. The detailed description of sample selection is in Table 1.

6. Results

6.1. Descriptive statistics

In Table 2, I present the descriptive statistics of variables used in the analysis. The results show that average firm size (*Size*) and firm growth

⁸ The time consuming hand-collection for audit committee meeting restricts me to extend the sample to a period prior to 2006.

Table 1

Sample selection.

| | Firms | |
|--|--------|-----------|
| | Lost | Available |
| No. of firms with valid Compustat info between 2006 and 2012 | – | 13,707 |
| Firms after merging with Audit Analytics | (8195) | 5512 |
| Firms after merging with ExecuComp | (3840) | 1672 |
| Firms after merging with Risk Metrics | (165) | 1507 |
| Firms with no auditor change | (1380) | 127 |
| Firms with multiple auditor change | (12) | 115 |
| Firms less than one year pre- and post-change info | (12) | 103 |
| Firms after deleting financial firms and utilities | (20) | 83 |

The final sample has 368 firm-year observations for 83 unique firms.

(*M2B*) is 5210.47 million and 1.94, respectively. Further results show that 11% of the sample firms had losses and 24% of the firms are in litigious industries. The results on board characteristics show that the average board size is nine and the average audit committee size is four. Twenty percent of the directors are accounting experts, and 74% of the directors are independent. The audit committee and the board, on average, meet eight times in a year. In the additional analysis I examine the frequency of audit committee meetings in the year of auditor switch ($Switch_t$). My untabulated results show that the top two most frequently occurring numbers of meetings in the initial year of auditor engagement are 9 and 11. In comparison I find that the top two meeting frequencies in the year prior to auditor change ($Switch_{t-1}$) are 8 and 5. The descriptive statistics on CEO characteristics reveal that 55% of the sample firms have CEOs who also serve as board chairpersons.

6.2. Correlation

In Table 3, I present the correlation among the variables used in the audit committee diligence analysis. The results show that *ACmeet* is positively associated with *Switch* (correlation = 0.059). This finding suggests that firms might increase the frequency of audit committee meetings in the initial year audit engagement. Furthermore, the results indicate that *ACmeet* is positively associated with *Size*, *Ceoown*, *InstiHoldgs*, *Lev*, *Boardsize*,

Table 2

Sample distribution.

| Panel A: full sample | | | | | |
|----------------------|---------|---------|-----------|----------------|----------------|
| Variable | Mean | Median | STDev | Lower quartile | Upper quartile |
| ACMeet | 7.7692 | 8.0000 | 3.3352 | 6.0000 | 10.0000 |
| BDmeet | 8.1529 | 7.0000 | 3.8992 | 5.0000 | 10.0000 |
| Size | 5210.47 | 991.50 | 12,717.14 | 392.3560 | 4365.50 |
| M2B | 1.9421 | 1.8191 | 6.7880 | 1.1678 | 2.8791 |
| Lev | 0.1767 | 0.1540 | 0.1730 | 0.0008 | 0.2856 |
| Loss | 0.1143 | 0.0000 | 0.3186 | 0.0000 | 0.0000 |
| Litigious | 0.2436 | 0.0000 | 0.4299 | 0.0000 | 0.0000 |
| Finance | 0.4382 | 0.0000 | 0.4962 | 0.0000 | 1.0000 |
| CeoChr | 0.5457 | 1.0000 | 0.4986 | 0.0000 | 1.0000 |
| Ceoown | 0.3891 | 0.0563 | 0.8667 | 0.0165 | 0.2344 |
| Acsize | 3.6486 | 3.0000 | 1.0209 | 3.0000 | 4.0000 |
| Boardsize | 8.5914 | 8.0000 | 2.0401 | 7.0000 | 10.0000 |
| %AcctExpert | 0.2017 | 0.1667 | 0.1512 | 0.1111 | 0.3038 |
| BoardInd | 0.7437 | 0.7500 | 0.1305 | 0.6667 | 0.8571 |
| InstHoldgs | 0.7748 | 0.8141 | 0.2032 | 0.6748 | 0.9290 |
| Dac | –0.0552 | –0.0482 | 0.0745 | –0.0807 | –0.0197 |

ACMeet = number of audit committee meetings; BDmeet = number of board meetings; Size = total assets; M2B = ratio of market to book value of equity; Lev = debt-to-assets ratio as of the year-end; Loss = 1 if a firm had a negative earnings, otherwise 0; Litigious = 1 if a firm is in any of the following sectors: pharmaceuticals (SIC codes 2833–2836), computers (3570–3577), electronics (3600–3674), retail (5200–5961), or software (7370), 0 otherwise; Finance = 1 if the number of common shares outstanding or the long-term debt increased by at least 10%, otherwise 0; CeoChr = 1 if the CEO is also the chairman of the company; Ceoown = percentage of common shared held by CEO; ACSize = number of audit committee members; BoardSize = number of board directors; %AcctExpert = percentage of accounting expert on audit committee; BoardInd = proportion of independent directors on the board; InstiHoldgs = percentage of common shares owned by institutional investors; Dac = residuals from modified Jones model.

