

Audit Committee Financial Expertise and Earnings Management: The Role of Status

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Abstract:

Regulatory pressure to increase audit committee financial expertise has resulted in lower status for audit committees relative to management. This status differential is important because expertise *and* relative status are important determinants of each party's ability to influence outcomes, particularly when parties are faced with conflicting goals. We find that audit committees with both financial expertise and high relative status are more effective at deterring earnings management, as measured by both accounting irregularities and abnormal accruals. Thus, regulatory pressure to increase financial expertise may have decreased the ability of some audit committees to deter earnings management.

Keywords: audit committees; earnings management; status; financial expertise

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1. Introduction

This study examines the joint effects of audit committee financial expertise and status on earnings management. Specifically, we test whether audit committee status, *relative* to management status, interacts with financial expertise to constrain accounting irregularities and abnormal accruals. We expect that higher status audit committees will be more effective than those with financial expertise alone. Thus, managers will be constrained only when the audit committee has both expertise and the authority inherent in high status.

Status is an aspect of personal power, reflecting the ability to influence outcomes based on perceived skills, qualities and personal attributes (Adler and Kwon, 2002; D'Aveni, 1990; Fischer and Pollock, 2004; Pollock et al., 2011). Thus, high status individuals are perceived to have high ability, command more authority and have greater influence on outcomes than lower-status individuals. We focus on aspects of status that are particularly relevant in a corporate setting, including education and public and private board membership (D'Aveni, 1990; Erkens and Bonner, 2013; Finkelstein, 1992; Pollock et al., 2011).

Recent regulatory actions have explicitly targeted audit committee financial expertise with the goal of increasing audit committee effectiveness (e.g., U.S. Congress, 2002). However, an unintended consequence is that audit committee status has declined (Erkens and Bonner, 2013). This status decline could impede regulatory goals by limiting the ability of audit committees to constrain opportunistic financial reporting by managers. This is because when parties face conflicting goals, each party's knowledge (expertise) *and* relative status affect its ability to influence outcomes, especially in non-routine, challenging and ambiguous situations (D'Aveni, 1990; Finkelstein, 1992; Hambrick, 2007; Pollock et al., 2011). The relationship between managers and audit committees has the potential for significant conflict as managers have

incentives to misreport, while audit committees are intended to constrain opportunistic financial reporting (AICPA, 1990; U.S. Congress, 2002). A movement towards greater financial expertise that resulted in a decreased ability to constrain opportunistic financial reporting would be a serious unintended effect of recent regulatory action.

There are several reasons that the status differential between managers and the audit committee is likely to influence audit committee effectiveness. First, audit committees must have both the ability and authority necessary to gain the respect of managers in order to influence financial reporting outcomes. The relative status of audit committee members directly influences how managers view them because status enhances perceived ability and commands authority and respect (D'Aveni, 1990; Pollock et al., 2011). Thus, managers would view higher status audit committee members as more competent and authoritative, providing a disincentive for managers to manipulate accounting numbers.

Second, high status directors are likely to be more active monitors because they have more to lose personally in terms of both reputation and wealth (Fama and Jensen, 1983). This conclusion flows directly from traditional measures of status, such as elite education and public and private board memberships (D'Aveni, 1990; Finkelstein, 1992; Pollock et al., 2011). For example, individuals with elite educations earn more over their lifetimes (Brewer et al., 1999), while holding more directorships indicates high reputation and earning power.

Third, higher status audit committee members are likely to be more active monitors because they would be less affected by management's status. As a result, in more challenging situations, they would be more willing to confront managers if necessary than would low status audit committee members (D'Aveni, 1990; Giordana, 1983). Thus, higher status audit committee members are likely to be more effective in situations involving questionable financial reporting.

In contrast, low status audit committee members would tend to defer to management due to the authority and respect higher status management commands.

Overall, higher status audit committees should be more effective monitors compared to lower status audit committees. Importantly, the above theories apply when individuals face negative repercussions for failing to act. In an analogous situation, low-power directors paired with higher-power managers allow such managers to extract higher compensation (Grinstein and Hribar, 2004) even though it may cause the directors embarrassment, loss of reputation and negative career concerns (Bebchuk et al., 2002). Adverse outcomes are magnified in financial reporting situations, given potential negative publicity (Miller, 2006). Thus, the ability of the audit committee to act as an influential peer in potential confrontations with managers is critical.

We gather a sample of firms from BoardEx, a business network database that provides biographical information and employment history for corporate directors and officers. We create measures of financial expertise and relative status (i.e., audit committee status relative to management status). Based on the rules implemented by the SEC (2003) under SOX, we define “financial experts” broadly as individuals with experience with or oversight over the creation or auditing of financial reports. We also consider the underlying types of financial expertise such as accounting, supervisory, and finance expertise because prior studies find differing effects based on type of financial expertise (e.g., Bédard and Gendron, 2010; DeFond et al., 2005; Dhaliwal et al., 2010).

Our relative status measure includes (1) the number of contemporaneous public board directorships, (2) the number of contemporaneous private board directorships, and (3) elite education (D’Aveni, 1990; Erkens and Bonner, 2013; Finkelstein, 1992; Pollock et al., 2011; Useem, 1979). We find that the average number of audit committee members with financial

expertise increased monotonically from 2001 through 2008, driven by members with accounting and finance expertise. Additionally, audit committee status relative to management has decreased over the same period.

We measure earnings management in two ways. First, we measure irregularities based on settled, accounting-based securities class-action lawsuits from RiskMetrics and SEC and Department of Justice enforcement actions claiming fraud or other intentional misconduct from Karpoff et al. (2008a and 2008b). Irregularities are an objective measure of GAAP violations, a severe form of earnings management. Second, to validate these results, we examine abnormal accruals, a common measure of within-GAAP earnings management (Zhao and Chen, 2008).

In multivariate tests involving the likelihood of an irregularity, the interaction between audit committee financial expertise and *relative* status is significantly negative. From an economic perspective, firm-years with audit committees that have high relative status are between 0.5 and 1.3 percentage points less likely to have an irregularity compared to those without high relative audit committee status. This represents between 17.9 and 46.4 percent of the 2.8 unconditional probability of having an irregularity. These results support the notion that only audit committees with sufficient expertise *and* relative status deter irregularities.

To confirm the importance of audit committee status with respect to financial reporting quality, we also examine abnormal accrual measures. This test follows the Healy and Wahlen (1999) definition of earnings management and considers abnormal accruals to be influenced by judgments to alter financial reports.¹ We find corroborating results for our main tests in that the interaction of financial expertise and status results in lower abnormal accruals.

¹Healy and Wahlen (1999, 368) define earnings management as “when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers.”

Moreover, additional tests which examine the status of the audit committee chair alone and the status of the independent, non-audit committee directors suggest that it is the status of the entire audit committee that is important for limiting irregularities. This finding is consistent with regulations that focus on audit committees as a whole, listing rules that require a minimum of three audit committee members, and research stressing the importance of examining groups with direct functional responsibility (e.g., Hambrick, 2007). For completeness, we examine whether specific types of financial expertise (accounting, supervisory, and finance) drive the results. We find evidence that supervisory expertise is negatively associated with a lower likelihood of an accounting irregularity, but only when the audit committee has high status. We also perform a falsification test with error-based restatements. In this test, we find no significant interaction between financial expertise and status differential.

It is possible that our results are due to high status directors either avoiding directorships at firms with high financial reporting risk or leaving the firm as soon as an irregularity is detected. Importantly, this concern is somewhat tempered by two factors inherent in our focus on *relative* rather than absolute audit committee status. First, firms with high financial reporting risk likely have lower status managers (all else being equal), because they are less attractive employment options. Therefore, even if these firms attract lower status audit committees, it is not clear that *relative* status would be affected. Second, managers who commit irregularities lose their positions at a very high rate (Karpoff et al., 2008a). It is likely that executive positions at irregularity firms are less desirable than other firms (all else being equal), and thus the status of the executives at firms post-irregularity revelation is also likely to fall. Thus, even if high status audit committee members leave, it is again unclear that *relative* status would be affected.

We attempt to further allay these concerns empirically. First, we examine the relation

between changes in audit committee status that accompany member turnover within irregularity firms. Contrary to the endogeneity concerns, we find that the change in relative audit committee status when there is turnover does not differ between years before and after an irregularity begins, and relative status increases after irregularity revelation compared to years prior to the revelation. Additionally, for all firms with audit committee turnover, the change in relative audit committee status from $t-1$ to t is unassociated with the predicted probability of an irregularity for $t-1$ (i.e., ex ante risk of an irregularity that should be observable to potential director candidates). These results are inconsistent with relatively high status audit committees being affected by high status directors either leaving firms before malfeasance begins or upon malfeasance detection.

This study makes two primary contributions to the accounting literature. First, we provide insight into the ability of audit committees to constrain earnings management. We find evidence that audit committee financial expertise does not constrain irregularities unless the audit committee also has high status. Similarly, abnormal accruals are lower when the audit committee has both high relative status and financial expertise. These results speak to benefits and limitations of financial expertise, the focus of considerable debate. Notably, the *combination* of financial expertise and relative status is critical for constraining earnings management.

Second, we extend the literature on status of corporate leaders. While surveys of individuals involved in financial reporting have proposed that audit committee status can affect financial reporting quality, ours is the first study to directly test this and with externally observable measures. This finding adds to research that examines the conditions in which board of director status can influence firm outcomes (D'Aveni, 1990; Pollock et al., 2011; Stuart et al., 1999). It also complements the emerging literature that suggests that external auditor status is important for audit quality (Bennett and Hatfield, 2013).

2. Literature Review and Hypothesis Development

2.1. Audit Committees and Accounting Irregularities

Audit committees are intended to monitor the financial reporting process and constrain opportunistic managerial reporting. This role reflects agency theory and the need to monitor managers (agents) to reduce their ability to extract rents from the firm (e.g., Beasley et al., 2009; Fama and Jensen, 1983). Due to this monitoring role, numerous regulators have highlighted the importance of audit committees.² For example, then-SEC Chairman Arthur Levitt (2000) echoed the advice of the Blue Ribbon Commission by stating that “one of the most reliable guardians of the public interest is a competent, committed, independent and tough-minded audit committee.” Following Levitt’s advice, SOX requires that firms must have fully independent audit committees. In addition, SOX effectively mandates financial expertise by requiring that firms disclose financial expertise (U.S. Congress, 2002).³ However, there is still substantial variation in audit committee composition and operation (Beasley et al., 2009; Cohen et al., 2010).

Several studies find that audit committee financial expertise limits “routine” earnings management as measured by accrual-based variables.⁴ However, the primary goal of SOX was constraining financial reporting outside of GAAP (irregularities involving potential fraud) rather than routine earnings management (Coates, 2007; Lucas, 2004). Constraining accounting irregularities is a significant challenge faced by audit committees. For example, while executives

² In addition to SOX, the Treadway Commission of 1987, the Cadbury Commission of 1992, the Blue Ribbon Commission of 1999, the New York Stock Exchange’s Corporate Governance Rules of 2004, and the Canadian Securities Administrators Audit Committee Rules of 2004 all stress the importance of audit committees.

³ Aside from regulatory requirements, audit committee members also face incentives to effectively monitor managers in the form of legal liability and reputational risk (e.g., Beasley et al., 2009).

⁴ Financial expertise on the audit committee is associated with better financial reporting quality, as measured by lower abnormal accruals, better accrual quality and more conservatism (Bédard et al., 2004; Carcello et al., 2006; Dhaliwal et al., 2010; Krishnan and Visvanathan, 2008; Xie et al., 2003). Financial expertise is also associated with a lower likelihood of internal controls weaknesses (Krishnan, 2005) and is valued by market participants with a positive stock price reaction when firms disclose the appointment of a financial expert to the audit committee (Davidson et al., 2004; DeFond et al., 2005).

admit to routine earnings management,⁵ they actively hide fraud from financial reporting monitors due to the career consequences and other severe penalties for intentional GAAP violations (e.g., Larcker et al., 2007; Schrand and Zechman, 2012).

This intentional obfuscation makes it difficult for audit committees to detect and prevent irregularities.⁶ Despite these difficulties, three prior studies find a negative relation between audit committee financial expertise and irregularities.⁷ Notably, all three studies involved sample periods prior to SOX, when choice of audit committee members was less restricted. While these studies present evidence that requiring financial expertise improved financial reporting quality, it is unclear whether their results will continue to hold given changes in the composition of audit committees for at least two reasons. First, the intended result of the audit committee financial disclosure requirement of SOX is an increase in the number of financial experts. Second, audit committees now include lower status members as a consequence of placing financial experts on the audit committee who would not have otherwise been considered for directorships.

2.2. Status and the Audit Committee

Given the role of the audit committee as the financial reporting gatekeeper within a firm, the ability of the committee to influence financial reporting outcomes is critical in constraining misbehavior. One important attribute that affects firm outcomes, especially in challenging

⁵ Graham et al. (2005) find that 78% of CFOs and other top executives admit to using discretion to smooth earnings, noting that “Several CFOs argue that, ‘you have to start with the premise that every company manages earnings.’” Graham et al. (2005) focus on within-GAAP earnings management and stress “...these executives are not talking about violating GAAP or committing fraud.” Moreover, measures of earnings management such as abnormal accruals have a very low relation to accounting irregularities (see Price et al., 2011).

⁶ For example, Beasley et al. (2009) report that audit committee members believe they cannot prevent fraud. In particular, one NYSE audit committee chair states: “It is totally beyond the competency of any audit committee member to be able to sniff out fraud. So much of this risk relates to the people, thus you must rely on your judgment regarding management’s integrity” (Beasley et al., 2009, 97).

⁷ Abbott et al. (2004) sample 44 fraud firms from 1991 through 1999 and find that audit committee financial expertise reduces the likelihood of fraud. Farber (2005) examines 87 firms with Accounting and Auditing Enforcement Releases detected through 1997 and finds a lower number of audit committee financial experts when compared to control firms. Agrawal and Chadha (2005) find a negative association between financial expertise and the likelihood of a restatement. Their sample includes 159 public companies that restated their earnings between 2000 and 2001 and includes restatements that would be considered irregularities.

settings that involve uncertainty, is the personal status or personal power of corporate leaders (D'Aveni, 1990; Finkelstein, 1992; Hambrick, 2007; Pollock et al., 2011). Status is a form of power based on personal qualities. A corporate leader with higher status is more able to influence firm outcomes and decisions (Finkelstein, 1992; Pollock et al., 2011; Stuart et al., 1999).

While SOX and related regulations now call for the generally desirable traits of financial expertise and independence on the audit committee, these same regulations have altered the demand for directors. By requiring higher levels of overall board independence, audit committee independence, and audit committee financial expertise, firms must appoint individuals to boards and audit committees who they may not have considered absent the regulations (see Engel et al., 2010). One of the side effects of this wider net for directors is that, in recent years, individuals with lower social status have been appointed to boards.

Erkens and Bonner (2013) find that typical accounting experts (e.g., retired auditors) have lower status than individuals with supervisory expertise (e.g., CEOs), and that firms with higher status are less likely to appoint an accounting expert to the audit committee. Thus, status plays a significant role in appointments of financial experts (Erkens and Bonner, 2013). In other words, firms are concerned with both the financial expertise and status of audit committee members. While financial expertise provides the knowledge necessary to improve financial reporting quality, it may not be sufficient by itself to effectively reduce accounting irregularities. This is due to the deterrent role of the audit committee with respect to accounting irregularities, which is shaped by the personal interactions of managers and directors and is thus dependent on status.

2.3. Status and Potential Conflict

The primary role of status with respect to manager-audit committee interaction involves a deterrent effect from being monitored by a group of peers versus a group with lower status. This

deterrent effect comes from management's perception of the audit committee, particularly the competence of the committee and the committee's willingness to confront managers over earnings management. This deterrent effect comes from three areas.

