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# Are Audit Committees Overloaded? Evidence from the Effect of Financial Risk Management Oversight on Financial Reporting Quality

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**Abstract.** Audit committee (AC) responsibilities have increased over time, prompting concerns that overloading the AC with too many duties may impair the AC’s ability to oversee financial reporting. Using new AC charter-based proxies to measure AC responsibilities, we find that an emphasis on the AC overseeing financial risk management (which is a *noncore* AC duty) is associated with *worse* financial reporting quality, as proxied by restatements—consistent with the argument of AC overload by distraction. This overload effect is attenuated when an AC has more directors to share duties or when the AC retains an expert auditor who can serve as a substitute for AC oversight. This overload effect is accentuated when AC members are busy with multiple board appointments or when the external auditor is busy with other audits. We also find that AC financial risk oversight is associated with more AC meetings and greater turnover of AC directors, consistent with the notion of overload. In sharp contrast, we find that greater AC oversight over internal controls (which is a *core* AC duty) is associated with *improved* financial reporting quality. Overall, we document that the *nature* of AC duties impacts the AC’s ability to promote financial reporting quality and that noncore duties may overload ACs.

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**Keywords:** corporate governance • audit committees • restatements • monitoring • financial reporting • financial reporting quality • financial reporting reliability

## 1. Introduction

*One of the big topics [in public discourse] has been audit committee overload. Sarbanes-Oxley said you’re responsible for financial reporting and internal control—that’s your main responsibility. But the regulators have heaped on other things ... often the answer is “anything that has to do with risk goes to the audit committee.”*

—Audit committee chair of a Fortune 100 company

We examine the relation between audit committee (AC) responsibilities and financial reporting quality. These responsibilities have increased over time, and practitioners have raised concerns that ACs may be overloaded, particularly regarding risk-related oversight (KPMG 2014, 2015).<sup>1</sup> Concerns about AC overload began to proliferate in the late 1990s and early 2000s as expectations of the committees increased with corporate governance reforms (e.g., Blue Ribbon Committee, Sarbanes-Oxley, etc.). At that time, AC members complained of

dramatically longer AC meetings (Beasley et al. 2009), and the accounting profession raised a “critical concern” that ACs faced an onslaught of new rules and roles, rising workloads, heavy agendas, and unrealistic expectations (Hunt and Carey 2001, Zaman 2001, Bill and Matthews 2007). When the Securities and Exchange Commission (SEC) and major stock exchanges proposed corporate governance rule changes to increase AC responsibilities in 2002, constituents argued that duties not directly related to financial reporting (which we refer to as “noncore” duties) could detract from ACs’ ability to oversee ‘core’ duties related to accounting and financial reporting (Sweeney and Vallario 2002, Computer Sciences 2003, KPMG 2003). In fact, the SEC disclosed that most comments on the proposed rules indicated worry about the AC’s capacity to handle the many responsibilities assigned to it (SEC 2003a). In 2002, American Institute of Certified Public Accountants leadership voiced similar concerns, saying “we shouldn’t saddle

[audit committees] with so much work that they can't perform their 'real' role" (Sweeney and Vallario 2002, p. 51).

These concerns continue today (Brock-Kyle 2019, Vasani 2022). Ernst & Young (2014) note that the role of an AC member continues to be demanding, in part because regulators and investors ask the committee to assume ever more responsibilities. In a survey conducted by KPMG (2015), 74% of AC members reported a significant or moderate increase in the time required to fulfill their responsibilities, and 40% reported difficulty in accomplishing all those responsibilities. At a meeting of the SEC's Investor Advisory Committee in 2020, governance professionals highlighted the consistent expansion of AC purview and the accompanying overload as a major challenge in helping ACs to achieve their core objectives (SEC 2020).

Practitioner concerns about overload contrast with the beliefs of regulators, who advocate requiring ACs to perform more oversight. For example, in a 2012 interview, Senator Sarbanes stated that increased AC workload and responsibility are "making an important difference" in promoting honest record keeping and meaningful financial statements (Beasley et al. 2012, p. 4). According to SEC (2003b, p. 4), the regulatory expansion of AC responsibilities in the early 2000s was "designed to further the ability of honest and well-intentioned directors...to perform their functions effectively, [and to] allow shareholders to more easily and efficiently monitor the performance of companies." Stock exchanges also favor expanding AC oversight. For example, as part of changes "aimed at helping to restore investor confidence by empowering...directors and strengthening corporate governance practices," in 2004 the New York Stock Exchange (NYSE) required ACs to incorporate risk management oversight into the scope of their duties (SEC 2003a, p. 1).