BDmeet, and BoardInd. This suggests that audit committees meet more frequently when the demand for monitoring is high, the probability of fraud and error is high, and the governance is strong. The result is consistent with Raghunandan and Rama's (2007) findings on determinants of audit committee meetings. Overall, the univariate result from Table 3 indicates that firms increase audit committee monitoring in the first year of auditor engagement, thus supporting H1. The correlation analysis further shows that none of the variables are highly correlated with each other, thus reducing the probability of multicollinearity.

6.3. Regression results

6.3.1. Effect of auditor switch on audit committee meetings

In Table 4, I present the result of H1 that looks at audit committee meetings during auditor change. The model is significant with p-value < 0.0001. The adjusted R-square is 16.87%. The variance inflation factors (VIF) for all the variables in this model is less than 2.02, indicating that the model is free from multicollinearity. The coefficient on Switch is positive (coefficient = 0.609; p-value = 0.0444) and is significant at 5%. This indicates that audit committees increase the frequency of their meetings during auditor change. Consistent with prior studies, I find the coefficient on Size (coefficient = 0.635; p-value < 0.0001) and InstiHoldgs (coefficient = 1.417; p-value = 0.0434) to be positive and significant, thus indicating that audit committees of larger firms and firms with a greater proportion of institutional investors meet more frequently. In addition, I find that audit committees meet more frequently when the propensity of fraud is high. The coefficient on Loss (coefficient = 0.513; p-value = 0.0948) and Litigious (coefficient = 0.561; p-value = 0.0616) is positive and significant. Lastly, I find that BDmeet (coefficient = 0.179; p-value < 0.0001) is significantly associated with ACmeet.

6.3.2. Explanation for an increase in audit committee meetings

In this section, I investigate what motivates firms to increase their audit committee meetings in the initial year of auditor engagement. One possible explanation for the audit committees to meet more frequently is the need for additional audit committee monitoring. Given that audit committee members are held responsible for the reporting failure (Srinivasan, 2005), I argue that the firms' past reporting behavior would play a significant role in the demand for more frequent audit committee meetings. Brick and Chidambaran (2010) document that board monitoring is explained by firm's reporting quality. Sharma,

Table 4

Regression examining audit committee meetings during initial year of auditor–client engagement.

$$ACmeet = \alpha_0 + \alpha_1 * Switch + \alpha_2 * BDmeet + \alpha_3 * Size + \alpha_4 * Ceoown + \alpha_5 * InstiHoldgs + \alpha_6 * Lev + \alpha_7 * Loss + \alpha_8 * M2B + \alpha_9 * Litigious + \alpha_{10} * Finance + \alpha_{11} * ACsize + \alpha_{12} * \%AcctExpert + \alpha_{13} * CeoChr + \alpha_{14} * BoardSize + \alpha_{15} * BoardInd + \sum_j \beta_j Year_j + \sum_k \beta_k Industry_k + \epsilon$$

| Variable | Estimate | t Value | Pr > t |
|-------------------|----------|---------|---------|
| Intercept | 1.6848 | 1.16 | 0.2489 |
| Switch | 0.6093 | 2.02 | 0.0444 |
| BDmeet | 0.1785 | 4.83 | <0.0001 |
| Size | 0.6348 | 6.23 | <0.0001 |
| Ceoown | 0.1784 | 0.32 | 0.7485 |
| InstiHoldgs | 1.4171 | 2.03 | 0.0434 |
| Lev | -0.8019 | -0.98 | 0.3289 |
| Loss | 0.5132 | 1.68 | 0.0948 |
| M2B | 0.0041 | 0.02 | 0.9874 |
| Litigious | 0.5609 | 1.88 | 0.0616 |
| Finance | 0.1170 | 0.44 | 0.6586 |
| ACsize | -0.2777 | -0.46 | 0.6432 |
| CeoChr | 0.1616 | 0.63 | 0.532 |
| %AcctExpert | -1.3082 | -1.45 | 0.1471 |
| BoardSize | 0.1053 | 0.15 | 0.8814 |
| BoardInd | -1.6561 | -1.4 | 0.1627 |
| Year controls | Included | | |
| Industry controls | Included | | |
| Adj R-square | 0.1687 | | |
| Nobs | 368 | | |
| Pr > F | <0.0001 | | |
| Highest VIF | 2.0208 | | |

ACmeet = number of audit committee meetings; Switch = 1 for the firm-years when the firm change auditor and 0 otherwise; BDmeet = number of board meetings; Size = natural log of total assets; Ceoown = percentage of common shares owned by CEO; InstiHoldgs = percentage of common shares owned by institutional investors; Lev = debt-to-assets ratio as of the year-end; Loss = 1 if a firm had a negative earnings, otherwise 0; M2B = ratio of market value to book value of equity; Litigious = 1 if a firm is in any of the following sectors: pharmaceuticals (SIC codes 2833–2836), computers (3570–3577), electronics (3600–3674), retail (5200–5961), or software (7370), 0 otherwise; Finance = 1 if the number of common shares outstanding or the long-term debt increased by at least 10%, otherwise 0; ACsize = logarithm of number of audit committee members; %AcctExpert = percentage of accounting expert on the audit committee; CeoChr = 1 if CEO is also the chair of the board, otherwise 0; BoardSize = logarithm of number of board directors; BoardInd = proportion of independent directors on the board.