First, an audit committee with higher status will be viewed as more competent and authoritative because status enhances perceived ability and commands respect (D'Aveni, 1990; Pollock et al., 2011). This enhanced competence and authority would make managers more reluctant to manipulate accounting numbers because they would believe the audit committee would be more likely to detect such actions.

Second, audit committee members with status that is more similar to management will be more willing to question and confront management. Conversely, when status differentials are large, high status individuals are often able to avoid sanctions for inappropriate behavior (see D'Aveni, 1990). This is particularly true when the task in question is complex (Giordano, 1983), as financial reporting issues often are. Therefore, this issue is important in deterring irregularities given that the types of executives who are predisposed to intentionally violate GAAP are often willing to engage in significant conflict in order to achieve their goals (e.g., Byrne, 2003; Helyar, 2003).⁸ Given the domineering personalities of many CEOs who seek to commit fraud, gatekeepers frequently encounter difficulty constraining their behavior.⁹ However, executives are

⁸ Anecdotes regarding the CEOs involved in accounting scandals are remarkably consistent, describing such CEOs as narcissists and bullies. Examples include Al Dunlap, the former CEO of Sunbeam (e.g., Sutton, 2007) and former HealthSouth CEO Richard Scrushy, described as "a supercilious bully" (Helyar, 2003).

⁹ While little direct evidence is available with respect to audit committees, numerous analogous cases exist with respect to auditors. These cases are instructive because auditors provide a similar gatekeeping role. Even gatekeepers with relevant expertise, such as auditors, frequently have difficulty standing up to misconduct, highlighting that more than mere financial expertise is necessary to constrain misreporting. For example, Arthur Andersen detected numerous misstatements by Waste Management, but could not convince the client to correct them. "Cowed by the client's executives...the SEC charged that the auditors simply caved when the company refused to implement the changes they wanted" (Toffler and Reingold, 2003, 147). In another case, the court found that the audits had been "sufficiently thorough...to uncover virtually all of the violations of GAAP which were ultimately corrected in the restatements" but that the cause of the failed audit "lay in the seeming spinelessness of [the audit partner] and the other E&Y accountants in their dealings with [the client]" (AUSA Life Insurance Co. v.

less likely to believe that they will be able to intimidate a committee of peers, versus a committee comprised of relatively low status individuals (see Giordano, 1983).

2.4. Relative Status

We focus on audit committee status relative to the top management team. We focus on the entire audit committee as the commissioned recommendations, exchange requirements, and SEC regulations focus on the existence, size, independence, and other characteristics of the audit committee as a group (SEC 2003). Moreover, research analyzing corporate decisions shows that examining the *groups* primarily responsible for certain decisions rather than isolated individuals provides better explanatory power of organizational outcomes (Carpenter and Fredrickson, 2001; Hambrick, 2007; Jackson, 1992). In additional support for this approach, Hambrick (2007) notes that “leadership of a complex organization is a shared activity, and the collective cognitions, capabilities, and interactions of the entire [top management team] enter into strategic behaviors.”

For the management team, we include the CEO and the CFO because they have ultimate authority over the financial reporting process. The SOX reforms designed to improve financial reporting quality largely focused on the CEO and CFO, requiring their personal certification of financial statements while enhancing criminal penalties for fraud (Karpoff et al., 2008a). In addition, CEOs and CFOs are personally named in most SEC enforcement actions dealing with financial reporting issues (Karpoff et al., 2008a; Feng et al., 2011), as well as nearly all securities class actions that allege fraudulent financial reporting (Klausner and Hegland, 2010).

Our focus on the status *differential* between the audit committee and management is

Ernst & Young, 991 F. Supp. 234, 247-248 (S.D.N.Y. 1997)). The trial court found the auditor not liable on other grounds, but was reversed in AUSA Life Insurance Co. v. Ernst & Young, 206 F.3d 202 (2d Cir. 2000).

Cases involving the domination of auditors by their clients are sufficiently common that ethics rules deal with situations involving status differentials. Interpretation 101-2, dealing with former auditors going to work for the client, states that the audit firm must determine “whether existing attest engagement team members have appropriate experience *and stature* to effectively deal with the former employee when that person will have significant interaction with the attest engagement team” (AICPA, 2003, emphasis added). Although it focuses on auditors, this rule reflects a specific recognition of the importance of status in the effectiveness of gatekeepers.

logical because characteristics of individuals or groups, such as status, are not held in isolation. That is, the ability of one party to influence organizational outcomes, especially when parties have conflicting goals, is a function of that party's position or power relative to the other parties involved in the decision making process (Adams et al., 2005; Bebchuk et al., 2002; Finkelstein, 1992; Hambrick, 2007; Pettigrew and McNulty, 1995). For example, Finkelstein finds that weighting executives on their relative levels of power (including the relative level of status) increases the explanatory power of the relation between executive backgrounds and firm outcomes, including diversification and acquisition choices.

The relative power between groups in other corporate settings (for example, managers versus shareholders and directors) is a powerful determinant of outcomes. For example, Gompers et al. (2003) and Bebchuk et al. (2009) find that firms with entrenched (powerful) managers experience worse performance than firms with more shareholder power. Grinstein and Hribar (2004) and Bebchuk et al. (2002) find that managers with more power relative to the board extract higher rents through compensation. While these studies focus on governance structure, few choices remain with respect to audit committee governance because full independence is required and financial expertise is essentially required due to disclosure regulations. Status, however, is unregulated and displays substantial cross-sectional variation.

2.5. Primary Hypothesis

Given the recent trends in audit committee characteristics, there is strong reason to examine the relation between financial expertise, status and accounting irregularities. As discussed, directors appointed to audit committees are now substantially different from those of earlier periods. In addition, as noted, status often influences effectiveness in challenging business situations (e.g., D'Aveni, 1990). Managers are undoubtedly aware ex ante that such higher status

individuals have more clout, more to offer and are more likely to stand up and challenge management if faced with potential financial reporting issues. Thus, managers are less likely to commit an irregularity in the first place due to deterrence provided by audit committees when they have the necessary combination of ability and authority. Turley and Zaman (2007, 779) support this deterrence function of the audit committee, quoting the Group Finance Director of Asburton PLC as saying, “The present Audit Committee team, they are all individually sort of strong characters, with a clear view of what’s going on. No one would dream of pulling a fast one on any of them.”

As accounting irregularities involve financial reporting choices, we expect that financial expertise is a necessary, but not sufficient, condition for reducing the likelihood of accounting irregularities. Therefore, we propose that audit committee status, relative to management status, interacts with audit committee financial expertise to reduce the likelihood of accounting irregularities. In other words, managers are likely to be more reluctant to commit an accounting irregularity when they believe that not only will it be discovered, but that the audit committee will not back down. We state our primary hypothesis in the alternative form:

H₁: Relative audit committee status interacted with audit committee financial expertise decreases the likelihood of a financial reporting irregularity.

2.6. Secondary Hypothesis

Similar to the description above regarding accounting irregularities, there is also reason to believe that audit committees with relatively higher status could help constrain other forms of earnings management, including those which could lie within-GAAP. That is, managers are again likely to more closely consider the commission of earnings management when faced with an audit committee that has the necessary combination of ability and authority. However, this

relation is somewhat less clear given that various forms of within-GAAP earnings management is regarded as a relatively normal business practice (see Graham et al., 2005).

We propose that audit committee status, relative to management status, interacts with audit committee financial expertise to reduce the likelihood of abnormal accruals. We state our secondary hypothesis in the alternative form:

H₂: Relative audit committee status interacted with audit committee financial expertise decreases the magnitude of abnormal accruals.

3. Sample and Research Design

3.1. Sample

We obtain our initial sample from BoardEx, a professional business network database. BoardEx provides biographical information and employment history for corporate directors and officers, which we utilize to determine audit committee member financial expertise and the relative status of board members to management. Given data restrictions and allowing for sufficient time for irregularity revelation, our sample covers 2001 to 2008. During this period, boards were pressured to increase the financial expertise of the audit committee. We exclude all firm-year observations with CEO or CFO turnover, as it is unclear how to determine the proper status measures for these years.

To obtain our irregularity sample, we obtain SEC and Department of Justice enforcement actions that allege fraud or other intentional misconduct from the Federal Securities Regulation Database¹⁰ and settled securities class-action lawsuits that allege violations of GAAP per RiskMetrics. *IRREGULARITY* is an indicator variable equal to one for years with alleged management misconduct. Specifically, it is set to one for either (1) violation years from SEC and

¹⁰ For more information on these data see <http://www.fesreg.com/>. These data were hand-collected by Jerry Martin and initially used in Karpoff et al. (2008a and 2008b).

Department of Justice enforcement actions that establish intent under Section 17(a) of the Securities Act of 1933, or either Section 10(b) (including Rule 10b-5) or 13(b)(5) of the Securities Exchange Act of 1934 or (2) class period years related to the class-action lawsuits.

Our primary management misconduct model controls for incentives to materially manipulate the financial statements, corporate governance variables related to monitoring, and other determinants of misconduct. Data for these control variables come from Compustat, CRSP and Thompson Reuters. In a second model, we also include the entrenchment index (Bebchuk et al., 2009), which results in a substantial reduction of firm-years. Our final sample includes 29,074 firm-year observations from 2001 through 2008, with 9,633 of these firm-years having entrenchment index data.

3.2. Primary Variable Definitions

3.2.1. Financial Expertise

We classify audit committee members as having financial expertise if their biographical information in BoardEx includes terms reflecting accounting experience, experience supervising the preparation of financial statements, or expertise using the financial statements. Our main measure of audit committee financial expertise, *EXPERTISE*, is based upon the SEC's definition of financial expertise, which includes three areas of expertise: accounting, supervisory and finance expertise (SEC, 2003) (see Appendix C for a list of terms included in each category).¹¹ *EXPERTISE* is the percent of audit committee members that have financial expertise.

We also create more granular expertise measures for accounting, supervisory, and finance

¹¹ The SEC specifically states that financial expertise is evidenced by, “(1) education and experience as a principal financial officer, principal accounting officer, controller, public accountant or auditor or experience in one or more positions that involve the performance of similar functions; (2) experience actively supervising a principal financial officer, principal accounting officer, controller, public accountant, auditor or person performing similar functions; (3) experience overseeing or assessing the performance of companies or public accountants with respect to the preparation, auditing or evaluation of financial statements; or (4) other relevant experience” (SEC, 2003).

experience. *SOXACC*, *SOXSUPER*, and *SOXFIN* are the percentage of audit committee members that have accounting, supervisory, and finance expertise, respectively.¹² *SOXACC_DUM*, *SOXSUPER_DUM*, and *SOXFIN_DUM* are indicators that are set to one if the audit committee has at least one member with accounting, supervisory, and finance expertise, respectively.

3.2.2. Status

We calculate status measures for audit committees, non-audit committee independent directors, and management (i.e., CEO and CFO). With these status measures we demonstrate that director and executive status is positively correlated at the firm level and that accountants lower the status of audit committees (e.g., Erkens and Bonner, 2013; Fahlenbrach et al., 2010). We also calculate status measures that capture the differential status between the audit committee and management (i.e., CEO and CFO) and also the differential status between independent directors not on the audit committee and management. Stated another way, these two differential measures capture the *relative* status of these two groups of directors compared to management. We use these measures to test our main hypothesis. Our status measures are composite measures based upon prior literature (Finkelstein, 1992; Erkens and Bonner, 2013; Pollock et al., 2011) that include (1) the number of contemporaneous public board of directorships, (2) the number of contemporaneous private board of directorships and (3) elite education.¹³

For audit committee status, *PUBBODS_AC* is an indicator that equals one if the mean number of audit committee concurrent public board appointments is greater than the median for all audit committees, and zero otherwise. *PRIBODS_AC* is an indicator that equals one if the

¹² We expand our analysis to these three types of expertise as the literature presents mixed evidence on whether and which types of expertise affect financial reporting outcomes (Bédard and Gendron, 2010).

¹³ Consistent with empirical studies that examine the entire board (e.g., Ferris et al., 2003) and the majority of audit committee studies recently reviewed (see Bédard and Gendron, 2010), we predict that more directorships signals higher quality directors and better monitoring as opposed to excessive “busyness.” Consistent with smaller sample surveys (e.g., Cohen et al., 2010), the audit committee members in our large sample serve on a mean (median) of 2.10 (2.67) total boards. The fact that more than half of these directors serve on fewer than two other boards provides additional evidence that is inconsistent with directors being over-extended.

mean number of audit committee concurrent private board appointments is greater than the median for all audit committees, and zero otherwise. *ELITEED_AC* is an indicator that equals one if the mean number of elite institution degrees for members of the audit committee is greater than the median for all audit committees, and zero otherwise. Elite institutions are noted in Appendix B and are consistent with prior research, including Useem and Karabel (1986), Finkelstein (1992), and Erkens and Bonner (2013). Then, *STATUS_AC* is an indicator that equals one if the sum of *PUBBODS_AC*, *PRIBODS_AC*, and *ELITEED_AC* is three, and zero otherwise. *STATUS_AC* is our measure of audit committee status.

We calculate similar measures for executive status (*STATUS_EXEC*) and independent, non-audit committee director status (*STATUS_NAC*) that are also based on (1) the number of contemporaneous public board of directorships, (2) the number of contemporaneous private board of directorships and (3) elite education. To calculate the *relative* status of the audit committee compared to management, we consider the same underlying measures used to create our audit committee status measure, but we consider the difference in those measures between each audit committee-management pair.¹⁴ *STATUS_DIF* is our measure of the status differential between audit committees and management, with values of one indicating instances where *relative* audit committee status is high.¹⁵ For parsimony, detailed variable definitions throughout the study are provided in Appendix A.

¹⁴ Specifically, *PUBBODS_DIF* is an indicator that equals one if the mean number of audit committee member concurrent public board appointments minus the mean number of CEO and CFO concurrent public board appointments is greater than the median difference across all audit committee-management pairs, and zero otherwise. *PRIBODS_DIF* is an indicator that equals one if the mean number of audit committee member concurrent private board appointments minus the mean number of CEO and CFO concurrent private board appointments is greater than the median difference across all audit committee-management pairs, and zero otherwise. *ELITEED_DIF* is an indicator that equals one if the mean number of elite institution degrees for audit committee members minus the mean number of elite institution degrees for the CEO and CFO is greater than the median difference across all audit committee-management pairs, and zero otherwise. *STATUS_DIF* is an indicator that equals one if the sum of *PUBBODS_DIF*, *PRIBODS_DIF*, and *ELITEED_DIF* is three, and zero otherwise.

¹⁵ In untabulated robustness tests, we find that inferences remain the same if we calculate relative audit committee status based upon audit committee status compared to only the CEO's status.

We also control for the relative status of the independent directors not on the audit committee compared to management. We use the same underlying status measures, but we consider the difference in those measures between each independent, non-audit committee director-management pair. *STATUS_DIF_NAC* is an indicator that equals one if the sum of three underlying variables (*PUBBODS_DIF_NAC*, *PRIBODS_DIF_NAC*, and *ELITEED_DIF_NAC*) is three, and zero otherwise.¹⁶ *STATUS_DIF_NAC* captures the status differential between independent, non-audit committee directors and management.