Despite the clear disagreement among stakeholders on expanding the scope of AC duties, research on this topic is limited due to empirical challenges, particularly the difficulty in measuring AC duties. Extant work has analyzed the impact on financial reporting of AC independence (Klein 2002), expertise (Ashraf et al. 2020), access to resources (Jaggi 2023), influence (Badolato et al. 2014), and diligence (Raghunandan and Rama 2007). However, the study of specific AC responsibilities is nascent. We fill this gap in the literature by using AC charters (which detail AC responsibilities) to analyze financial reporting quality (as proxied by restatements) when the AC is asked to fulfill oversight responsibilities unrelated to its core function.

We draw on theories of agenda setting, time allocation, and distraction (Becker 1965, Kahneman 1973, Zhu 1992) to argue that increasing the AC agenda to include noncore duties could harm financial reporting. The core

duties of ACs encompass monitoring accounting and reporting, overseeing financial statement attestation, and promoting a firm's internal controls (Blue Ribbon Committee on Audit Committee Effectiveness 1999, SEC 1999a, Deloitte 2013, PwC 2018). Although noncore duties may provide the AC with a deeper understanding of the firm, theory suggests that committees tasked with too many diverse tasks cannot effectively perform their core functions (Becker 1965, Kahneman 1973, Zhu 1992, Ernst & Young 2014, KPMG 2014). We refer to this problem as overload by distraction.

Empirically, we create new measures of AC responsibilities via textual analysis of AC charters. These charters are created by the ACs themselves, reviewed annually by the AC, and disclosed publicly (SEC 1999b, c, d; PwC and IARF 2011). According to AC directors we informally interviewed who collectively chair or serve on 10 committees, ACs abide by their charters and perform every duty listed therein. This is not surprising, given that AC members have a fiduciary duty to shareholders and face potential civil and criminal liability if they fail to perform their charter duties (Lipman 2015).<sup>2</sup> As such, we posit that the data in a charter can be used to proxy for the nature of responsibilities performed by an AC.

Our sample consists of hand-collected AC charters between 2000 and 2006. We study this period for two reasons. First, concerns about AC overload ballooned in the early 2000s, amid an onslaught of new rules and roles, rising workloads, and unrealistic expectations (Hunt and Carey 2001, Zaman 2001, Bill and Matthews 2007). This fact, combined with significant variation in governance practices that existed during this period, creates a rich setting to test our research question. Second, the SEC required public companies during this time to include a copy of their whole AC charter as an appendix to their publicly available proxy statement at least once every three years (SEC 2000). This allows us to gather a comprehensive time series of historical charters necessary to facilitate studying the effect of AC responsibilities. The charter disclosure rule was modified in November 2006, and after this date, firms maintain only their current AC charter on their company websites and simply refer to the website in proxy statements. We end our sample to coincide with this disclosure regime change.

To operationalize the construct of distraction by noncore duties, we focus on AC oversight over financial risk in our analyses. Financial risks are ones associated with financing or volatility in financial performance, such as market risk, liquidity risk, credit risk, and investment risk.<sup>3</sup> We make this choice because practitioners during our sample period were focused on financial risk oversight as being a distraction for ACs, and practitioner concern arose (at least in part) because this oversight was imposed by the NYSE (SEC Release 34-47672; Zaman 2001, Sweeney and Vallario 2002,

Connelly et al. 2010). Furthermore, public discourse in recent years regarding the possibility of AC overload has focused on risk oversight as the major potential distraction (KPMG 2014, 2015; Brock-Kyle 2019; Vasani 2022). By using financial risk oversight to operationalize the broader construct of AC distraction, we speak directly to the concerns of AC members and those who advise or regulate them.