Naiker, and Lee (2009) focus on the frequency of audit committee meetings and find that independent boards are likely to meet more frequently when the reporting is aggressive. Following these findings, I

Table 3
Correlation.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|-------------|---|--------------|--------------|--------------|--------------|--------------|----------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| ACMeet | 1 | 0.059 | 0.271 | 0.217 | 0.112 | 0.104 | 0.071 | 0.039 | 0.006 | 0.014 | -0.005 | 0.066 | -0.027 | -0.009 | 0.193 | 0.134 |
| Switch | | 1 | 0.021 | -0.048 | -0.063 | -0.022 | 0.029 | -0.003 | -0.048 | 0.019 | 0.079 | -0.030 | -0.007 | -0.036 | 0.021 | - 0.095 |
| BDmeet | | | 1 | 0.109 | 0.203 | 0.218 | 0.205 | 0.219 | 0.129 | 0.077 | -0.015 | -0.010 | - 0.166 | 0.028 | 0.001 | 0.245 |
| Size | | | | 1 | 0.392 | 0.485 | - 0.153 | 0.32 | - 0.175 | - 0.238 | 0.336 | 0.025 | 0.182 | 0.566 | 0.292 | |
| Ceoown | | | | | 1 | 0.233 | 0.269 | 0.013 | -0.067 | - 0.100 | - 0.168 | 0.153 | - 0.082 | 0.087 | 0.311 | 0.366 |
| InstiHoldgs | | | | | | 1 | 0.073 | 0.161 | -0.040 | 0.095 | 0.032 | -0.036 | -0.047 | 0.017 | -0.043 | 0.364 |
| Lev | | | | | | | 1 | 0.086 | 0.037 | - 0.190 | - 0.251 | - 0.198 | - 0.092 | 0.124 | 0.342 | 0.181 |
| Loss | | | | | | | | 1 | 0.267 | -0.001 | -0.027 | - 0.111 | -0.059 | 0.012 | -0.026 | 0.072 |
| M2B | | | | | | | | | 1 | - 0.177 | - 0.101 | 0.035 | 0.132 | 0.061 | 0.020 | - 0.079 |
| Litigious | | | | | | | | | | 1 | 0.131 | - 0.162 | - 0.154 | -0.048 | - 0.179 | -0.056 |
| Finance | | | | | | | | | | | 1 | - 0.175 | 0.102 | - 0.108 | - 0.232 | - 0.105 |
| ACsize | | | | | | | | | | | | 1 | 0.084 | 0.138 | 0.479 | 0.212 |
| CeoChr | | | | | | | | | | | | | 1 | -0.022 | 0.019 | - 0.115 |
| %AcctExpert | | | | | | | | | | | | | | 1 | 0.028 | 0.167 |
| BoardSize | | | | | | | | | | | | | | | 1 | 0.213 |
| BoardInd | | | | | | | | | | | | | | | | 1 |

ACmeet = number of audit committee meetings; Switch = 1 for the firm-years when the firm change auditor and 0 otherwise; BDmeet = number of board meetings; Size = natural log of total assets; Ceoown = percentage of common shares owned by CEO; InstiHoldgs = percentage of common shares owned by institutional investors; Lev = debt-to-assets ratio as of the year-end; Loss = 1 if a firm had a negative earnings, otherwise 0; M2B = ratio of market value to book value of equity; Litigious = 1 if a firm is in any of the following sectors: pharmaceuticals (SIC codes 2833–2836), computers (3570–3577), electronics (3600–3674), retail (5200–5961), or software (7370), 0 otherwise; Finance = 1 if the number of common shares outstanding or the long-term debt increased by at least 10%, otherwise 0; ACsize = logarithm of number of audit committee members; %AcctExpert = percentage of accounting expert on audit committee; CeoChr = 1 if CEO is also the chair of the board, otherwise 0; BoardSize = logarithm of number of board directors; BoardInd = proportion of independent directors on the board. Coefficients in bold are significant at 10% or better.

assume that audit committees whose firms have a history of aggressive reporting are more likely to support the auditor monitoring with additional audit committee meetings in the initial year of auditor engagement.