3.3 Regression Model, Dependent Variable, and Control Variables

We begin by investigating the role of audit committee financial expertise in explaining audit committee status (Erkens and Bonner, 2013). In this initial model, we include controls for executive and independent, non-audit committee status. We also include our control variables from our main model of interest, equation (3), which is presented later. Model 1 is specified:

$$\begin{aligned} \text{Prob}(\text{STATUS_AC}_t = 1) = & F(\beta_0 + \beta_1 \text{EXPERTISE}_t + \beta_2 \text{STATUS_EXEC}_t + \\ & \beta_3 \text{STATUS_NAC}_t + \beta_4 \text{NUM_AC}_t + \beta_5 \text{NUM_BRD}_t + \beta_6 \text{BRD_PCT_IND}_t + \\ & \beta_7 \text{CEOISCHAIR}_t + \beta_8 \text{INSTITUTIONAL_OWN}_t + \beta_9 \text{LMARKETCAP}_t + \beta_{10} \text{BM}_t + \\ & \beta_{11} \text{LEVERAGE}_t + \beta_{12} \text{ISSUE}_t + \beta_{13} \text{ROA}_t + \text{Year Fixed Effects} + \text{Industry Fixed Effects}) \end{aligned} \quad (1)$$

The dependent variable, *STATUS_AC*, is set to one for firm-years with high audit committee status. As we do for each model, we re-estimate equation (1) controlling for the entrenchment index (*EINDEX*). We provide separate estimations with and without the entrenchment index because the entrenchment index is only available for a small subset of our overall sample.

¹⁶ Specifically, *PUBBODS_DIF_NAC* is an indicator that equals one if the mean number of independent, non-audit committee directors concurrent public board appointments minus the mean number of CEO and CFO concurrent public board appointments is greater than the median difference across all pairs, and zero otherwise. *PRIBODS_DIF_NAC* is an indicator that equals one if the mean number of independent, non-audit committee directors concurrent private board appointments minus the mean number of CEO and CFO concurrent private board appointments is greater than the median difference across all pairs, and zero otherwise. *ELITEED_DIF_NAC* is an indicator that equals one if the mean number of elite institution degrees for independent, non-audit committee directors minus the mean number of elite institution degrees for the CEO and CFO is greater than the median difference across all pairs, and zero otherwise.

Our coefficient of interest is β_1 , which is for *EXPERTISE*. The sign and significance of β_1 provides insights into how a change in audit committee financial expertise is associated with audit committee status. In subsequent specifications of equation (1) we replace *EXPERTISE* with *SOXACC*, *SOXSUPER*, and *SOXFIN* and also with *SOXACC_DUM*, *SOXSUPER_DUM*, and *SOXFIN_DUM* to investigate how specific types of audit committee expertise are associated with audit committee status. A negative and significant coefficient on *SOXACC* and *SOXACC_DUM* would be consistent with the findings of Erkens and Bonner (2013) that accountants lower the status of the audit committee.

Because our main interest is how relative audit committee status interacts with financial expertise in deterring irregularities, we also investigate whether financial expertise and the types of financial expertise affect relative audit committee status. To do this, we replace the status measures in model (1) with our relative status measures. Model 2 is specified as follows:

$$\text{Prob}(\text{STATUS_DIF}_t = 1) = F(\beta_0 + \beta_1 \text{EXPERTISE}_t + \beta_2 \text{STATUS_DIF_NAC}_t + \beta_3 \text{NUM_AC}_t + \beta_4 \text{NUM_BRD}_t + \beta_5 \text{BRD_PCT_IND}_t + \beta_6 \text{CEOISCHAIR}_t + \beta_7 \text{INSTITUTIONAL_OWN}_t + \beta_8 \text{LMARKETCAP}_t + \beta_9 \text{BM}_t + \beta_{10} \text{LEVERAGE}_t + \beta_{11} \text{ISSUE}_t + \beta_{12} \text{ROA}_t + \text{Year Fixed Effects} + \text{Industry Fixed Effects}) \quad (2)$$

The dependent variable, *STATUS_DIF*, is set to one for firm-years where relative audit committee status is high.

As in equation (1), the coefficient of interest is β_1 , for *EXPERTISE*. The sign and significance of β_1 provides insights into how a change in audit committee financial expertise is associated with the differential status between audit committees and management. In subsequent specifications of equation (1) we replace *EXPERTISE* with *SOXACC*, *SOXSUPER*, and *SOXFIN* and also with *SOXACC_DUM*, *SOXSUPER_DUM*, and *SOXFIN_DUM* to investigate how specific types of expertise are associated with relative audit committee status. Similar to equation (1), we anticipate a negative and significant coefficient on *SOXACC* and *SOXACC_DUM*. This

would be consistent with the proposition that accountants lower audit committee status, which would contribute to lowering the likelihood of high relative audit committee status.

After investigating the effects of audit committee financial expertise on audit committee status and on relative audit committee status, we examine the relation between financial expertise, relative audit committee status, and accounting irregularities. The model controls for major incentives for managers to misreport financial results, including debt and equity offerings, size, growth prospects and leverage (see Dechow et al., 2011; Kim and Skinner, 2012), as well as corporate governance variables related to monitoring the financial reporting process (see Dechow et al., 2011; Dechow et al., 1996; Klein, 2002). Model 3 is specified as follows:

$$\begin{aligned} \text{Prob}(\text{IRREGULARITY}_t = 1) = F(\beta_0 + \beta_1 \text{EXPERTISE}_t + \beta_2 \text{EXPERTISE}_t * \text{STATUS_DIF}_t \\ + \beta_3 \text{STATUS_DIF}_t + \beta_4 \text{STATUS_DIF_NAC}_t + \beta_5 \text{NUM_AC}_t + \beta_6 \text{NUM_BRD}_t + \\ \beta_7 \text{BRD_PCT_IND}_t + \beta_8 \text{CEOISCHAIR}_t + \beta_9 \text{INSTITUTIONAL_OWN}_t + \\ \beta_{10} \text{LMARKETCAP}_t + \beta_{11} \text{BM}_t + \beta_{12} \text{LEVERAGE}_t + \beta_{13} \text{ISSUE}_t + \beta_{14} \text{ROA}_t + \text{Year Fixed} \\ \text{Effects} + \text{Industry Fixed Effects}) \quad (3) \end{aligned}$$

The dependent variable, *IRREGULARITY*, is set to one for firm-years associated with an irregularity (e.g., the years of the class period for a class-action lawsuit and the violation years associated with SEC and Department of Justice Enforcement Actions).

The coefficient of interest is β_2 , the interaction of *EXPERTISE* and *STATUS_DIF*. A negative and significant coefficient would be consistent with our first hypothesis. We make no prediction for β_1 , the main effect for audit committee financial expertise, and β_3 , the main effect of relative audit committee status, as it is unclear whether either of these without the other would serve to deter managers from committing an irregularity. In subsequent specifications of equation (3) we replace *EXPERTISE* with the underlying expertise variables (*SOXACC*, *SOXSUPER*, and *SOXFIN* and also with *SOXACC_DUM*, *SOXSUPER_DUM*, and *SOXFIN_DUM*) and include the associated interactions of *STATUS_DIF* and the underlying

expertise variables to investigate how the interactions of relative audit committee status with the specific types of audit committee expertise are associated with the likelihood of an irregularity.

We control for other board of director characteristics that affect governance and could affect the likelihood of an irregularity. Specifically, we control for the relative status of independent directors who are not on the audit committee and management (*STATUS_DIF_NAC*), audit committee size (*NUM_AC*), board size (*NUM_BRD*), board independence (*BRD_PCT_IND*), CEO duality (*CEOISCHAIR*), institutional ownership (*INSTITUTIONAL_OWN*), firm size (*LMARKETCAP*), growth prospects (*BM* and *ROA*), leverage (*LEVERAGE*), and debt and equity offerings (*ISSUE*). As we do for the other regression models, we re-estimate equation (3) after also controlling for the entrenchment index (*EINDEX*).

Next, we examine the relation between financial expertise, relative audit committee status, and abnormal accruals. While abnormal accruals are a common measure of earnings management, the models are also noisy (e.g., Bernard and Skinner, 1996; Kothari et al., 2005). This makes results less reliable and more difficult to interpret as compared to the more objective measure of accounting irregularities (Erickson et al., 2004). In addition, predicting an effect of relative audit committee status interacted with audit committee financial expertise on abnormal accruals is less clear because within-GAAP earnings management is relatively routine and many executives admit to this behavior (see Graham et al., 2005). Therefore, relative audit committee status may not serve as a substantial deterrent with respect to abnormal accruals.

We calculate abnormal accruals using the modified-Jones model with an intercept. Our measure of abnormal accruals, *ABN_ACC*, is the error term for firm *i* in year *t* as measured using the following equation estimated by year and two-digit Standard Industrial Classification code:

$$TOTAL_ACCRUALS_{it} = \beta_0 + \beta_1*(1/ASSETS_{it-1}) + \beta_2*(\Delta REV_{it} - \Delta AR_{it}) + \beta_3*PPE_{it} + \varepsilon$$

(4)

We require ten firm-year observations per industry to compute *ABN_ACC*.

After calculating abnormal accruals, we use the following model, based upon prior literature (e.g., Doyle et al., 2007; Ashbaugh-Skaife et al., 2008; Prawitt et al., 2009; Dhaliwal et al., 2010) to test whether the status differential between audit committees and management interacts with audit committee financial expertise to lower abnormal accruals.

$$\begin{aligned} ABN_ACC_t = & \beta_0 + \beta_1 EXPERTISE_t + \beta_2 EXPERTISE_t * STATUS_DIF_t + \\ & \beta_3 STATUS_DIF_t + \beta_4 STATUS_DIF_NAC_t + \beta_5 NUM_AC_t + \beta_6 NUM_BRD_t + \\ & \beta_7 BRD_PCT_IND_t + \beta_8 CEOISCHAIR_t + \beta_9 INSTITUTIONAL_OWN_t + \beta_{10} STD_CFO_t \\ & + \beta_{11} STD_SALE_t + \beta_{12} FORSALES_t + \beta_{13} LSEGCOUNT_t + \beta_{14} EXTREMESG_t + \\ & \beta_{15} MERGER_t + \beta_{16} RESTRUCTURING_t + \beta_{17} LNASSETS_t + \beta_{18} AGGLOSS_t + \\ & \beta_{19} SHUMWAY_t + \beta_{20} BIG4_t + \beta_{21} LEVERAGE_t + \beta_{22} BM_t + \beta_{23} ROA_t + Year\ Fixed\ Effects \\ & + Industry\ Fixed\ Effects + \varepsilon \end{aligned}$$

(5)

The coefficient of interest is β_2 , the interaction of *EXPERTISE* and *STATUS_DIF*. A negative and significant coefficient would be consistent with our second hypothesis. We also predict a negative coefficient for β_1 , the main effect for audit committee financial expertise, because audit committee financial expertise has been shown in prior studies to be negatively related to various measures of accrual-related financial reporting quality (i.e., Xie et al., 2003; Krishnan and Visvanathan, 2008; Dhaliwal et al., 2010).¹⁷ We make no prediction for β_3 , the main effect of relative audit committee status, as it is unclear whether relative audit committee status would serve to restrain abnormal accruals without the presence of financial expertise.

¹⁷ We are not aware of any large-sample, post-SOX evidence of the relation between audit committee financial expertise and abnormal accruals, but research provides evidence of a positive relation between financial expertise and accrual-related financial reporting quality. For example, Dhaliwal et al. (2010) have a post-SOX sample of 770 firm observations and find a relation between financial expertise and accruals quality. Krishnan and Visvanathan (2008) have a pre-SOX sample of 929 firm-year observations and find a relation between financial expertise and measures of accruals quality and conservatism. Xie et al. (2003) have 282, pre-SOX firm-year observations and find a relation between financial expertise and current abnormal accruals. Given the audit committee data available in BoardEx, our sample comprises eight years and over 21,000 observations.

To rule out the potential for false positives, we also investigate the relation between financial expertise, relative audit committee status, and error-based restatements. Financial reporting errors are unlikely to have involved potential conflict between management and the audit committee as they did not involve intentional misconduct. The model is identical to equation (3) with the exception of the dependent variable. Model 6 is specified as follows:

$$\begin{aligned} \text{Prob}(\text{ERROR}_t = 1) = F(\beta_0 + \beta_1 \text{EXPERTISE}_t + \beta_2 \text{EXPERTISE}_t * \text{STATUS_DIF}_t + \\ \beta_3 \text{STATUS_DIF}_t + \beta_4 \text{STATUS_DIF_NAC}_t + \beta_5 \text{NUM_AC}_t + \beta_6 \text{NUM_BRD}_t + \\ \beta_7 \text{BRD_PCT_IND}_t + \beta_8 \text{CEOISCHAIR}_t + \beta_9 \text{INSTITUTIONAL_OWN}_t + \\ \beta_{10} \text{LMARKETCAP}_t + \beta_{11} \text{BM}_t + \beta_{12} \text{LEVERAGE}_t + \beta_{13} \text{ISSUE}_t + \beta_{14} \text{ROA}_t + \text{Year Fixed} \\ \text{Effects} + \text{Industry Fixed Effects}) \quad (6) \end{aligned}$$

The dependent variable, *ERROR*, is set to one for firm-years with an accounting misstatement when the misstatement is not considered an irregularity (i.e., when *IRREGULARITY* = 0).

4. Empirical Results

4.1 Descriptive Statistics

Table 1 Panel A presents descriptive statistics by year for variables that relate to the board, the audit committee, or institutional ownership. Average audit committee financial expertise (*EXPERTISE*) increases from a low of 48.7% in 2001 to a high of 59.5% in 2008. In other words, in 2001 (2008) 48.7 (59.5) percent of audit committee members had financial expertise, which is, on average 1.9 (2.2) members per audit committee. It appears that this increase in financial expertise is driven by an increase in accounting and / or finance expertise, as the percent of audit committee members with accounting (*SOXACC*) or finance (*SOXFIN*) expertise monotonically increases from 2001 through 2008, while the percent of audit committee members with supervisory expertise (*SOXSUPER*) stays approximately the same over this time period.

In contrast to the change in financial expertise, the average audit committee status (*STATUS_AC*) and the average relative audit committee status (*STATUS_DIF*) decrease over the

sample period. The increase in accounting expertise over this period is consistent with accountants having lower status than other directors (Erkens and Bonner, 2013).

Additionally, the size of the audit committee (*NUM_AC*) is fairly constant, so it appears that firms replaced high-status members with accounting or finance experts rather than adding accounting or finance members to the audit committee. Finally, the percentage of independent board members and percentage of institutional ownership increase over time, and the instances of CEO duality decrease over the sample period. These trends seem consistent with pressure from regulators and shareholder advocates to increase the quality of boards. Table 1 Panel A also shows that irregularities increased from 2001 through 2003 and then declined through 2008.

Table 1 Panel B presents descriptive statistics for our irregularity and control (firms without an irregularity) samples. Panel B provides evidence that there is a significant difference between our irregularity and control samples with respect to a number of variables. Specifically, audit committee accounting expertise is higher in the control sample compared to the irregularity sample, which is expected. Surprisingly, the percentage of audit committee financial expertise and supervisory expertise (both the percentage and presence) are higher in the irregularity sample compared to the control sample. Additionally, the status and relative status of the audit committee are higher in the irregularity sample than in the control sample. These correlations could be the result of larger firms having an increased likelihood of an irregularity and also having an increased likelihood of being able to attract high-status directors (Erkens and Bonner, 2013). Table 2 show positive and significant correlations between *LMARKETCAP* and *EXPERTISE*, *SOXSUPER*, *SOXSUPER_DUM*, *STATUS_AC*, and *STATUS_DIF*.

4.2. Results – Audit Committee Status and Status Differential

Our results for equation (1) are presented in Table 3 Panel A. Column one reveals that the

percentage of audit committee financial expertise (*EXPERTISE*) is positively associated with audit committee status (*STATUS_AC*). However, the negative and significant coefficients in columns three through six on *SOXACC* and *SOXACC_DUM* are consistent with accounting experts lowering audit committee status. Additionally, the positive and significant coefficients in columns three through six on *SOXSUPER_DUM*, *SOXFIN*, and *SOXFIN_DUM* suggest that supervisory and finance experts increase audit committee status. These results are also consistent with the status of executives and other independent directors not serving on the audit committee being positively associated with audit committee status, as is evidenced by positive and significant coefficients on *STATUS_EXEC* and *STATUS_NAC*. Thus, it appears that high status directors and executives prefer to serve with other high status executives and directors.