We measure AC oversight over financial risk as the number of references to financial risk-related words in the charters. Descriptively, 38% of charters make no mention of financial risk oversight, suggesting that many firms do not burden their ACs with such duties, and 41% contain only one financial risk-related term, suggesting that even firms that do assign such duties to the AC may limit the AC's mandated scope for financial risk oversight. However, consistent with overload by distraction, we find empirically that financial risk oversight by the AC is *positively* associated with misstatement propensity (i.e., *worse* financial reporting quality). A one-standard-deviation increase in AC financial risk oversight is associated with an 8.1% increase in the propensity to restate (relative to the mean incidence of restatements in our sample). In addition to controlling for common variables shown by the literature to explain financial reporting quality, we strengthen our inferences by (i) controlling for financial risk inherent to the business, which helps mitigate concerns that inherently riskier firms drive our results; (ii) controlling for firms' previously announced restatements, which helps mitigate concerns about reverse causality; (iii) studying Big R restatements, which helps assuage concerns regarding materiality of the restatements; (iv) showing that the results hold for restatements *unrelated* to financial risk, which helps corroborate our AC distraction hypothesis; (v) using alternate methods of measuring our test variable, which helps mitigate concerns that the calculation of our test variable is driving results; and (vi) entropy balancing our sample, which helps improve results by balancing covariates across treatment and control groups.

We also find cross-sectional evidence that firms can mitigate the harm of noncore duties on financial reporting quality. Specifically, we find the positive association between AC financial risk oversight and restatements is attenuated when the AC has more members (to share duties) and when the firm engages an industry expert external auditor (which can serve as a substitute for AC oversight). On the other hand, we find that the positive association between AC financial risk oversight and restatements is exacerbated when AC members are distracted by multiple concurrent board appointments and when the external auditor is distracted with busy season audits.

We conduct several additional tests. First, we document that AC financial risk oversight is positively associated with the number of AC meetings. We also document a similar association with the turnover of AC

members. Both findings are consistent with the notion that noncore duties, financial risk oversight, in our setting, increase the workload for committee members. Second, we analyze the effects of the AC's internal control-related responsibilities (a core duty) and find that these responsibilities are *negatively* associated with the propensity to restate. This contrast provides additional support for our methodology of measuring AC duties using charters. Third, we conduct a placebo test using the incidence of filler words in the AC charter. Because these words do not capture relevant duties, this measure should not have an association with restatements. Accordingly, we fail to find a significant association. Taken together, these findings reinforce the validity of the inferences from our main analysis.

Finally, studying charters from the years 2000 to 2006 raises a potential concern as to whether AC financial risk oversight is relevant today. Our main contribution is to study whether AC noncore duties can distract the AC from performing its core duties rather than to articulate the effect of a particular noncore duty. Indeed, we acknowledge that financial risk oversight may not always significantly distract ACs and that other distractions likely exist; as firms and markets evolve, we expect the duties that might distract the AC to vary over time. However, to better understand whether AC financial risk oversight remains relevant today, we randomly collect a sample of 100 charters from firms' websites in 2022 and compare their content to the charters in our sample. Descriptively, we find that AC financial risk oversight duties appear in charters in 2022 with a small increase in frequency compared with our sample period.

We make three important contributions. First, we contribute to the debate between practitioners, regulators, and stock exchanges regarding scope creep of AC duties. Our findings lend credence to practitioner concerns that noncore AC duties (and, specifically, financial risk-related duties) impair the oversight of financial reporting. Our analyses highlight a potential unintended consequence of regulatory and stock exchange efforts to broaden the AC agenda. We also show that the harm of scope creep can be mitigated through measures such as enhancing the size of ACs. These are all important insights related to the overall trend of assigning ACs greater and more diverse duties (Zaman 2001, Bonham 2008, Ernst & Young 2014, KPMG 2015). Relatedly, our results highlight to regulators, researchers, and investors the informational value of charters. For example, our results have implications for regulators in determining whether to require easier access to committee charters for investors who may be seeking ways to evaluate the governance effectiveness of board committees and for researchers interested in studying the activities of committees.

Second, we contribute to the board governance literature. Research on board governance began by focusing

largely on how the composition and characteristics of the board are associated with governance effectiveness (Klein 1998, Coles et al. 2008). As stock exchanges began requiring the existence of specific board committees, the literature evolved to focus on how the composition and characteristics of these committees (such as the nominating or compensation committee) were associated with effectiveness (Yermack 1997, Cyert et al. 2002, Huang et al. 2009, Laux and Laux 2009, Cohen et al. 2012, Field et al. 2013, Lee 2020, Carter et al. 2022). Our study has implications for this literature generally and specifically for the literature on the board's risk-related oversight (Hines et al. 2015, Ames et al. 2018). We expand this broad literature by focusing on the AC and the nature of its duties.