To test this argument, I identify firms with history of aggressive reporting (*Aggressive*) using the magnitude of discretionary accruals. For the analysis, I first calculate discretionary accruals as the residuals of modified Jones model. I identify firms as *Aggressive* if their absolute discretionary accruals are greater than the industry average in the years before the auditor change. I interact *Aggressive* with *Switch* and rerun model 1. The results are presented in Table 5. The results show that the coefficient on *Switch* is positive but insignificant (coefficient = 0.399; p-value = 0.1775). The coefficient on the interacting variable (*Aggressive***Switch*) is positive and significant (coefficient = 0.788; p-value = 0.0824). This indicates that firms that switch auditors and have a history of aggressive reporting meet more frequently than firms that switch auditors but do not report aggressively.

6.3.3. Control for potential selection bias

The decision to switch auditors is voluntary. There is a possibility that the factors that influence the firms to switch their auditor may drive the difference in the audit committee meetings. To control for this potential selection bias, I use the Heckman procedure (Heckman, 1979). To conduct this Heckman test I use a full model consisting of 4793 firm-observations. I run a probit model in the first stage of this procedure and obtain an inverse mills ratio (*Mills*), which I use as a control variable in the main model. Following Mande and Son (2012), I run the following probit model:

$$\text{Prob}(\text{Switch}_t = 1) = \alpha_0 + \alpha_1 \text{Restate}_{t-1} + \alpha_2 \text{GC}_{t-1} + \alpha_3 \text{AudTen}_{t-1} + \alpha_4 \text{Afee}_{t-1} + \alpha_5 \text{Expert}_{t-1} + \alpha_6 \text{ROA}_{t-1} + \alpha_7 \text{Loss}_{t-1} + \alpha_8 \text{Lev}_{t-1} + \alpha_9 \text{M2B}_{t-1} + \alpha_{10} \text{Da}_{t-1} + \alpha_{11} \text{M\&A}_{t-1} + \alpha_{12} \text{Busseg}_{t-1} + \alpha_{13} \text{Foreign}_{t-1} + \alpha_{14} \text{Size}_{t-1} + \alpha_{15} \text{Boardsize}_{t-1} + \alpha_{16} \text{ACratio}_{t-1} + \alpha_{17} \text{BoardInd}_{t-1} + \alpha_{18} \text{InstiHoldgs}_{t-1} + \sum_j \beta_j \text{Year}_j + \sum_k \beta_k \text{Industry}_k + \varepsilon \quad (2)$$

In the above model, the dependent variable is *Switch*. Following Mande and Son (2012) I include restatement (*Restate*) in the model. *Restate* is 1 if the firm restated its reported earnings. Going concern (*GC*), auditor tenure (*AudTen*), audit fees (*Afee*), and auditor expertise (*Expert*) relates to auditor characteristics. I measured *GC* as 1 if the firm receives going concern opinion; *AudTen* as logarithm of number of years audited by incumbent auditor; *Afee* as logarithm of audit fees; and *Expert* as 1 if the auditor is an industry expert. The other set of control variables include return on asset (*RoA*), firm loss (*Loss*), leverage (*Lev*), and firm growth (*M2B*). I measure *RoA* as net income before extraordinary items divided by total assets. Since probability of auditor switch increases with auditor conservatism and mergers and acquisition, I control for discretionary accruals (*Dac*) and merger and acquisition (*M&A*) in the control. *M&A* is an indicator variable that takes value 1 if the firm has a merger or acquisition in the previous two years. I control for firm complexity using proxies for firm's business segments (*Busseg*), foreign activities (*Foreign*), and size (*Size*). I measure *Busseg* as number of segments and *Foreign* as 1 if the firm is engaged in foreign activities. Lastly, I control for firm governance. In particular I add *Boardsize*, percentage of audit committee on the board (*ACratio*) measured as ratio of audit committee directors to total directors on board, *BoardInd*, and *Instiholdgs* in the model. The other variables are as defined earlier in model 1.

The result of the probit test in panel A of Table 6 indicates that firm loss (*Loss*), leverage (*Lev*), growth (*M2B*), and discretionary accruals (*Dac*), are positively and significantly associated with auditor switch. All the variables are significant at less than 10% significance level. The

Table 5

Explanation for the increase in the audit committee meetings in the initial year of auditor-client engagement.

$$\text{ACmeet} = \alpha_0 + \alpha_1 * \text{Switch} + \alpha_2 * \text{Aggressive} + \alpha_3 * \text{Switch} * \text{Aggressive} + \alpha_4 * \text{BDmeet} + \alpha_5 * \text{Size} + \alpha_6 * \text{Ceown} + \alpha_7 * \text{InstiHoldgs} + \alpha_8 * \text{Lev} + \alpha_9 * \text{Loss} + \alpha_{10} * \text{M2B} + \alpha_{11} * \text{Litigious} + \alpha_{12} * \text{Finance} + \alpha_{13} * \text{ACSize} + \alpha_{14} * \% \text{AcctExpert} + \alpha_{15} * \text{CeoChr} + \alpha_{16} * \text{BoardSize} + \alpha_{17} * \text{BoardInd} + \sum_j \beta_j \text{Year}_j + \sum_k \beta_k \text{Industry}_k + \varepsilon$$