Results from equation (2) relating to the determinants of relative audit committee status are presented in Table 3 Panel B. These results are consistent and stronger than the results in Table 3 Panel A. Specifically, the magnitude and statistical significance for the coefficients on the audit committee expertise variables increase when we switch the dependent variable from *STATUS_AC* to *STATUS_DIF*. The results are consistent with accounting experts on the audit committee decreasing relative audit committee status and with supervisory and finance experts on the audit committee increasing relative audit committee status. Additionally, there is a positive and significant coefficient on *STATUS_DIF_NAC* suggesting that companies where the relative status of independent, non-audit committee directors is high are the same companies where the relative status of the audit committee is high. This is consistent with the claim that high status directors seek out other high status directors to fill directorships.

4.3. Results – Irregularities, Abnormal Accruals, and Errors

Table 4 Panel A presents results of equation (3), where the dependent variable is

IRREGULARITY. Both columns one and two reveal that the coefficients on *EXPERTISE* are insignificant, suggesting that financial expertise is not associated with accounting irregularities. However, both columns three and four reveal that the coefficient on *EXPERTISE*STATUS_DIF* is negative and significant. Additionally, Figures 1 and 2 reveal that plotting the average significance of the interaction term for model (3) is significant and negative. To put these results in economic perspective, the results from column (3) suggest that firm-years with audit committees that have high relative status are 0.5 percentage points less likely to have an irregularity compared to those without high relative audit committee status. This represents approximately 17.9 percent of the 2.8 unconditional probability of having an irregularity.¹⁸ This supports H1 and is consistent with the proposition that *relative* status of the audit committee interacts with audit committee financial expertise to deter management from accounting irregularities.¹⁹

Table 4 Panel B presents the results of equation (5), where the dependent variable is *ABN_ACC*. Both columns one and two reveal that the coefficient on *EXPERTISE* is negative and significant, suggesting that the percentage of audit committee members with financial expertise limits abnormal accruals. Both columns three and four reveal that the coefficient on

¹⁸ Marginal effects are computed using the average of discrete or partial changes over all observations (Bartus, 2005). The -0.5 percent marginal effect was computed by adding the marginal effect on *STATUS_DIF* and *EXPERTISE*STATUS_DIF* that correspond to the associated values in column (3) of Table 4 Panel A. These marginal effects are 0.021 and -0.026, respectively. The marginal effects corresponding to the associated values in column (4) represent a -1.3 percentage point marginal effect, suggesting that the effect of audit committee relative status is even more pronounced for larger firms (i.e., those with an entrenchment index).

¹⁹ To ensure that our result hold in the period following SOX, we run additional tests in which we drop 2001 only, 2001 and 2002, or 2001 through 2003. SOX became effective in 2002, but the requirements to have the external auditor perform internal control testing did not become effective until 2004. Inferences are consistent in all tests. In addition, the coefficient on the interaction of *STATUS_DIF* and *EXPERTISE* becomes more negative as we drop observations from 2001, 2001 and 2002, and then 2001 through 2003. This is consistent with relative audit committee status becoming more important for deterring irregularities as more directors who otherwise would not be selected for audit committee service were selected because of their financial expertise.

*EXPERTISE*STATUS_DIF* is negative and significant.²⁰ This supports H2 and suggests that the *relative* status of the audit committee compared to management further assists the audit committee in constraining opportunistic financial reporting.

Table 4 Panel C presents results of equation (6), where the dependent variable is *ERROR*. Both columns one and two reveal that the coefficient on *EXPERTISE* is insignificant. Also, columns three and four reveal that the coefficient on *EXPERTISE*STATUS_DIF* is negative and insignificant. This suggests that audit committee expertise as well as *relative* audit committee status interacted with audit committee expertise are unrelated to accounting errors.

Overall, these results suggest that the interaction of relative audit committee status and financial expertise limits only intentional earnings management (irregularities and abnormal accruals). In the falsification test, errors are not related to our interaction term of interest.

4.3. Endogeneity

It is also possible that our results are due to the self-selection of audit committee members at firms with high financial reporting risk. Due to personal risks in terms of reputation and legal liability, high status individuals may be unlikely to accept an audit committee role in a firm where management has a questionable reputation or may leave a firm when an accounting irregularity is detected (see Beasley et al., 2009). Thus, low status audit committees may be matched with managers who are more likely to commit an irregularity, leading to our results. Importantly, this concern is somewhat tempered by two factors inherent in our focus on *relative* rather than absolute audit committee status. First, firms with high financial reporting risk likely have lower status managers, because they are less attractive employment options. Therefore, even if these firms attract lower status audit committees, it is not clear that *relative* status would

²⁰ In untabulated robustness tests, we find that inferences remain the same if we use performance-matched abnormal accruals (see Kothari et al. 2005).

be affected. Second, managers who commit irregularities lose their positions at a very high rate (Karpoff et al., 2008a). It is likely that executive positions at irregularity firms are less desirable than other firms (all else being equal), and thus the status of the executives at firms post-irregularity revelation is also likely to fall. Thus, even if high status audit committee members leave, it is again unclear that *relative* status would be affected.

We also attempt to allay this concern empirically, in two ways. First, we examine audit committee expertise, status, and *relative* status for the irregularity firms before the irregularity commences, during the irregularity, and after the irregularity is revealed. Second, we examine the relation between audit committee expertise, status, and relative status with the ex ante risk of an irregularity for all firms with audit committee turnover.

Table 5 Panel A presents descriptive statistics for variables of interest for firm-years from irregularity firms. The number of firm-years with audit committee turnover (either directors leaving the board or joining the audit committee) increase monotonically from the pre-irregularity years to the irregularity and post-irregularity years. The average percentage of audit committee financial expertise increases over this time period, while the average audit committee status and firm size decrease. Most relevant, average *relative* audit committee status increases from the pre-irregularity years to the years where the irregularity is being committed, but then decreases in the post-irregularity years. This is exactly the opposite of the self-selection story outline above. The same pattern holds for the interaction of audit committee expertise and relative audit committee status.

To formally test whether the changes in audit committee expertise, status, and *relative* status are significant, we first compare the change in audit committee expertise, status, and relative status for the irregularity firms before the irregularity commences to the period after the

irregularity commences (including both during the irregularity and post-revelation). Table 5 Panel B suggests that there is no difference in the change in audit committee status and relative status before and after irregularity commencement as evidenced by the insignificant coefficients on the interaction of *PRE_IRREGULARITY* with *CH_STATUS_DIF* and *CH_STATUS_AC*.

We then compare the change in audit committee expertise, status, and relative status for the irregularity firms before and during the irregularity to the period after irregularity revelation. Table 5 Panel C suggests that the change in relative audit committee status increases after irregularity revelation as is evidenced by the positive and significant coefficient on *POST_REVELATION*CH_STATUS_DIF*. The negative and significant coefficient on *POST_REVELATION*CH_STATUS_AC* suggests that the status of the audit committee decreases after irregularity revelation.

Taken together, these results show that executive status decreases incrementally to the decrease in audit committee status after irregularity revelation. Importantly, in both panels the coefficient on the change in the interaction of the change in audit committee expertise and the change in relative status is insignificant. Overall, this is inconsistent with the self-selection story.

In untabulated results, we also find an insignificant association between relative audit committee status change and financial reporting risk (which we measure using model (3) without the relative audit committee status-related variables) from the year prior to an audit committee turnover event (the information that would be available to a prospective audit committee member at the time of accepting the appointment). We also find a positive association between the change in audit committee expertise that accompanies audit committee member turnover and ex ante financial reporting risk. Thus, this provides some evidence that the role of status director selection does not confound our inferences. Overall, these analyses are consistent with relative

audit committee status serving a deterrence role, rather than being a self-selection story.

5. Additional Analyses and Results

5.1 Specific Types of Audit Committee Expertise

Next, we explore whether *relative* audit committee status interacts with specific types of audit committee expertise, suggesting that specific types of expertise assist in irregularity deterrence. To do this, we re-estimate equation (3), but replace *EXPERTISE* with measures of audit committee accounting, supervisory, and finance expertise.

Table 6 presents our results. The coefficients on the interactions of audit committee accounting expertise with relative audit committee status and of audit committee finance expertise with relative audit committee status are insignificant. However, the coefficients on *SOXSUPER*STATUS_DIF* in columns one and two and on *SOXSUPER_IND*STATUS_DIF* in column four are negative and significant.²¹ These results suggest that relative audit committee status specifically interacts with audit committee supervisory expertise to deter accounting irregularities. It is possible that past experience as a CEO, combined with high *relative* audit committee status, is a key to irregularity deterrence.²²

5.2 Relative Audit Committee Chair Status and Relative Independent Director Status

Because we find evidence that audit committee member status improves the ability of audit committee financial experts to constrain accounting irregularities, we also investigate whether *relative* audit committee chair or non-audit committee independent director status provides similar benefits. As the audit committee chair is the leader of the audit committee, it is reasonable to think that it is the chair's status that really matters when it comes to standing up to

²¹ The negative coefficient on *SOXSUPER_IND*STATUS_DIF* in column three has a p-value of 0.1081, suggesting that it too is marginally significant.

²² Interestingly, McDaniel et al. (2002) find that financial literates (such as CEOs) are better than experts (i.e., individuals with accounting backgrounds) at identifying non-recurring accounting issues.

management who are intentionally materially misstating the financial statements.²³ Similarly, it is possible that high status independent directors who do not sit on the audit committee could support the audit committee when confronting management about possible irregularities. In untabulated results, we find no evidence that *relative* audit committee chair status or *relative* independent, non-audit committee director status interact with audit committee expertise to deter accounting irregularities. These results provide evidence that audit committee status as a whole, as compared to audit committee chair or non-audit committee independent director status, is most important in assisting audit committee financial experts in reducing irregularities.

6. Conclusion

This study examines the importance of the interaction of audit committee status and financial expertise in constraining earnings management. Our results suggest that the presence of both relative audit committee status and financial expertise deters management from committing irregularities. In addition, the combination of relative audit committee status and financial expertise limits abnormal accruals. Thus, our findings imply that the calls of regulators to increase financial expertise on the audit committee are insufficient without considering audit committee status.

In particular, the push for more accounting experts may have had the unintended consequence of increasing the likelihood of accounting irregularities as these directors on average have low status compared to other directors. Thus, the broader definition of audit committee financial expertise allowed by the SEC as part of SOX may have had a positive effect by allowing firms to appoint higher status financial experts and constrain earnings management.

Our findings are important to the various stakeholders interested in the appointment of

²³ For example, Turley and Zaman (2007) and Bédard and Gendron (2010) discuss the importance of the audit committee chair in ensuring financial reporting quality.

effective audit committee members. Moreover, these results are particularly relevant given that audit committee financial expertise has increased in recent years (from 2001 through 2008), but audit committee status relative to management has decreased during this time frame.

In addition, we extend the academic literature by providing evidence regarding both the benefits and limitations of audit committee financial expertise, which has been the focus of considerable debate and discussion. This is the first study to directly test, with externally observable measures, how relative audit committee status can affect earnings management. Our findings add to research that examines the conditions in which board of director status can influence firm outcomes (D'Aveni, 1990; Pollock et al., 2011; Stuart et al., 1999) and complement the studies suggesting that external auditor status is important for audit quality (Bennett and Hatfield, 2013).

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Appendix A: Variable Definitions

		Definition
Dependent Variables		
	<i>IRREGULARITY</i>	An indicator variable equal to one for (1) violation years from SEC and Department of Justice enforcement actions that establish intent under Section 17(a) of the Securities Act of 1933, or either Section 10(b) (including Rule 10b-5) or 13(b)(5) of the Securities Exchange Act of 1934 and (2) class period years related to settled securities class-action lawsuits that allege violations of Generally Accepted Accounting Principles.
	<i>ERROR</i>	An indicator variable equal to one for misstated years when a restatement is not considered an irregularity (i.e., when <i>IRREGULARITY</i> =0).
	<i>ABN_ACC</i>	The value of the error term for firm <i>i</i> in year <i>t</i> as measured using the following equation estimated by year and two-digit Standard Industrial Classification code: $TOTAL_ACCRUALS_{it} = \beta_0 + \beta_1 * (1/ASSETS_{it-1}) + \beta_2 * (\Delta REV_{it} - \Delta AR_{it}) + \beta_3 * PPE_{it} + \varepsilon$

		Definition
Expertise Variables - all data come from BoardEx.		
	<i>EXPERTISE</i>	The percentage of audit committee members with financial expertise as defined as prior employment or a professional distinction that fits into at least one of SOXACC, SOXFIN and SOXSUPER as defined below, and zero otherwise.
	<i>SOXACC</i>	The percentage of audit committee members with accounting expertise as defined as work experience as a public auditor at one of the 25 audit firms listed in Compustat, as a CPA or Chartered Accountant or in an accounting-specific position, such as CFO, Treasurer, Controller, Head of Accounting, etc.
	<i>SOXSUPER</i>	The percentage of audit committee members with supervisory expertise as defined as work experience at a public firm in a supervisory position that involves the supervision of individuals involved in financial reporting, such as a CEO, COO or President.
	<i>SOXFIN</i>	The percentage of audit committee members with finance expertise as defined as work experience in a financial position that uses financial reports, such as an Analyst or an Investment Banker.
	<i>SOXACC_DUM</i>	An indicator that is equal to one if at least one audit committee member has accounting expertise as defined as work experience as a public auditor at one of the 25 audit firms listed in Compustat, as a CPA or Chartered Accountant or in an accounting-specific position, such as CFO, Treasurer, Controller, Head of Accounting, etc.
	<i>SOXSUPER_DUM</i>	An indicator that is equal to one if at least one audit committee member has supervisory expertise as defined as work experience at a public firm in a supervisory position that involves the supervision of individuals involved in financial reporting, such as a CEO, COO or President.
	<i>SOXFIN_DUM</i>	An indicator that is equal to one if at least one audit committee member has finance expertise as defined as work experience in a financial position that uses financial reports, such as an Analyst or an Investment Banker.

		Definition
Status Variables - all data come from BoardEx.		
	<i>STATUS_AC</i>	A measure of the status of the AC. It is an indicator that equals one if the sum of <i>PUBBODS_AC</i> , <i>PRIBODS_AC</i> , and <i>ELITEED_AC</i> is three, and zero otherwise.
	<i>STATUS_EXEC</i>	A measure of the status of the CEO and CFO. It is an indicator that equals one if the sum of <i>PUBBODS_EXEC</i> , <i>PRIBODS_EXEC</i> , and <i>ELITEED_EXEC</i> is three, and zero otherwise.
	<i>STATUS_DIF</i>	A measure of the status differential between the AC and the Executive Team (CEO and CFO). It is an indicator that equals one if the sum of <i>PUBBODS_DIF</i> , <i>PRIBODS_DIF</i> , and <i>ELITEED</i> is three, and zero otherwise.
	<i>STATUS_NAC</i>	A measure of the status of the non-AC independent directors. It is an indicator that equals one if the sum of <i>PUBBODS_NAC</i> , <i>PRIBODS_NAC</i> , and <i>ELITEED_NAC</i> is three, and zero otherwise.
	<i>STATUS_DIF_NAC</i>	A measure of the status differential between non-AC independent directors and the executive team (CEO and CFO). It is an indicator that equals one if the sum of <i>PUBBODS_DIF_NAC</i> , <i>PRIBODS_DIF_NAC</i> , and <i>ELITEED_DIF_NAC</i> is three, and zero otherwise.
	<i>PUBBODS_AC</i>	An indicator that equals one if the mean number of AC concurrent public board appointments is greater than the median for all ACs, and zero otherwise.
	<i>PRIBODS_AC</i>	An indicator that equals one if the mean number of AC concurrent private board appointments is greater than the median for all ACs, and zero otherwise.
	<i>ELITEED_AC</i>	An indicator that equals one if the mean number of elite institution degrees for members of the AC is greater than the median for all ACs, and zero otherwise. Elite institutions are noted in Appendix B.
	<i>PUBBODS_EXEC</i>	An indicator that equals one if the mean number of concurrent public board appointments for the CEO and CFO is greater than the median for all CEOs and CFOs, and zero otherwise.
	<i>PRIBODS_EXEC</i>	An indicator that equals one if the mean number of concurrent private board appointments for the CEO and CFO is greater than the median for all CEOs and CFOs, and zero otherwise.
	<i>ELITEED_EXEC</i>	An indicator that equals one if the mean number of elite institution degrees for members of the executive team (i.e., the CEO and CFO) is greater than the median for all executive teams, and zero otherwise. Elite institutions are noted in Appendix B.