Many studies focus on the AC because of its relative importance to a company's overall governance (Chan and Li 2008, Dey 2008, BDO 2022, Foster 2022). This literature conceptualizes drivers of AC effectiveness in terms of three key dimensions: committee composition, resources, and authority (Bédard and Gendron 2010). We focus on the authority component, which includes AC influence and responsibilities (DeZoort et al. 2002). Studies suggest that AC influence matters for effectiveness (Badolato et al. 2014, Beck and Mauldin 2014), but the literature on the effect of AC responsibilities is nascent. An exception is the work of Bratten et al. (2022), who examine AC reports and find that AC oversight of the external audit is associated with better audit and financial reporting quality. We build on their work by examining AC charters (which are different than AC reports) and investigating whether noncore AC duties distract the AC from overseeing financial reporting quality. We expand the literature on the effect of AC responsibilities, showing that not all AC duties have a uniform or beneficial impact on AC effectiveness. Core responsibilities can enhance financial reporting quality, whereas noncore duties, like financial risk oversight, may act as distractors.

Finally, we also contribute to the literature through our development of novel measures that proxy for specific AC duties. Our measures complement but are distinct from existing measures, which include the number of AC meetings (Abbott et al. 2003, Farber 2005, Krishnan 2005, Bédard and Gendron 2010) and oversight of the internal and external auditors (Bratten et al. 2022, Jaggi 2023). Our findings suggest future research exploring AC charters could be fruitful.

## 2. Institutional Details, Related Literature, and Hypothesis Development

### 2.1. Institutional Background: Audit Committee Charters and Duties

We use AC charter disclosures to proxy for the nature of AC responsibilities. The purpose of the charter is to

publicly describe the responsibilities that an AC must perform (SEC 1999b, c, d; PWC and IARF 2011). It is the responsibility of each public company's AC to adopt a charter and to annually reassess its adequacy. Charters must be approved by the board of directors (SEC rulemaking file nos. SR-AMEX-99-38, SR-NYSE-99-39, and SR-NASD-99-48).

The charter's purpose and importance have been stressed by both regulators and academics. For example, the SEC notes that "audit committees that have their responsibilities set forth in a written charter are more likely to play an effective role in overseeing the company's financial reports" (SEC 2000, p. 6). Per regulatory requirements, the charter must specify the scope of the AC's responsibilities and how the AC carries out those responsibilities, including committee structure, processes, and membership requirements (SEC 1999b, c, d). Given the AC's fiduciary responsibility to shareholders, the charter also informs committee members of the matters for which they can be held personally liable (Lipman 2015).

Kalbers and Fogarty (1993) speak of the charter as an instrument for establishing the authority and mandate of the AC. DeZoort et al. (2002, p. 44) state that "the audit committee charter has become an increasingly important document for helping audit committee members focus on their specific responsibilities and for helping stakeholders assess the role and responsibilities of the audit committee." Böhm et al. (2016) and Abbott et al. (2007) also argue that the AC charter illuminates the role of the AC. These manuscripts, along with the work of Carcello et al. (2002), provide evidence of meaningful variation in the content of AC charters and dispel the notion that the charters are exclusively boilerplate. Taken together, the findings of academics and the perspectives of regulators help confirm what AC members reported to us in private discussions: the charter is a useful public signal of actual AC responsibilities.<sup>4</sup>

To better understand the content of AC charters, we manually examine 100 randomly selected charters from our sample period of 2000–2006. In Appendix A, we provide a list of topics that appear in these charters, along with the related regulations (where applicable). We find that some topics in the charters are tied to AC responsibilities stipulated by the SEC or the stock exchanges (e.g., AC responsibility for auditor selection is required by stock exchanges and codified by the Sarbanes-Oxley Act of 2002 (SOX)), whereas other topics are not (e.g., AC review of investments). We observe numerous topics related to financial reporting, internal control, and the external audit. Other common topic areas include internal auditing, regulatory compliance, and financial risk management. Overall, most duties in these charters relate to the AC's core duty of financial reporting oversight, but we also observe some noncore duties, most commonly financial risk oversight.