| Variable | Estimate | t value | Pr > t |
|-------------------|----------|---------|---------|
| Intercept | -0.5837 | -0.54 | 0.5928 |
| Switch | 0.3991 | 1.35 | 0.1775 |
| Aggressive | 0.3968 | 1.89 | 0.0590 |
| Switch*Aggressive | 0.7883 | 1.74 | 0.0824 |
| BDmeet | 0.1799 | 6.63 | <0.0001 |
| Size | 0.3396 | 4.24 | <0.0001 |
| Ceown | -0.4563 | -1.06 | 0.2885 |
| InstiHoldgs | 0.8842 | 1.62 | 0.1060 |
| Lev | -1.1838 | -1.96 | 0.0500 |
| Loss | 0.0871 | 0.39 | 0.6962 |
| M2B | -0.3207 | -1.47 | 0.1412 |
| Litigious | 0.2784 | 1.25 | 0.2102 |
| Finance | -0.0120 | -0.06 | 0.9502 |
| ACsize | -0.7684 | -1.85 | 0.0648 |
| CeoChr | 0.4346 | 2.34 | 0.0199 |
| %AcctExpert | -0.5691 | -0.91 | 0.3644 |
| BoardSize | 2.0314 | 3.76 | 0.0002 |
| BoardInd | 0.4149 | 0.47 | 0.6380 |
| Year controls | Included | | |
| Industry controls | Included | | |
| Adj R-square | 0.2203 | | |
| Nobs | 368 | | |
| Pr > F | <0.0001 | | |
| Highest VIF | 2.1593 | | |

ACmeet = number of audit committee meetings; Switch = 1 for the firm-years when the firm change auditor and 0 otherwise; Aggressive = 1 if the absolute discretionary accruals are greater than the industry average in the years before the auditor change; BDmeet = number of board meetings; Size = natural log of total assets; Ceown = percentage of common shares owned by CEO; InstiHoldgs = percentage of common shares owned by institutional investors; Lev = debt-to-assets ratio as of the year-end; Loss = 1 if a firm had a negative earnings, otherwise 0; M2B = ratio of market value to book value of equity; Litigious = 1 if a firm is in any of the following sectors: pharmaceuticals (SIC codes 2833–2836), computers (3570–3577), electronics (3600–3674), retail (5200–5961), or software (7370), 0 otherwise; Finance = 1 if the number of common shares outstanding or the long-term debt increased by at least 10%, otherwise 0; ACsize = logarithm of number of audit committee members; %AcctExpert = percentage of accounting expert on the audit committee; CeoChr = 1 if CEO is also the chair of the board, otherwise 0; BoardSize = logarithm of number of board directors; and BoardInd = proportion of independent directors on the board.

results further show that auditor switch is negative and significantly associated with auditor tenure (*AudTen*), auditor expertise (*Expert*), return on assets (*RoA*), and governance (*BoardInd*; *Instiholdgs*) at less than 2% significance level. The pseudo-R-square is 0.2785, and the estimated parameters from this model are used to calculate the inverse mills ratio (*Mills*). I rerun model 1 after including *Mills* as a control variable. The result in panel B shows that the coefficient on *Switch* continues to be positive (coefficient = 0.562) and significant (p-value = 0.0514) after the inclusion of *Mills*. Therefore, the results show that the increase in audit committee meetings in the year of auditor change is not as an outcome of a potential selection bias.

6.3.4. Effect of increase in audit committee meetings on the reporting quality

In this test I examine the effect of audit committee meetings in the initial year of auditor-client engagement on the reporting quality. Although prior auditing studies document that auditor monitoring is weak in the initial year of audit engagement, studies examining the reporting quality in the first year of auditor engagement do not find any evidence of impairment in audit quality (Kraub et al., 2014). To provide direct evidence that frequency of audit committee meetings explains this no association of reporting failure in the initial year of auditor engagement, I create an indicator variable *Highmeet* that takes value 1 if the audit committee meetings are greater than the industry

Table 6

Panel A: Probit analysis to control for self-selection.

$$\text{Prob}(\text{Switch}_t = 1) = \alpha_0 + \alpha_1 \text{Restate}_{t-1} + \alpha_2 \text{GC}_{t-1} + \alpha_3 \text{AudTen}_{t-1} + \alpha_4 \text{Afee}_{t-1} + \alpha_5 \text{Expert}_{t-1} + \alpha_6 \text{ROA}_{t-1} + \alpha_7 \text{Loss}_{t-1} + \alpha_8 \text{Lev}_{t-1} + \alpha_9 \text{M2B}_{t-1} + \alpha_{10} \text{Dac}_{t-1} + \alpha_{11} \text{M\&A}_{t-1} + \alpha_{12} \text{Busseg}_{t-1} + \alpha_{13} \text{Foreign}_{t-1} + \alpha_{14} \text{Size}_{t-1} + \alpha_{15} \text{Boardsize}_{t-1} + \alpha_{16} \text{ACratio}_{t-1} + \alpha_{17} \text{Boardind}_{t-1} + \alpha_{18} \text{InstiHoldgs}_{t-1} + \sum_j \beta_j \text{Year}_j + \sum_k \beta_k \text{Industry}_k + \varepsilon$$