		Definition
Status Variables (continued) - all data come from BoardEx.		
	<i>PUBBODS_DIF</i>	An indicator that equals one if the mean number of AC concurrent public board appointments minus the mean number of CEO and CFO concurrent public board appointments is greater than the median difference across all executive and AC pairs, and zero otherwise.
	<i>PRIBODS_DIF</i>	An indicator that equals one if the mean number of AC concurrent private board appointments minus the mean number of CEO and CFO concurrent private board appointments is greater than the median difference across all executive and AC pairs, and zero otherwise.
	<i>ELITEED_DIF</i>	An indicator that equals one if the mean number of elite institution degrees for members of the AC minus the mean number of elite institution degrees for the CEO and CFO is greater than the median difference across all executive and AC pairs, and zero otherwise. Elite institutions are noted in Appendix B.
	<i>PUBBODS_NAC</i>	An indicator that equals one if the mean number of concurrent public board appointments for non-AC independent directors is greater than the median for all non-AC independent directors, and zero otherwise.
	<i>PRIBODS_NAC</i>	An indicator that equals one if the mean number of concurrent private board appointments for non-AC independent directors is greater than the median for all non-AC independent directors, and zero otherwise.
	<i>ELITEED_NAC</i>	An indicator that equals one if the mean number of elite institution degrees for non-AC independent directors is greater than the median for all non-AC independent directors, and zero otherwise. Elite institutions are noted in Appendix B.
	<i>PUBBODS_DIF_NAC</i>	An indicator that equals one if the mean number of concurrent public board appointments for non-AC independent directors minus the mean number of CEO and CFO concurrent public board appointments is greater than the median difference across all executive and non-AC independent director pairs, and zero otherwise.
	<i>PRIBODS_DIF_NAC</i>	An indicator that equals one if the mean number of concurrent private board appointments for non-AC independent directors minus the mean number of CEO and CFO concurrent private board appointments is greater than the median difference across all executive and non-AC independent director pairs, and zero otherwise.
	<i>ELITEED_DIF_NAC</i>	An indicator that equals one if the mean number of elite institution degrees for non-AC independent directors minus the mean number of elite institution degrees for the CEO and CFO is greater than the median difference across all executive and non-AC independent director pairs, and zero otherwise. Elite institutions are noted in Appendix B.

		Definition
Control Variables - data come from BoardEx, Compustat, CRSP, Thompson Reuters, and Lucian Bebchuk. Compustat variables names are in parenthesis.		
	<i>NUM_AC</i>	The number of directors that sit on the audit committee in year <i>t</i> .
	<i>NUM_BRD</i>	The number of directors on the board of directors in year <i>t</i> .
	<i>BRD_PCT_IND</i>	The percentage of directors that are independent in year <i>t</i> .
	<i>CEOISCHAIR</i>	An indicator variable that is equal to one if the CEO is also the chair of the board of directors in year <i>t</i> , and zero otherwise.
	<i>INSTITUTIONAL_OWN</i>	The percentage of shares outstanding held by institutional investors at the end of year <i>t</i> . Data for this variable come from Thompson Reuters and Compustat (<i>csho</i>).
	<i>LMARKETCAP</i>	The natural log of market capitalization (<i>PRCC_F*CSHO</i>) in year <i>t</i> .
	<i>BM</i>	The book value of common equity (<i>ceq</i>) divided by the market value of common equity (<i>prcc_f*csho</i>) in year <i>t</i> .
	<i>LEVERAGE</i>	The total debt (<i>DLTT</i> + <i>DLC</i>) divided by total assets (<i>AT</i>) in year <i>t</i> .
	<i>ISSUE</i>	An indicator variable coded 1 if the sum of issued securities (<i>sstk</i> > 0 or <i>dltis</i> > 0) during year <i>t</i> is greater than ten percent of total assets (<i>at</i>) for year <i>t</i> , and zero otherwise.
	<i>ROA</i>	Return on assets: net income (<i>ni</i>) divided by total assets (<i>at</i>) in year <i>t</i> .
	<i>EINDEX</i>	The entrenchment index as described in Bebchuk et al. (2009) and obtained from http://www.law.harvard.edu/faculty/bebchuk/data.shtml .

		Definition
Accrual Calculation Variables - data come from Compustat. Compustat variables names are in parenthesis.		
	$TOTAL_ACCRUALS_{it}$	Total accruals for firm i in year t , calculated as income before extraordinary items (ibc) divided by $ASSETS_{it-1}$ minus net cash flow from operating activities (oancf) divided by $ASSETS_{it-1}$.
	$ASSETS_{it-1}$	Total assets (at) for firm i in year t .
	ΔREV_{it}	The change in revenue (sale) for firm i in year t scaled by $ASSETS_{it-1}$.
	ΔAR_{it}	The change in receivables (rect) for firm i in year t scaled by $ASSETS_{it-1}$.
	PPE_{it}	Gross property, plant, and equipment (ppeg) for firm i in year t scaled by $ASSETS_{it-1}$.

		Definition
Additional Control Variables for Accrual Regressions - data come from Compustat, and CRSP. Compustat variables names are in parenthesis.		
	<i>AGGLOSS</i>	An indicator variable equal to one if earnings before extraordinary items (<i>IB</i>) in years <i>t</i> and <i>t-1</i> sum to less than zero, and zero otherwise.
	<i>EXTREMESG</i>	An indicator variable that is equal to one if year-over-year industry-adjusted sales growth (<i>SALE</i>) falls into the top quintile in year <i>t</i> , and zero otherwise.
	<i>RESTRUCTURING</i>	The aggregate restructuring charges (<i>RCP</i> * -1) in years <i>t</i> and <i>t-1</i> , scaled by the firm's year <i>t</i> market capitalization (<i>PRCC_F</i> * <i>CSHO</i>).
	<i>STD_CFO</i>	Standard deviation of cash flow from operations (<i>oancf</i>) divided by total assets (<i>at</i>), where the standard deviation is calculated using the prior five fiscal years, requiring a minimum of three years of data.
	<i>STD_SALE</i>	Standard deviation of sales (<i>sale</i>) divided by total assets (<i>at</i>), where the standard deviation is calculated using the prior five fiscal years, requiring a minimum of three years of data.
	<i>FORSALES</i>	An indicator that is equal to one if the firm reports foreign sales (from Compustat Segment file) in year <i>t</i> , and zero otherwise.
	<i>LSEGCOUNT</i>	The natural log of the sum of the number of operating and geographic segments reported by the Compustat Segments database for the firm in year <i>t</i> .
	<i>MERGER</i>	An indicator variable that is equal to one if the firm has a non-zero acquisition expense (<i>aqp</i>) in years <i>t</i> or <i>t-1</i> , and zero otherwise.
	<i>LNASSETS</i>	The natural log of total assets (<i>at</i>) for the firm in year <i>t</i> .
	<i>SHUMWAY</i>	The decile rank of the percentage probability of bankruptcy in year <i>t</i> from the default hazard model prediction based on Shumway (2001). Note: higher score translates to higher probability of bankruptcy.
	<i>BIG4</i>	An indicator variable that is equal to one if the firm engaged one of the largest four audit firms in year <i>t</i> as reported by Compustat (<i>au</i>). The largest four audit firms include Deloitte and Touche, Ernst and Young, KPMG, and PricewaterhouseCoopers.

		Definition
Variables for Endogeneity Regressions		
	<i>TURNOVER</i>	An indicator that is equal to one if the audit committee has a new member that is also new to the board for year <i>t</i> or if an audit committee member leaves the board effective year <i>t</i> , and zero
	<i>POST_REVELATION</i>	An indicator that is equal to one for firm-years from irregularity firms that are after the public revelation of the irregularity, and zero otherwise.
	<i>PRE_REVELATION</i>	An indicator that is equal to one for firm-years from irregularity firms that are before the irregularity begins, and zero otherwise.
	<i>CH_EXPERTISE</i>	<i>EXPERTISE</i> for year <i>t</i> minus <i>EXPERTISE</i> for year <i>t-1</i> .
	<i>CH_STATUS_DIF</i>	<i>STATUS_DIF</i> for year <i>t</i> minus <i>STATUS_DIF</i> for year <i>t-1</i> .
	<i>CH_STATUS_AC</i>	<i>STATUS_AC</i> for year <i>t</i> minus <i>STATUS_AC</i> for year <i>t-1</i> .
	<i>CH_MARKETCAP</i>	<i>MARKETCAP</i> for year <i>t</i> minus <i>MARKETCAP</i> for year <i>t-1</i> .

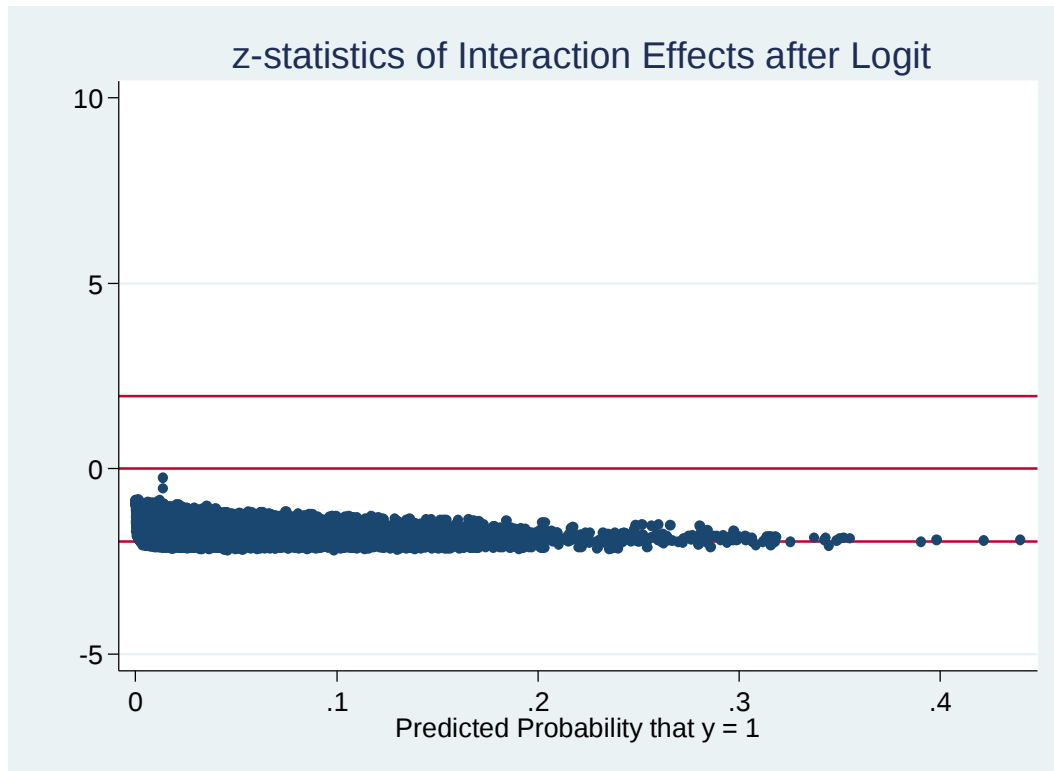
Appendix B: List of Elite Institutions

Following Useem and Karable (1986) and Finkelstein (1992) the following institutions are considered elite educational institutions:	
Amherst College	Princeton University
Brown University	Stanford University
Carleton College	Swarthmore College
Columbia University	United States Military Academy
Cornell University	United States Naval Academy
Dartmouth College	University of California, Berkeley
Grinnell College	University of California, Los Angeles
Harvard University	University of Chicago
Haverford College	University of Michigan
John Hopkins University	University of Pennsylvania
Massachusetts Institute of Technology	Wellesley College
New York University	Wesleyan University
Northwestern University	Williams College
Oberlin College	Yale University
Pomona College	
Using the US News and World Report Rankings from 1991 through 2011, we added Universities that achieved a top 25 ranking for Top Universities for more than one year. The following four universities fall into this category.	
Emory University	
Duke University	
Washington University in St Louis	
California Institute of Technology	

Appendix C: BoardEx Expertise Search Terms

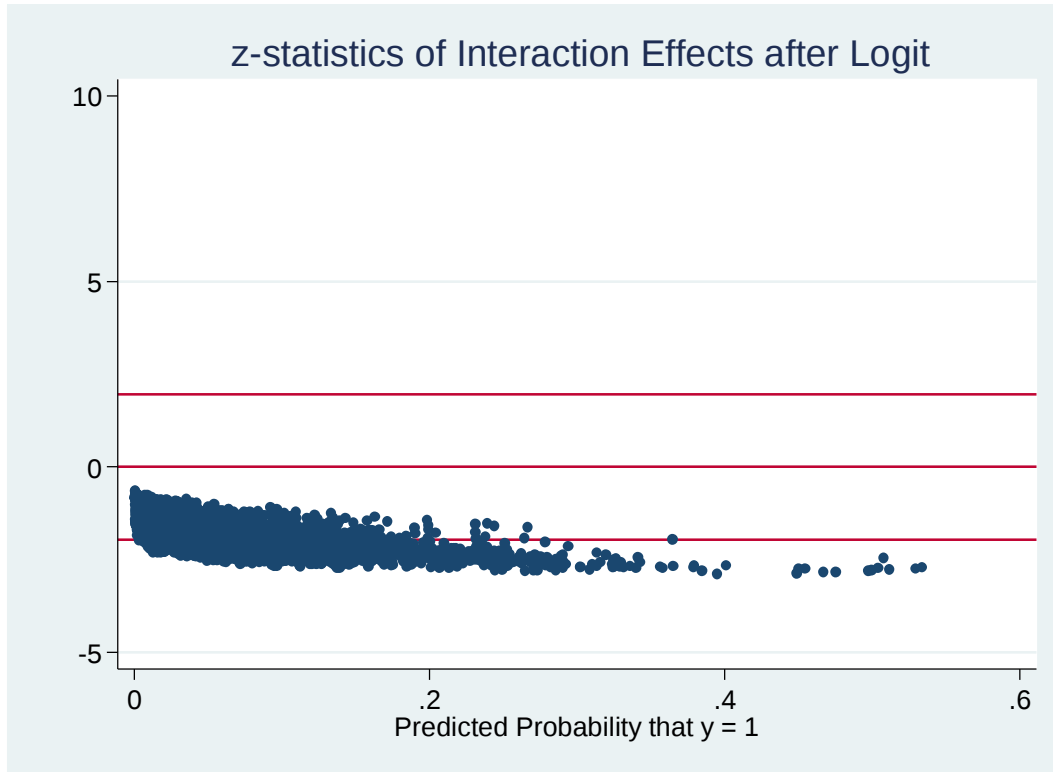
<i>Accounting</i>	<i>Supervisory</i>	<i>Finance</i>
Chief Financial Officer Accounting Officer Chief Accountant Controller Certified Public Accountant Chartered Accountant Financial Officer Head of Accounting Vice President of Accounting Also: Employment at one of the 25 current and historical Audit Firms listed in Compustat	Chief Executive Officer President Chief Operating Officer	Banker Analyst Loan Officer Investment Manager Fund Manager Asset Manager Treasurer Finance Director Manager Finance Vice President Finance
* Note: As BoardEx allows considerable variation in titles and roles, we scanned a complete list of distinct titles to also include various prefixes, suffixes, and abbreviations for these titles as well as discernable misspellings. We code each search term independent of spacing, punctuation or case.		

Figure 1: Model (1) Interaction Effects



As is described in Norton et al. (2004), this figure displays the z-statistics for the interaction of *EXPERTISE* and *STATUS_DIF* from model (3). This provides a graphical analysis of the interactive effect for each observation. The average effects are displayed in Table 4, Panel A.

Figure 2: Model (2) Interaction Effects



As is described in Norton et al. (2004), this figure displays the z-statistics for the interaction of *EXPERTISE* and *STATUS_DIF* from model (3) when we also control for *EINDEX*. This provides a graphical analysis of the interactive effect for each observation. The average effects are displayed in Table 4, Panel A.

Table 1, Panel A: Board of Director Variables of Interest by Year

Year	No. of Obs.	No. of Irregularities	<i>STATUS_AC</i>	<i>STATUS_DIF</i>	<i>STATUS_DIF_NAC</i>
2001	1775	125	0.159	0.208	0.176
2002	1858	126	0.154	0.218	0.182
2003	3452	155	0.114	0.180	0.131
2004	4229	143	0.099	0.163	0.133
2005	4542	116	0.098	0.166	0.130
2006	4553	66	0.095	0.157	0.144
2007	4484	58	0.086	0.145	0.148
2008	4181	24	0.082	0.136	0.137
Year	No. of Obs.	<i>EXPERTISE</i>	<i>SOXACC</i>	<i>SOXSUPER</i>	<i>SOXFIN</i>
2001	1775	0.487	0.185	0.299	0.213
2002	1858	0.511	0.202	0.306	0.231
2003	3452	0.511	0.244	0.275	0.251
2004	4229	0.533	0.278	0.274	0.270
2005	4542	0.556	0.304	0.274	0.292
2006	4553	0.572	0.324	0.280	0.307
2007	4484	0.586	0.336	0.285	0.320
2008	4181	0.595	0.346	0.285	0.331
Year	No. of Obs.	<i>SOXACC_DUM</i>	<i>SOXSUPER_DUM</i>	<i>SOXFIN_DUM</i>	<i>NUM_AC</i>
2001	1775	0.530	0.677	0.566	3.878
2002	1858	0.580	0.691	0.608	3.969
2003	3452	0.659	0.636	0.645	3.834
2004	4229	0.725	0.633	0.681	3.796
2005	4542	0.763	0.633	0.710	3.771
2006	4553	0.790	0.634	0.724	3.767
2007	4484	0.804	0.634	0.742	3.737
2008	4181	0.815	0.634	0.756	3.761
Year	No. of Obs.	<i>NUM_BRD</i>	<i>BRD_PCT_IND</i>	<i>CEOISCHAIR</i>	<i>INSTITUTIONAL_OWN</i>
2001	1775	12.519	0.579	0.655	0.367
2002	1858	12.515	0.579	0.651	0.399
2003	3452	10.479	0.662	0.582	0.321
2004	4229	10.056	0.689	0.559	0.341
2005	4542	9.894	0.703	0.524	0.356
2006	4553	9.843	0.714	0.499	0.392
2007	4484	9.718	0.719	0.489	0.426
2008	4181	9.751	0.724	0.482	0.422

This panel provides descriptive statistics regarding board composition and accounting irregularities by year. Variable definitions are provided in Appendix A.

Table 1, Panel B: Descriptive Statistics

	IRREGULARITY = 1 (n=813)			IRREGULARITY = 0 (n=28,261)			Differences	
	Mean	Std Dev	Median	Mean	Std Dev	Median	Mean	Median
Expertise Variables								
<i>EXPERTISE</i>	0.575	0.265	0.667	0.552	0.283	0.600	0.022 **	0.067 **
<i>SOXACC</i>	0.271	0.225	0.250	0.294	0.235	0.333	-0.023 ***	-0.083 **
<i>SOXSUPER</i>	0.333	0.266	0.333	0.281	0.266	0.250	0.053 ***	0.083 ***
<i>SOXFIN</i>	0.286	0.239	0.333	0.288	0.248	0.286	-0.002	0.048
<i>SOXACC_DUM</i>	0.710	0.454	1.000	0.738	0.440	1.000	-0.028 *	0.000 *
<i>SOXSUPER_DUM</i>	0.727	0.446	1.000	0.638	0.481	1.000	0.089 ***	0.000 ***
<i>SOXFIN_DUM</i>	0.700	0.459	1.000	0.696	0.460	1.000	0.004	0.000
Status Variables								
<i>STATUS_AC</i>	0.178	0.383	0.000	0.101	0.301	0.000	0.078 ***	0.000 ***
<i>STATUS_DIF</i>	0.213	0.410	0.000	0.163	0.369	0.000	0.050 ***	0.000 ***
<i>STATUS_DIF_NAC</i>	0.151	0.359	0.000	0.142	0.349	0.000	0.009	0.000
Control Variables								
<i>NUM_AC</i>	3.843	1.117	4.000	3.793	1.076	4.000	0.050	0.000
<i>NUM_BRD</i>	11.533	3.843	11.000	10.222	3.664	10.000	1.310 ***	1.000 ***
<i>BRD_PCT_IND</i>	0.623	0.133	0.615	0.689	0.139	0.667	-0.067 ***	-0.051 ***
<i>CEOISCHAIR</i>	0.624	0.471	1.000	0.534	0.490	1.000	0.089 ***	0.000 ***
<i>INSTITUTIONAL_OWN</i>	0.398	0.364	0.408	0.378	0.346	0.332	0.020	0.076
<i>LMARKETCAP</i>	7.391	1.777	7.283	6.167	1.913	6.133	1.223 ***	1.150 ***
<i>BM</i>	0.477	0.479	0.389	0.571	0.638	0.471	-0.095 ***	-0.082 ***
<i>LEVERAGE</i>	0.231	0.211	0.197	0.211	0.215	0.160	0.020 ***	0.037 ***
<i>ISSUE</i>	0.373	0.484	0.000	0.350	0.477	0.000	0.023	0.000
<i>ROA</i>	-0.009	0.211	0.025	-0.042	0.638	0.022	0.033 ***	0.002
<i>EINDEX</i>	2.105	1.286	2.000	2.546	1.266	3.000	-0.441 ***	-1.000 ***

This panel provides descriptive statistics. We obtain an irregularity sample made up of (1) violation years from SEC and Department of Justice enforcement actions that establish intent under Section 17(a) of the Securities Act of 1933, or either Section 10(b) (including Rule 10b-5) or 13(b)(5) of the Securities Exchange Act of 1934 per the Federal Securities Regulation Database and (2) class period years related to settled securities class-action lawsuits that allege violations of Generally Accepted Accounting Principles per RiskMetrics. We obtain audit committee expertise and status measures from BoardEx from 2001 through 2008. *, **, and *** represent two-tailed statistical significance at the 10%, 5%, and 1% levels, respectively. Variable definitions are provided in Appendix A.

Table 2: Pearson Correlations for Variables in Main Regression

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1 <i>IRREGULARITY</i>																					
2 <i>EXPERTISE</i>	0.013																				
3 <i>SOXACC</i>	-0.016	0.577																			
4 <i>SOXSUPER</i>	0.033	0.633	0.062																		
5 <i>SOXFIN</i>	-0.001	0.601	0.592	0.134																	
6 <i>SOXACC_DUM</i>	-0.011	0.459	0.745	0.079	0.429																
7 <i>SOXSUPER_DUM</i>	0.031	0.523	0.054	0.794	0.136	0.098															
8 <i>SOXFIN_DUM</i>	0.001	0.493	0.443	0.157	0.765	0.482	0.180														
9 <i>STATUS_AC</i>	0.042	0.056	-0.034	0.079	0.049	-0.014	0.101	0.070													
10 <i>STATUS_DIF</i>	0.022	0.091	-0.006	0.098	0.058	-0.001	0.105	0.068	0.353												
11 <i>STATUS_DIF_NAC</i>	0.004	0.094	0.035	0.101	0.066	0.026	0.096	0.066	0.052	0.238											
12 <i>NUM_AC</i>	0.008	-0.049	-0.118	0.068	-0.088	0.098	0.163	0.091	0.080	0.008	-0.008										
13 <i>NUM_BRD</i>	0.059	0.033	-0.048	0.118	-0.023	0.044	0.146	0.056	0.107	0.076	0.167	0.521									
14 <i>BRD_PCT_IND</i>	-0.079	-0.045	0.048	-0.083	-0.002	0.068	-0.067	-0.002	-0.046	-0.095	-0.011	0.092	-0.231								
15 <i>CEOISCHAIR</i>	0.030	-0.011	-0.044	0.010	-0.018	-0.041	0.000	-0.005	0.018	-0.037	-0.035	0.038	0.065	-0.163							
16 <i>INSTITUTIONAL_OWEN</i>	0.009	0.180	0.078	0.168	0.135	0.080	0.170	0.138	0.072	0.062	0.080	0.091	0.213	-0.161	0.048						
17 <i>LMARKETCAP</i>	0.105	0.174	0.007	0.225	0.092	0.054	0.231	0.144	0.167	0.119	0.162	0.328	0.654	-0.304	0.128	0.388					
18 <i>BM</i>	-0.025	-0.061	0.012	-0.086	-0.022	0.005	-0.078	-0.029	-0.056	-0.065	-0.049	0.003	-0.050	0.083	-0.010	-0.060	-0.256				
19 <i>LEVERAGE</i>	0.015	0.042	0.042	-0.019	0.086	0.020	0.002	0.058	0.024	0.000	0.036	0.054	0.122	-0.042	0.077	0.056	0.114	-0.055			
20 <i>ISSUE</i>	0.008	0.056	0.050	-0.004	0.076	0.019	0.005	0.045	0.010	0.010	0.020	-0.108	-0.118	0.036	-0.012	-0.003	-0.036	-0.066	0.321		
21 <i>ROA</i>	0.009	-0.004	0.013	-0.013	0.005	0.015	-0.009	0.011	-0.006	0.004	0.001	0.059	0.094	-0.060	0.029	0.082	0.156	0.039	-0.020	-0.068	
22 <i>EINDEX</i>	-0.069	0.003	0.023	0.020	-0.007	0.066	0.030	0.032	-0.031	-0.033	-0.012	0.155	0.142	0.160	0.055	0.007	-0.083	0.047	0.092	0.019	-0.005

This table provides Pearson correlation coefficients for primary variables. Variable definitions are provided in Appendix A. Bolded coefficients are significant at the 10 percent level.

Table 3, Panel A: Effect of Audit Committee Expertise on Audit Committee Status

Logistic Regressions, Dependent Variable is <i>STATUS_AC</i>						
Independent Variables	(1)	(2)	(3)	(4)	(5)	(6)
<i>EXPERTISE</i>	0.2355 *	-0.1425				
	(0.134)	(0.213)				
<i>SOXACC</i>			-1.1765 ***	-1.1607 ***		
			(0.203)	(0.307)		
<i>SOXSUPER</i>			0.1879	-0.1870		
			(0.135)	(0.207)		
<i>SOXFIN</i>			1.1811 ***	1.0333 ***		
			(0.169)	(0.261)		
<i>SOXACC_DUM</i>					-0.4407 ***	-0.5119 ***
					(0.087)	(0.121)
<i>SOXSUPER_DUM</i>					0.3520 ***	0.1338
					(0.085)	(0.135)
<i>SOXFIN_DUM</i>					0.5704 ***	0.5537 ***
					(0.090)	(0.130)
<i>STATUS_EXEC</i>	0.3488 ***	0.4025 ***	0.3098 ***	0.3427 **	0.3140 ***	0.3596 ***
	(0.109)	(0.137)	(0.109)	(0.139)	(0.109)	(0.138)
<i>STATUS_NAC</i>	0.4701 ***	0.3093 ***	0.4442 ***	0.3032 ***	0.4375 ***	0.2810 ***
	(0.074)	(0.107)	(0.074)	(0.108)	(0.074)	(0.107)
<i>NUM_AC</i>	0.1721 ***	0.1572 ***	0.1660 ***	0.1535 ***	0.1403 ***	0.1455 ***
	(0.031)	(0.043)	(0.031)	(0.044)	(0.031)	(0.044)
<i>NUM_BRD</i>	-0.0283 *	-0.0325	-0.0235	-0.0254	-0.0236	-0.0251
	(0.015)	(0.025)	(0.015)	(0.025)	(0.015)	(0.025)
<i>BRD_PCT_IND</i>	0.1409	-0.0690	0.1621	-0.0948	0.1637	-0.1404
	(0.292)	(0.600)	(0.293)	(0.607)	(0.292)	(0.609)
<i>CEOISCHAIR</i>	-0.0418	0.0137	-0.0508	0.0152	-0.0444	0.0030
	(0.070)	(0.107)	(0.070)	(0.107)	(0.070)	(0.107)
<i>INSTITUTIONAL_OWN</i>	0.1610	-0.0079	0.1396	-0.0184	0.1293	-0.0290
	(0.114)	(0.168)	(0.114)	(0.167)	(0.113)	(0.166)
<i>LMARKETCAP</i>	0.2732 ***	0.2568 ***	0.2655 ***	0.2498 ***	0.2551 ***	0.2395 ***
	(0.027)	(0.049)	(0.028)	(0.049)	(0.027)	(0.048)
<i>BM</i>	-0.0250	0.0014	-0.0274	-0.0039	-0.0366	-0.0069
	(0.065)	(0.114)	(0.066)	(0.113)	(0.065)	(0.115)
<i>LEVERAGE</i>	0.2599	0.7612 ***	0.2415	0.6688 **	0.2600	0.7166 **
	(0.173)	(0.288)	(0.173)	(0.288)	(0.172)	(0.288)
<i>ISSUE</i>	0.1226 **	0.0335	0.1160 **	0.0394	0.1132 **	0.0351
	(0.055)	(0.089)	(0.055)	(0.089)	(0.055)	(0.090)
<i>ROA</i>	-0.0673	-0.4194	-0.0628	-0.4061	-0.0613	-0.3784
	(0.049)	(0.355)	(0.042)	0.406	(0.042)	(0.345)
<i>EINDEX</i>		-0.0179		-0.0128		-0.0165
		(0.045)		(0.045)		(0.045)
Year Fixed Effects?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects?	Yes	Yes	Yes	Yes	Yes	Yes
Obs. where <i>STATUS_AC</i> =1	2,988	1,396	2,988	1,396	2,988	1,396
Total Obs.	29,074	9,633	29,074	9,633	29,074	9,633
Pseudo R ²	0.10	0.07	0.11	0.08	0.11	0.08

This table reports the results of a logistic regression examining the effect of audit committee expertise on the likelihood of high audit committee status based on the following model:

$$\text{Prob}(\text{STATUS_AC}_i = 1) = F(\beta_1 \text{EXPERTISE}_i + \beta'(\text{CONTROLS}))$$

STATUS_AC is an indicator variable that is set to one when the audit committee has high status, and zero otherwise. Columns one and two include *EXPERTISE*, which includes accounting, supervisory, and finance expertise. Columns three and four include *SOXACC*, *SOXSUPER*, and *SOXFIN*, which measure the percent of the audit committee with accounting, supervisory, and finance expertise, respectively. Columns five and six include *SOXACC_DUM*, *SOXSUPER_DUM*, and *SOXFIN_DUM*, which measure the presence of accounting, supervisory, and finance expertise, respectively, on the audit committee. Columns two, four, and six include *EINDEX* as an additional control, which reduces the sample size.