| Variable | Estimate | Chi square | Pr > t |
|----------------------------|----------|------------|---------|
| Intercept | 1.5443 | 1.99 | 0.0462 |
| Restate _{t-1} | 0.3235 | 0.41 | 0.6845 |
| GC _{t-1} | 1.1907 | 1.39 | 0.1652 |
| AudTen _{t-1} | -0.0861 | -14.46 | <0.0001 |
| Afee _{t-1} | -0.0556 | -0.92 | 0.3581 |
| Expert _{t-1} | -0.6152 | -5.74 | <0.0001 |
| ROA _{t-1} | -1.2009 | -3.15 | 0.0016 |
| Loss _{t-1} | 0.1672 | 1.88 | 0.0598 |
| Lev _{t-1} | 0.3813 | 1.74 | 0.0816 |
| M2B _{t-1} | 0.1223 | 1.72 | 0.0852 |
| Dac _{t-1} | 1.1422 | 2.66 | 0.0079 |
| M&A _{t-1} | -0.1088 | -0.58 | 0.5627 |
| Busseg _{t-1} | 0.0016 | 0.8 | 0.4256 |
| Foreign _{t-1} | 0.0734 | 1.05 | 0.2954 |
| Size _{t-1} | 0.0313 | 0.77 | 0.4391 |
| Boardsize _{t-1} | 0.0275 | 0.14 | 0.8851 |
| ACratio _{t-1} | -0.0847 | -0.25 | 0.8024 |
| Boardind _{t-1} | -0.7084 | -2.48 | 0.0133 |
| InstiHoldgs _{t-1} | -0.5812 | -2.88 | 0.0039 |
| Year controls | Included | | |
| Industry controls | Included | | |
| Pseudo R-square | 0.2785 | | |
| Nobs | 4793 | | |

Switch = 1 for the firm-years when the firm change auditor and 0 otherwise; Restate = 1 if the firm restate its reported earnings; GC = 1 if firm received going concern opinion; AudTen = logarithm of number of years audited by incumbent auditor; Afee = logarithm of audit fees; Expert = 1 if the auditor is an industry expert; ROA = ratio of net income divide by total assets; Loss = 1 if a firm had a negative earnings, otherwise 0; Lev = debt-to-assets ratio as of the year-end; M2B = Ratio of market value of equity to book value of equity; Dac = residuals from modified Jones model; M&A = 1 if the firm has a merger or acquisition; Busseg = number of business segments' Foreign = 1 if the firm is engaged in foreign activities; Size = natural log of total assets; BoardSize = logarithm of number of board directors; ACRatio = ratio of audit committee directors to total directors on board; BoardInd = proportion of independent directors on the board; InstiHoldgs = percentage of common shares owned by institutional investors.

Panel B: Regression examining audit committee meetings during initial year of auditor–client engagement after controlling for self-selection

$$\text{ACmeet} = \alpha_0 + \alpha_1 * \text{Switch} + \alpha_2 * \text{BDmeet} + \alpha_3 * \text{Size} + \alpha_4 * \text{Ceoown} + \alpha_5 * \text{InstiHoldgs} + \alpha_6 * \text{Lev} + \alpha_7 * \text{Loss} + \alpha_8 * \text{M2B} + \alpha_9 * \text{Litigious} + \alpha_{10} * \text{Finance} + \alpha_{11} * \text{ACSize} + \alpha_{12} * \% \text{AcctExpert} + \alpha_{13} * \text{CeoChr} + \alpha_{14} * \text{BoardSize} + \alpha_{15} * \text{BoardInd} + \sum_j \beta_j \text{Year}_j + \sum_k \beta_k \text{Industry}_k + \varepsilon$$

| Variable | Estimate | t value | Pr > t |
|-------------------|----------|---------|---------|
| Intercept | 0.3996 | 0.77 | 0.4401 |
| Switch | 0.5618 | 1.95 | 0.0514 |
| BDmeet | 0.1113 | 9.17 | <0.0001 |
| Size | 0.3154 | 8.96 | <0.0001 |
| Ceoown | 0.7208 | 3.41 | 0.0007 |
| InstiHoldgs | 0.6913 | 2.67 | 0.0076 |
| Lev | -0.6646 | -2.44 | 0.0148 |
| Loss | 0.1678 | 1.64 | 0.1002 |
| M2B | 0.2254 | 2.23 | 0.0261 |
| Litigious | 0.5143 | 5.25 | <0.0001 |
| Finance | -0.0479 | -0.58 | 0.5608 |
| ACsize | -0.8892 | -4.85 | <0.0001 |
| CeoChr | -0.4059 | -5.00 | <0.0001 |
| %AcctExpert | 1.0677 | 3.43 | 0.0006 |
| BoardSize | 1.2561 | 5.47 | <0.0001 |
| BoardInd | 1.3354 | 3.43 | 0.0006 |
| Mills | 0.1151 | 1.89 | 0.0586 |
| Year controls | Included | | |
| Industry controls | Included | | |
| Adj R-square | 0.1299 | | |
| Nobs | 4793 | | |
| Pr > F | <0.0001 | | |
| Highest VIF | 1.9790 | | |