Variable definitions are provided in Appendix A. Standard errors clustered by firm in parentheses. Pseudo R-Square is the max re-scaled r-square from SAS (also known as Cragg & Uhler's pseudo r-square). *, **, and *** represent two-tailed statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 3, Panel B: Effect of Audit Committee Expertise on Relative Audit Committee Status

Logistic Regressions, Dependent Variable is <i>STATUS_DIF</i>						
Independent Variables	(1)	(2)	(3)	(4)	(5)	(6)
<i>EXPERTISE</i>	0.5068 *** (0.106)	0.3520 ** (0.175)				
<i>SOXACC</i>			-0.6768 *** (0.161)	-0.7612 *** (0.264)		
<i>SOXSUPER</i>			0.3514 *** (0.112)	0.1834 (0.176)		
<i>SOXFIN</i>			0.7970 *** (0.145)	0.7884 *** (0.235)		
<i>SOXACC_DUM</i>					-0.2609 *** (0.075)	-0.3143 *** (0.117)
<i>SOXSUPER_DUM</i>					0.3055 *** (0.066)	0.1352 (0.110)
<i>SOXFIN_DUM</i>					0.3846 *** (0.077)	0.3698 *** (0.122)
<i>STATUS_DIF_NAC</i>	1.3041 *** (0.060)	1.2116 *** (0.088)	1.2995 *** (0.060)	1.2172 *** (0.088)	1.2923 *** (0.060)	1.2104 *** (0.088)
<i>NUM_AC</i>	0.0859 *** (0.028)	0.0949 ** (0.039)	0.0721 ** (0.028)	0.0808 ** (0.040)	0.0487 * (0.028)	0.0747 * (0.040)
<i>NUM_BRD</i>	-0.0187 (0.012)	-0.0016 (0.019)	-0.0160 (0.012)	0.0043 (0.019)	-0.0157 (0.012)	0.0039 (0.019)
<i>BRD_PCT_IND</i>	-1.4076 *** (0.234)	-2.2410 *** (0.445)	-1.3978 *** (0.234)	-2.2457 *** (0.444)	-1.3890 *** (0.234)	-2.2237 *** (0.444)
<i>CEOISCHAIR</i>	-0.2914 *** (0.058)	-0.1781 * (0.091)	-0.2959 *** (0.058)	-0.1783 * (0.091)	-0.2907 *** (0.058)	-0.1814 ** (0.091)
<i>INSTITUTIONAL_OWN</i>	0.0903 (0.093)	0.0765 (0.139)	0.0862 (0.093)	0.0832 (0.139)	0.0789 (0.093)	0.0839 (0.138)
<i>LMARKETCAP</i>	0.1123 *** (0.021)	0.0107 (0.037)	0.1085 *** (0.022)	0.0036 (0.037)	0.1059 *** (0.022)	0.0057 (0.037)
<i>BM</i>	-0.0865 * (0.052)	-0.1515 * (0.091)	-0.0882 * (0.052)	-0.1572 * (0.090)	-0.0934 * (0.052)	-0.1608 * (0.091)
<i>LEVERAGE</i>	-0.0001 (0.144)	0.3223 (0.253)	0.0001 (0.144)	0.2757 (0.252)	0.0084 (0.143)	0.3127 (0.254)
<i>ISSUE</i>	0.0705 (0.046)	0.0323 (0.081)	0.0718 (0.046)	0.0401 (0.081)	0.0684 (0.046)	0.0339 (0.081)
<i>ROA</i>	-0.0133 (0.020)	-0.1293 (0.233)	-0.0089 (0.021)	-0.1054 (0.105)	-0.0086 (0.021)	-0.1014 (0.236)
<i>EINDEX</i>		-0.0191 (0.038)		-0.0145 (0.038)		-0.0170 (0.039)
Year Fixed Effects?	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects?	Yes	Yes	Yes	Yes	Yes	Yes
Obs. where <i>STATUS_DIF</i> =1	4,771	1,983	4,771	1,983	4,771	1,983
Total Obs.	29,074	9,633	29,074	9,633	29,074	9,633
Pseudo R ²	0.13	0.10	0.13	0.11	0.14	0.11

This table reports the results of a logistic regression examining the effect of audit committee expertise on the likelihood of high relative audit committee status compared to management status based on the following model:

$$\text{Prob}(\text{STATUS_DIF}_i = 1) = F(\beta_1 \text{EXPERTISE}_i + \beta'(\text{CONTROLS}))$$

STATUS_DIF is an indicator variable that is set to one when relative audit committee status is high, and zero otherwise. Columns one and two include *EXPERTISE*, which includes accounting, supervisory, and finance expertise.

Columns three and four include *SOXACC*, *SOXSUPER*, and *SOXFIN*, which measure the percent of the audit committee with accounting, supervisory, and finance expertise, respectively. Columns five and six include *SOXACC_DUM*, *SOXSUPER_DUM*, and *SOXFIN_DUM*, which measure the presence of accounting, supervisory, and finance expertise, respectively, on the audit committee. Columns two, four, and six include *EINDEX* as an additional control, which reduces the sample size.

Variable definitions are provided in Appendix A. Standard errors clustered by firm in parentheses. Pseudo R-Square is the max re-scaled r-square from SAS (also known as Cragg & Uhler's pseudo r-square). *, **, and *** represent two-tailed statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 4, Panel A: Effect of the Interaction of Audit Committee Expertise and Relative Audit Committee Status on Irregularities

Logistic Regressions, Dependent Variable is <i>IRREGULARITY</i>				
Independent Variables	(1)	(2)	(3)	(4)
<i>EXPERTISE</i>	0.0067 (0.237)	0.4145 (0.384)	0.2001 (0.249)	0.7812 * (0.411)
<i>EXPERTISE*STATUS_DIF</i>			-0.9929 * (0.514)	-1.7906 *** (0.655)
<i>STATUS_DIF</i>	0.0877 (0.136)	0.0172 (0.180)	0.6645 * (0.344)	1.0748 ** (0.435)
<i>STATUS_DIF_NAC</i>	-0.2522 * (0.151)	-0.3408 * (0.199)	-0.2547 * (0.151)	-0.3461 * (0.197)
<i>NUM_AC</i>	-0.0569 (0.059)	-0.0331 (0.078)	-0.0584 (0.059)	-0.0383 (0.077)
<i>NUM_BRD</i>	-0.0262 (0.028)	0.0144 (0.037)	-0.0251 (0.028)	0.0161 (0.037)
<i>BRD_PCT_IND</i>	-0.9464 * (0.535)	-0.3612 (1.003)	-0.9273 * (0.532)	-0.2941 (0.991)
<i>CEOISCHAIR</i>	0.1071 (0.131)	0.0549 (0.186)	0.1093 (0.130)	0.0762 (0.185)
<i>INSTITUTIONAL_OWN</i>	-0.2859 (0.211)	-0.5304 * (0.307)	-0.2973 (0.211)	-0.5505 * (0.306)
<i>LMARKETCAP</i>	0.4076 *** (0.047)	0.3380 *** (0.076)	0.4060 *** (0.047)	0.3361 *** (0.076)
<i>BM</i>	0.3279 *** (0.111)	0.4655 *** (0.158)	0.3250 *** (0.112)	0.4636 *** (0.161)
<i>LEVERAGE</i>	0.6704 ** (0.294)	1.3245 *** (0.429)	0.6660 ** (0.294)	1.3149 *** (0.429)
<i>ISSUE</i>	0.2428 ** (0.099)	0.0919 (0.149)	0.2408 ** (0.099)	0.0939 (0.149)
<i>ROA</i>	-0.0213 (0.049)	-0.2117 (0.339)	-0.0206 (0.052)	-0.1850 (0.344)
<i>EINDEX</i>		-0.1820 ** (0.074)		-0.1869 ** (0.074)
Year Fixed Effects?	Yes	Yes	Yes	Yes
Industry Fixed Effects?	Yes	Yes	Yes	Yes
Obs. where <i>IRREGULARITY</i> =1	813	400	813	400
Total Obs.	29,074	9,633	29,074	9,633
Pseudo R ²	0.14	0.15	0.14	0.16

This table reports the results of a logistic regression examining the effect of the interaction of audit committee financial expertise and relative audit committee status on the likelihood of an irregularity based on the following model:

$$\text{Prob}(\text{IRREGULARITY}_t = 1) = F(\beta_1 \text{EXPERTISE}_t + \beta_2 \text{EXPERTISE}_t * \text{STATUS_DIF}_t + \beta_3 \text{STATUS_DIF}_t + \beta'(\text{CONTROLS}))$$

We obtain an irregularity sample made up of (1) violation years from SEC and Department of Justice enforcement actions that establish intent under Section 17(a) of the Securities Act of 1933, or either Section 10(b) (including Rule 10b-5) or 13(b)(5) of the Securities Exchange Act of 1934 per the Federal Securities Regulation Database and (2) class period years related to settled securities class-action lawsuits that allege violations of Generally Accepted Accounting Principles per RiskMetrics. Columns two and four include *EINDEX* as an additional control, which reduces the sample size.

Variable definitions are provided in Appendix A. Standard errors clustered by firm in parentheses. Pseudo R-Square is the max re-scaled r-square from SAS (also known as Cragg & Uhler's pseudo r-square). *, **, and *** represent two-tailed statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 4, Panel B: Effect of the Interaction of Audit Committee Expertise and Relative Audit Committee Status on Abnormal Accruals

OLS Regressions, Dependent Variable is <i>ABN_ACC</i>				
Independent Variables	(1)	(2)	(3)	(4)
<i>EXPERTISE</i>	-0.0170 *** (0.005)	-0.0167 *** (0.005)	-0.0130 *** (0.005)	-0.0125 ** (0.005)
<i>EXPERTISE*STATUS_DIF</i>			-0.0301 *** (0.011)	-0.0261 ** (0.012)
<i>STATUS_DIF</i>	-0.0021 (0.003)	0.0023 (0.003)	0.0164 ** (0.007)	0.0188 ** (0.009)
<i>STATUS_DIF_NAC</i>	0.0019 (0.003)	-0.0009 (0.003)	0.0020 (0.003)	-0.0009 (0.003)
<i>NUM_AC</i>	0.0014 (0.001)	0.0004 (0.001)	0.0014 (0.001)	0.0004 (0.001)
<i>NUM_BRD</i>	0.0000 (0.001)	0.0004 (0.001)	0.0000 (0.001)	0.0004 (0.001)
<i>BRD_PCT_IND</i>	0.0151 (0.010)	0.0218 (0.014)	0.0150 (0.010)	0.0219 (0.014)
<i>CEOISCHAIR</i>	0.0047 * (0.003)	0.0040 (0.003)	0.0046 * (0.003)	0.0041 (0.003)
<i>INSTITUTIONAL_OWN</i>	-0.0186 *** (0.003)	-0.0119 *** (0.004)	-0.0187 *** (0.003)	-0.0120 *** (0.004)
<i>STD_CFO</i>	-0.0192 (0.046)	0.0316 (0.066)	-0.0190 (0.046)	0.0299 (0.067)
<i>STD_SALE</i>	0.0058 (0.008)	-0.0242 (0.019)	0.0057 (0.008)	-0.0248 (0.019)
<i>FORSALES</i>	0.0019 (0.004)	0.0047 (0.004)	0.0019 (0.004)	0.0048 (0.004)
<i>LSEGCOUNT</i>	0.0043 (0.003)	0.0020 (0.003)	0.0043 (0.003)	0.0019 (0.003)
<i>EXTREMESG</i>	0.0069 (0.004)	-0.0010 (0.005)	0.0070 (0.004)	-0.0010 (0.005)
<i>MERGER</i>	-0.0099 * (0.006)	-0.0024 (0.006)	-0.0100 * (0.006)	-0.0024 (0.006)
<i>RESTRUCTURING</i>	-0.0046 (0.023)	0.0159 (0.022)	-0.0042 (0.023)	0.0161 (0.022)
<i>LNASSETS</i>	-0.0123 *** (0.001)	-0.0028 * (0.002)	-0.0123 *** (0.001)	-0.0029 * (0.002)
<i>AGGLOSS</i>	-0.0538 *** (0.007)	-0.0027 (0.004)	-0.0539 *** (0.007)	-0.0027 (0.004)
<i>SHUMWAY</i>	-0.0065 *** (0.001)	0.0023 *** (0.001)	-0.0065 *** (0.001)	0.0023 *** (0.001)
<i>BIG4</i>	-0.0034 (0.004)	-0.0013 (0.006)	-0.0038 (0.004)	-0.0018 (0.006)
<i>LEVERAGE</i>	0.0714 *** (0.012)	0.0350 *** (0.011)	0.0716 *** (0.012)	0.0351 *** (0.011)
<i>BM</i>	0.0126 *** (0.002)	0.0133 *** (0.004)	0.0126 *** (0.002)	0.0133 *** (0.004)
<i>ROA</i>	0.0958 *** (0.036)	0.3625 *** (0.018)	0.0957 *** (0.036)	0.3627 *** (0.018)
<i>EINDEX</i>		-0.0005 (0.001)		-0.0005 (0.001)
Year Fixed Effects?	Yes	Yes	Yes	Yes
Industry Fixed Effects?	Yes	Yes	Yes	Yes
Total Obs.	21,031	7,768	21,031	7,768
R ²	0.12	0.26	0.12	0.26

This table reports the results of a ordinary least squares regression examining the effect of the interaction of audit committee financial expertise and relative audit committee status on signed abnormal accruals. The model is:

$$ABN_ACC_t = \beta_0 + \beta_1 EXPERTISE_t + \beta_2 EXPERTISE_t * STATUS_DIF_t + \beta_3 STATUS_DIF_t + \beta' (CONTROLS) + \varepsilon$$

We calculate abnormal accruals using the modified-Jones model with an intercept. Columns two and four include *EINDEX* as an additional control, which reduces the sample size.