ACmeet = number of audit committee meetings; Switch = 1 for the firm-years when the firm change auditor and 0 otherwise; BDmeet = number of board meetings; Size = natural log of total assets; Ceoown = percentage of common shares owned by CEO; InstiHoldgs = percentage of common shares owned by institutional investors; Lev = debt-to-assets ratio as of the year-end; Loss = 1 if a firm had a negative earnings, otherwise 0; M2B = ratio of market value to book value of equity; Litigious = 1 if a firm is in any of the following sectors: pharmaceuticals (SIC codes 2833–2836), computers (3570–3577), electronics (3600–3674), retail (5200–5961), or software (7370), 0 otherwise; Finance = 1 if the number of common shares outstanding or the long-term debt increased by at least 10%, otherwise 0; ACsize = logarithm of number of audit committee members; %AcctExpert = percentage of accounting expert on the audit committee; CeoChr = 1 if CEO is also the chair of the board, otherwise 0; BoardSize = logarithm of number of board directors; BoardInd = proportion of independent directors on the board.

average. I regress absolute discretionary accruals (*Abdac*), proxy for reporting quality, on *Switch*, *High_{meet}*, interaction of *High_{meet}* and *Switch*, and other control variables. The control variables include firm size (*Size*), growth (*M2B*), leverage (*Lev*), firm financial performance (*Loss* and *Volatility*), auditor characteristics (*Afee* and *Audlag*), and governance variables

(*CeoChr*, *%AcctExpert*, *ACsize*, *BoardSize*, and *BoardInd*). *Volatility* is measured as standard deviation in stock returns and *Audlag* is measured as number of days from fiscal year end to earnings release.

The results of the test are reported in Table 7. The results show that the coefficient on *Switch* is positive and significant at 10%. The results further

Table 7
Regression examining the effect of audit committee meetings in the initial year of auditor engagement on reporting quality.

$$Abdac = \alpha_0 + \alpha_1 * Switch + \alpha_2 * High_{meet} + \alpha_3 * High_{meet} * Switch + \alpha_4 * Size + \alpha_5 * M2B + \alpha_6 * Loss + \alpha_7 * Lev + \alpha_8 * Volatility + \alpha_9 * Big4 + \alpha_{10} * Afee + \alpha_{11} * Audlag + \alpha_{12} * CeoChr + \alpha_{13} * \%AcctExpert + \alpha_{14} * ACSize + \alpha_{15} * BoardSize + \alpha_{16} * BoardInd + \sum_j \beta_j Year_j + \sum_k \beta_k Industry_k + \epsilon$$

| Variable | Estimate | t value | Pr > t |
|------------------------------|----------|---------|---------|
| Intercept | 0.1398 | 3.12 | 0.0019 |
| Switch | 0.0126 | 1.95 | 0.0514 |
| High _{meet} | 0.0075 | 1.41 | 0.1593 |
| High _{meet} *Switch | -0.0118 | -1.72 | 0.0863 |
| Size | 0.0022 | 0.85 | 0.3939 |
| M2B | -0.0098 | -2.12 | 0.0347 |
| Loss | -0.0134 | -0.94 | 0.3474 |
| Lev | -0.0611 | -3.69 | 0.0003 |
| Volatility | 0.5211 | 4.92 | <0.0001 |
| Big4 | 0.0026 | 0.56 | 0.5726 |
| Afee | -0.0072 | -2.1 | 0.0366 |
| Audlag | 0.0000 | 0.07 | 0.9481 |
| CeoChr | 0.0011 | 0.25 | 0.7997 |
| %AcctExpert | 0.0416 | 2.63 | 0.0089 |
| ACsize | 0.0037 | 0.36 | 0.7226 |
| BoardSize | -0.0171 | -1.4 | 0.1624 |
| BoardInd | 0.0157 | 0.82 | 0.4134 |
| Year controls | Included | | |
| Industry controls | Included | | |
| Adj R-square | 0.1734 | | |
| Nobs | 368 | | |
| Pr > F | <0.0001 | | |
| Highest VIF | 3.9444 | | |

Abdac = Absolute value of residuals from modified Jones model; Switch = 1 for the firm-years when the firm change auditor and 0 otherwise; High_{meet} = 1 if audit committee meetings are greater than the industry average; Size = natural log of total assets; M2B = Ratio of market value of equity to book value of equity; Loss = 1 if a firm had a negative earnings, otherwise 0; Lev = debt-to-assets ratio as of the year-end; Volatility = standard deviation in stock returns; Big4 = 1 if the auditor is a big 4; Afee = logarithm of audit fees; Audlag = The number of days from fiscal year-end to earnings release date; CeoChr = 1 if CEO is also the chair of the board, otherwise 0; %AcctExpert = percentage of accounting expert on audit committee; ACSize = logarithm of number of audit committee members; BoardSize = logarithm of number of board directors; BoardInd = proportion of independent directors on the board.

show that the coefficient on High_{meet} is insignificant. The coefficient on the interaction (High_{meet}*Switch) is negative and significant (coefficient = -0.012; p-value = 0.0863). This indicates that the firms who switch auditors and whose audit committees meet more frequently in the initial year of auditor engagement have better reporting quality than firms who switched auditors but have fewer meetings.

7. Conclusion

Auditor monitoring provides assurance to the financial statement users about the reliability of reported earnings. However auditor's monitoring is not always uniform and is affected by auditor's lack of familiarity of client's activities (Johnson et al., 2002). Given the fact that audit function in concert with other financial reporting governance mechanism (Ahmed et al., 2008), I examine whether firms supplement periods of weak audit quality with an increased number of audit committee meetings, a governance mechanism argued to support auditor monitoring.

In particular, I examine whether the firms increase their audit committee meetings in the initial year of auditor engagement. Like auditors, audit committees are knowledgeable about financial reporting and are held responsible for the monitoring of the financial reports (Srinivasan, 2005). Furthermore prior studies document that audit committees with diligent monitoring reduce the incidence of reporting failure (Abbott et al., 2004) and the demand for auditor assurance of reporting quality (Stewart & Munro, 2007). Since the auditors' familiarity of client's activities is minimum in the initial year of auditor engagement, there is a higher chance of reporting failure. Thus the initial year of auditor engagement provides me with a setting to examine the interplay between audit committee and auditor monitoring.

Using a sample of firms that switched auditors between 2006 through 2012, I find that audit committees respond to a probability of weak audit assurance in the first year of auditor engagement by being more active. The results further show that firms' past reporting behavior plays a significant role in the demand for more audit committee meetings in the initial year of auditor engagement. Lastly my results show that the reporting quality is better for firms that meet more frequently in the initial year of auditor engagement. Overall, my study provides an explanation to Sankaraguruswamy and Whisenant's (2009) findings of no change in the reporting quality in the initial year of auditor engagement. My results, therefore, extend the literature on initial auditor engagement that, until now, focused on audit fees following auditor switches, possible cause of auditor switches, and market responses to auditor switches.

Appendix A. Variable definitions

| Variable | Definition |
|---------------------------------|--|
| <i>Main variables</i> | |
| ACmeet | Number of audit committee meetings in a year |
| Switch | 1 for the firm-years when the firm change auditor and 0 otherwise |
| Abdac | Absolute value of the residuals obtained from modified Jones model |
| <i>Control variables</i> | |
| <i>Compustat</i> | |
| Volatility | Standard deviation in stock returns |
| Size | Logarithm of total assets |
| Lev | Ratio of total debt to total assets |
| Loss | 1 if a firm had a negative earnings, otherwise 0 |
| M2B | Ratio of market value of equity to book value of equity |
| Litigious | 1 if a firm is in any of the following sectors: pharmaceuticals (SIC codes 2833–2836), computers (3570–3577), electronics (3600–3674), retail (5200–5961), or software (7370); 0 otherwise |
| Finance | 1 if the number of common shares outstanding or the long-term debt increased by at least 10%, otherwise 0 |
| ROA | Return on assets measured as net income before extraordinary items divided by total assets |
| Dac | Residuals obtained from modified Jones model |
| M&A | 1 if the client had merger and acquisition and 0 otherwise |
| Busseg | Number of segments |
| Foreign | 1 if the firm is engaged in foreign activities |
| Restate | 1 if the firm restates its earnings |
| <i>Risk Metrics</i> | |
| ACsize | Logarithm of number of audit committee members |
| ACratio | Ratio of audit committee directors to total directors on board |
| %Acctexpert | Percentage of accounting expert on the audit committee |
| Boardsize | Logarithm of number of board directors |
| High _{meet} | 1 if the audit committee meetings are greater than the industry average |
| BoardInd | Ratio of independent directors on the board |
| <i>Hand collected variables</i> | |
| BDmeet | Number of board meetings |
| <i>ExecuComp</i> | |
| CeoChr | 1 if the CEO is also the chairman of the company |
| Ceoown | Percentage of common shares held by CEO |
| <i>Audit Analytics</i> | |
| GC | 1 if the firm receives a going concern opinion |
| AudTen | Logarithm of number of years audited by incumbent auditor |
| Expert | 1 if the auditor is an industry specialist |
| Afee | Logarithm of audit fees |
| Big4 | 1 if the auditor is a big 4 |
| Audlag | Number of days from fiscal year end to earnings release |
| <i>Thomson-Reuters</i> | |
| InstiHolds | Percentage of common shares owned by the institutional investors |

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