Variable definitions are provided in Appendix A. Standard errors clustered by firm in parentheses. *, **, and *** represent two-tailed statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 4, Panel C: Effect of the Interaction of Audit Committee Expertise and Relative Audit Committee Status on Errors

Logistic Regressions, Dependent Variable is <i>ERROR</i>				
Independent Variables	(1)	(2)	(3)	(4)
<i>EXPERTISE</i>	0.1006 (0.097)	-0.1097 (0.185)	0.1503 (0.101)	-0.1084 (0.196)
<i>EXPERTISE*STATUS_DIF</i>			-0.3252 (0.238)	-0.0069 (0.396)
<i>STATUS_DIF</i>	0.0117 (0.065)	-0.0417 (0.103)	0.2060 (0.156)	-0.0376 (0.269)
<i>STATUS_DIF_NAC</i>	0.0214 (0.071)	0.0483 (0.106)	0.0214 (0.071)	0.0484 (0.106)
<i>NUM_AC</i>	-0.0190 (0.027)	-0.0721 * (0.041)	-0.0187 (0.027)	-0.0721 * (0.041)
<i>NUM_BRD</i>	-0.0132 (0.011)	0.0014 (0.020)	-0.0131 (0.011)	0.0014 (0.020)
<i>BRD_PCT_IND</i>	-0.9295 *** (0.214)	-0.4340 (0.453)	-0.9271 *** (0.214)	-0.4339 (0.453)
<i>CEOISCHAIR</i>	0.0321 (0.054)	-0.0033 (0.095)	0.0322 (0.054)	-0.0032 (0.094)
<i>INSTITUTIONAL_OWN</i>	-0.1295 (0.093)	-0.2875 * (0.147)	-0.1317 (0.093)	-0.2875 * (0.147)
<i>LMARKETCAP</i>	-0.0366 * (0.021)	-0.1827 *** (0.045)	-0.0371 * (0.021)	-0.1827 *** (0.045)
<i>BM</i>	0.1002 *** (0.034)	0.1775 ** (0.071)	0.0998 *** (0.034)	0.1775 ** (0.071)
<i>LEVERAGE</i>	0.5825 *** (0.132)	0.2169 (0.269)	0.5816 *** (0.132)	0.2170 (0.269)
<i>ISSUE</i>	0.0712 (0.045)	0.1573 * (0.086)	0.0698 (0.045)	0.1573 * (0.086)
<i>ROA</i>	-0.0163 (0.020)	-0.4692 ** (0.200)	-0.0162 (0.020)	-0.4691 ** (0.200)
<i>EINDEX</i>		-0.0258 (0.039)		-0.0259 (0.039)
Year Fixed Effects?	Yes	Yes	Yes	Yes
Industry Fixed Effects?	Yes	Yes	Yes	Yes
Obs. where <i>ERROR</i> =1	4,268	1,430	4,268	1,430
Total Obs.	29,074	9,633	29,074	9,633
Pseudo R ²	0.04	0.09	0.04	0.09

This table reports the results of a logistic regression examining the effect of the interaction of audit committee financial expertise and relative audit committee status on the likelihood of an error based on the following model:

$$\text{Prob}(\text{ERROR}_t = 1) = F(\beta_1 \text{EXPERTISE}_t + \beta_2 \text{EXPERTISE}_t * \text{STATUS_DIF}_t + \beta_3 \text{STATUS_DIF}_t + \beta'(\text{CONTROLS}))$$

ERROR is an indicator variable equal to one for mistated years when the associated restatement is not considered an irregularity (i.e., when *IRREGULARITY*=0). Columns two and four include *EINDEX* as an additional control, which reduces the sample size.

Variable definitions are provided in Appendix A. Standard errors clustered by firm in parentheses. Pseudo R-Square is the max re-scaled r-square from SAS (also known as Cragg & Uhler's pseudo r-square). *, **, and *** represent two-tailed statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 5, Panel A: Descriptives for Irregularity Firms

Irregularity Firms			
	Pre-irregularity years	Irregularity years	Post-irregularity years
With turnover events	56	124	176
With AC members that are also new to the board	33	77	121
With AC members who left the board	38	76	114
Mean <i>EXPERTISE</i>	0.5363	0.6132	0.6612
Mean <i>STATUS_AC</i>	0.1704	0.1633	0.1380
Mean <i>STATUS_DIF</i>	0.2148	0.2245	0.1864
Mean <i>EXPERTISE*STATUS_DIF</i>	0.1207	0.1353	0.1308
Mean <i>LMARKETCAP</i>	7.5235	7.4060	7.1914

This panel provides descriptive statistics related to firm-years from firms that had an irregularity during the sample period. We obtain an irregularity sample made up of (1) violation years from SEC and Department of Justice enforcement actions that establish intent under Section 17(a) of the Securities Act of 1933, or either Section 10(b) (including Rule 10b-5) or 13(b)(5) of the Securities Exchange Act of 1934 per the Federal Securities Regulation Database and (2) class period years related to settled securities class-action lawsuits that allege violations of Generally Accepted Accounting Principles per RiskMetrics. The first row captures firm-years where either there is an audit committee member who is new to the board for year t or an audit committee member that left the board effective year t . The second row captures firm-years where there is an audit committee member who is new to the board for year t . The third row captures firm-years where there is an audit committee member that left the board effective year t . Variable definitions are provided in Appendix A.

Table 5, Panel B: Effect of Irregularity Commencement on the Change in Audit Committee Expertise, Status, and Relative Status

Logistic Regressions, Dependent Variable is <i>TURNOVER</i>	
Independent Variables	
<i>PRE_IRREGULARITY</i>	-0.4441 (1.455)
<i>CH_EXPERTISE</i>	2.0660 *** (0.754)
<i>PRE_IRREGULARITY*CH_EXPERTISE</i>	0.1501 (0.539)
<i>CH_STATUS_DIF</i>	-0.1473 (0.257)
<i>PRE_IRREGULARITY*CH_STATUS_DIF</i>	-0.6855 (0.613)
<i>CH_EXPERTISE*CH_STATUS_DIF</i>	-1.4305 (1.728)
<i>PRE_IRREGULARITY*CH_EXPERTISE*CH_STATUS_DIF</i>	4.0633 (3.860)
<i>CH_STATUS_AC</i>	0.1138 (0.301)
<i>PRE_IRREGULARITY*CH_STATUS_AC</i>	0.8608 (1.148)
<i>CH_LMARKETCAP</i>	-0.2870 * (0.150)
<i>PRE_IRREGULARITY*CH_LMARKETCAP</i>	0.5950 (0.472)
Year Fixed Effects?	Yes
Industry Fixed Effects?	Yes
Fully Interacted Model?	Yes
Obs. where dependent variable=1	356
Total Obs.	842
Pseudo R ²	0.12

Using firm-years from irregularity firms, this table reports the results of a logistic regression examining how changes in audit committee status, audit committee expertise, and relative audit committee status are associated with audit committee turnover events and how these relations differ pre- and post-irregularity commencement. The model is:

$$\text{Prob}(\text{TURNOVER}_t = 1) = F(\beta_1 \text{PRE_IRREGULARITY}_t + \beta_2 \text{CH_EXPERTISE}_t + \beta_3 \text{PRE_IRREGULARITY}_t * \text{CH_EXPERTISE}_t + \beta_4 \text{CH_STATUS_DIF}_t + \beta_5 \text{PRE_IRREGULARITY}_t * \text{CH_STATUS_DIF}_t + \beta_6 \text{CH_EXPERTISE}_t * \text{CH_STATUS_DIF}_t + \beta_7 \text{PRE_IRREGULARITY}_t * \text{CH_EXPERTISE}_t * \text{CH_STATUS_DIF}_t + \beta_8 \text{CH_STATUS_AC}_t + \beta_9 \text{PRE_IRREGULARITY}_t * \text{CH_STATUS_AC}_t + \beta_{10} \text{CH_LMARKETCAP}_t + \beta_{11} \text{PRE_IRREGULARITY}_t * \text{CH_LMARKETCAP}_t)$$

TURNOVER is an indicator set to one for firm-years where either there is an audit committee member who is new to the board for year *t* or an audit committee member that left the board effective year *t*, and zero otherwise.

PRE_IRREGULARITY is an indicator that is equal to one for firm-years from irregularity firms that are before the irregularity begins, and zero otherwise.

Variable definitions are provided in Appendix A. Standard errors clustered by firm in parentheses. Pseudo R-Square is the max re-scaled r-square from SAS (also known as Cragg & Uhler's pseudo r-square). *, **, and *** represent two-tailed statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 5, Panel C: Effect of Irregularity Revelation on the Change in Audit Committee Expertise, Status, and Relative Status

Logistic Regressions, Dependent Variable is <i>TURNOVER</i>	
Independent Variables	
<i>POST_REVELATION</i>	-0.0120 (0.735)
<i>CH_EXPERTISE</i>	1.2953 (1.186)
<i>POST_REVELATION*CH_EXPERTISE</i>	1.2494 (1.474)
<i>CH_STATUS_DIF</i>	-0.6906 ** (0.298)
<i>POST_REVELATION*CH_STATUS_DIF</i>	0.7430 * (0.440)
<i>CH_EXPERTISE*CH_STATUS_DIF</i>	-0.2478 (2.624)
<i>POST_REVELATION*CH_EXPERTISE*CH_STATUS_DIF</i>	-0.9227 (3.000)
<i>CH_STATUS_AC</i>	0.9590 * (0.545)
<i>POST_REVELATION*CH_STATUS_AC</i>	-1.1610 * (0.700)
<i>CH_LMARKETCAP</i>	-0.0030 (0.243)
<i>POST_REVELATION*CH_LMARKETCAP</i>	-0.3583 (0.305)
Year Fixed Effects?	Yes
Industry Fixed Effects?	Yes
Fully Interacted Model?	Yes
Obs. where dependent variable=1	356
Total Obs.	842
Pseudo R ²	0.14

Using firm-years from irregularity firms, this table reports the results of a logistic regression examining how changes in audit committee status, audit committee expertise, and relative audit committee status are associated with audit committee turnover events and how these relations differ pre- and post-irregularity revelation. The model is:

$$\begin{aligned} \text{Prob}(\text{TURNOVER}_t = 1) = & F(\beta_1 \text{POST_REVELATION}_t + \beta_2 \text{CH_EXPERTISE}_t + \\ & \beta_3 \text{POST_REVELATION}_t * \text{CH_EXPERTISE}_t + \beta_4 \text{CH_STATUS_DIF}_t + \\ & \beta_5 \text{POST_REVELATION}_t * \text{CH_STATUS_DIF}_t + \beta_6 \text{CH_EXPERTISE}_t * \text{CH_STATUS_DIF}_t + \\ & \beta_7 \text{POST_REVELATION}_t * \text{CH_EXPERTISE}_t * \text{CH_STATUS_DIF}_t + \beta_8 \text{CH_STATUS_AC}_t + \\ & \beta_9 \text{POST_REVELATION}_t * \text{CH_STATUS_AC}_t + \beta_{10} \text{CH_LMARKETCAP}_t + \beta_{11} \text{POST_REVELATION}_t \\ & * \text{CH_LMARKETCAP}_t) \end{aligned}$$

TURNOVER is an indicator set to one for firm-years where either there is an audit committee member who is new to the board for year *t* or an audit committee member that left the board effective year *t*, and zero otherwise.

POST_REVELATION is an indicator that is equal to one for firm-years from irregularity firms that are after the public revelation of the irregularity, and zero otherwise.

Variable definitions are provided in Appendix A. Standard errors clustered by firm in parentheses. Pseudo R-Square is the max re-scaled r-square from SAS (also known as Cragg & Uhler's pseudo r-square). *, **, and *** represent two-tailed statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 6: Effect of the Interaction of Audit Committee Expertise Types and Relative Audit Committee Status on Irregularities

Logistic Regressions, Dependent Variable is <i>IRREGULARITY</i>				
Independent Variables	(1)	(2)	(3)	(4)
<i>SOXACC</i>	0.0328 (0.393)	0.0747 (0.661)		
<i>SOXACC*STATUS_DIF</i>	-0.6675 (0.679)	-1.1130 (1.098)		
<i>SOXSUPER</i>	0.2536 (0.256)	0.5718 (0.385)		
<i>SOXSUPER*STATUS_DIF</i>	-1.1755 ** (0.457)	-1.9422 *** (0.695)		
<i>SOXFIN</i>	0.1434 (0.361)	0.5388 (0.587)		
<i>SOXFIN*STATUS_DIF</i>	0.1036 (0.626)	-0.2618 (0.954)		
<i>SOXACC_DUM</i>			0.0792 (0.165)	0.1913 (0.223)
<i>SOXACC_DUM*STATUS_DIF</i>			-0.1191 (0.326)	-0.4711 (0.450)
<i>SOXSUPER_DUM</i>			0.1275 (0.151)	0.1265 (0.230)
<i>SOXSUPER_DUM*STATUS_DIF</i>			-0.4369 (0.272)	-0.7876 ** (0.401)
<i>SOXFIN_DUM</i>			0.0355 (0.156)	0.2109 (0.229)
<i>SOXFIN_DUM*STATUS_DIF</i>			-0.0458 (0.335)	-0.0131 (0.496)
<i>STATUS_DIF</i>	0.6177 ** (0.300)	1.0373 *** (0.367)	0.5272 (0.381)	0.9487 ** (0.476)
<i>STATUS_DIF_NAC</i>	-0.2548 * (0.150)	-0.3377 * (0.197)	-0.2522 * (0.151)	-0.3302 * (0.200)
<i>NUM_AC</i>	-0.0570 (0.059)	-0.0380 (0.077)	-0.0633 (0.060)	-0.0512 (0.079)
<i>NUM_BRD</i>	-0.0248 (0.028)	0.0193 (0.037)	-0.0262 (0.028)	0.0177 (0.037)
<i>BRD_PCT_IND</i>	-0.9376 * (0.532)	-0.3050 (0.996)	-0.9396 * (0.535)	-0.2956 (0.999)
<i>CEOISCHAIR</i>	0.1085 (0.131)	0.0744 (0.187)	0.1114 (0.131)	0.0736 (0.187)
<i>INSTITUTIONAL_OWN</i>	-0.3058 (0.213)	-0.5544 * (0.309)	-0.2932 (0.213)	-0.5040 (0.313)
<i>LMARKETCAP</i>	0.4030 *** (0.047)	0.3350 *** (0.076)	0.4034 *** (0.047)	0.3455 *** (0.076)
<i>BM</i>	0.3199 *** (0.114)	0.4599 *** (0.161)	0.3247 *** (0.112)	0.4613 *** (0.161)
<i>LEVERAGE</i>	0.6596 ** (0.294)	1.2992 *** (0.422)	0.6618 ** (0.293)	1.3476 *** (0.430)
<i>ISSUE</i>	0.2405 ** (0.099)	0.1043 (0.149)	0.2408 ** (0.099)	0.0883 (0.149)
<i>ROA</i>	-0.0172 (0.060)	-0.1619 (0.162)	-0.0191 (0.054)	-0.2069 (0.344)
<i>EINDEX</i>		-0.1870 ** (0.074)		-0.1877 ** (0.075)
Year Fixed Effects?	Yes	Yes	Yes	Yes
Industry Fixed Effects?	Yes	Yes	Yes	Yes
Obs. where <i>IRREGULARITY</i> =1	813	400	813	400
Total Obs.	29,074	9,633	29,074	9,633
Pseudo R ²	0.14	0.16	0.14	0.16

This table reports the results of a logistic regression examining the effect of the interaction of audit committee financial expertise type and relative audit committee status on the likelihood of an irregularity based on the following model:

$$\text{Prob}(\text{IRREGULARITY}_t = 1) = F(\beta_1 \text{SOXACC}_t + \beta_2 \text{SOXACC}_t * \text{STATUS_DIF}_t + \beta_3 \text{SOXSUPER}_t + \beta_4 \text{SOXSUPER}_t * \text{STATUS_DIF}_t + \beta_5 \text{SOXFIN}_t + \beta_6 \text{SOXFIN}_t * \text{STATUS_DIF}_t + \beta_7 \text{STATUS_DIF}_t + \beta'(\text{CONTROLS}))$$

We obtain an irregularity sample made up of (1) violation years from SEC and Department of Justice enforcement actions that establish intent under Section 17(a) of the Securities Act of 1933, or either Section 10(b) (including Rule 10b-5) or 13(b)(5) of the Securities Exchange Act of 1934 per the Federal Securities Regulation Database and (2) class period years related to settled securities class-action lawsuits that allege violations of Generally Accepted Accounting Principles per RiskMetrics. Columns one and two include *SOXACC*, *SOXSUPER*, and *SOXFIN*, which measure the percent of the audit committee with accounting, supervisory, and finance expertise, respectively. Columns three and four replace the audit committee expertise type variables based on the percentage of expertise with *SOXACC_DUM*, *SOXSUPER_DUM*, and *SOXFIN_DUM*, which measure the presence of accounting, supervisory, and finance expertise, respectively, on the audit committee. Columns two and four include *EINDEX* as an additional control, which reduces the sample size.

Variable definitions are provided in Appendix A. Standard errors clustered by firm in parentheses. Pseudo R-Square is the max re-scaled r-square from SAS (also known as Cragg & Uhler's pseudo r-square). *, **, and *** represent two-tailed statistical significance at the 10%, 5%, and 1% levels, respectively.