## 2.2. Related Audit Committee Literature

Studies of ACs date back at least to the work of Greene and Falk (1979), who suggest that a good AC is an integral part of the board at large. Since then, the AC has increased in importance and responsibility. The academic literature has examined characteristics associated with AC effectiveness, commonly discussing three key dimensions: (1) composition, (2) resources, and (3) authority (DeZoort et al. 2002, Bédard and Gendron 2010, Cohen et al. 2014).

AC composition studies are the most common, especially those examining committee members' independence and financial expertise (DeZoort et al. 2002, Carcello et al. 2011, Behrend and Eulerich 2019, Lisic et al. 2019, Alderman and Jollineau 2020). Numerous studies document an association between AC composition characteristics, such as independence, types of expertise, and financial reporting outcomes, measured using restatements, SEC sanctions for misreporting, earnings management proxies, disclosure metrics, accounting conservatism, audit fees, auditor selection, audit quality, and internal control weaknesses (Abbott and Parker 2000; Abbott et al. 2000, 2003, 2004; Carcello and Neal 2000; Klein 2002; Xie et al. 2003; Bédard et al. 2004; Mangena and Pike 2005; Krishnan 2005; Krishnan and Visvanathan 2008; Badolato et al. 2014; Farber et al. 2018; Cheng et al. 2019; Ashraf et al. 2020; Omer et al. 2020; Liu et al. 2021; Myers et al. 2021).<sup>5</sup>

The effectiveness of ACs also depends on their access to resources needed to do their job (Jaggi 2023). These resources include having enough committee members and access to relevant information from management, external and internal auditors, legal counsel, and the full board (DeZoort et al. 2002). Lacking better proxies, many studies in this literature focus on the size of the AC as a measure of resources; however, evidence linking AC size to effectiveness is inconclusive (Xie et al. 2003, Abbott et al. 2004, Bédard et al. 2004).

Finally, AC authority is a function of the AC's influence and responsibilities (DeZoort et al. 2002, He et al. 2017, Cassell et al. 2018). Badolato et al. (2014) examine the influence of the AC using a measure of the status of AC members, relative to management, and find that relative status helps determine AC effectiveness in promoting financial reporting quality. Similarly, Beck and Mauldin (2014) report that AC influence has important implications for negotiating terms of the external audit in the presence of managerial incentives to reduce audit fees and allow earnings management opportunities.

In terms of responsibilities, Bratten et al. (2022) find that financial reporting quality improves when ACs more actively oversee the external audit. Relatedly, numerous studies rely on AC meeting frequency as a measure of diligence, or, put another way, the quantity of AC oversight (Raghunandan and Rama 2007, Bédard and Gendron 2010). Although AC meeting frequency may represent the extent of AC oversight conceptually,

there is no consensus in the literature regarding the empirical association between AC meetings and effectiveness, likely due to measurement limitations such as reverse causality.<sup>6</sup>

In summary, the literature finds that AC composition (and, to some extent, AC access to resources) is associated with monitoring effectiveness. However, the literature on AC responsibilities is nascent. We help fill this gap in the literature by developing new measures of AC responsibilities using AC charters and studying their association with financial reporting quality.

## 2.3. Hypothesis

Capital market participants depend on financial reporting quality to mitigate agency costs of information asymmetry that arise due to the separation of ownership and control (Healy and Palepu 2001). The central role of the AC is to enhance or maintain investor confidence in financial reports and thereby encourage the efficient functioning of financial markets (PwC and IARF 2011). Practically, ACs do this by overseeing the financial reporting process, thus ensuring the reliability of financial reports and disclosures that are disseminated to the market (Bédard and Gendron 2010). Consistent with interviews reported by Beasley et al. (2009), AC members we talked with asserted that they took this responsibility seriously.

Given the importance of AC oversight, we expect the nature of this oversight to impact financial reporting quality. Time allocation theory (Becker 1965) suggests that time is a limited resource, that different types of time use yield different outcomes, and that allocation of time is costly. One implication of this theory in agenda setting is that activities carry an opportunity cost (Zhu 1992) because, when one activity is selected, another is not. In applying this theory to our setting, AC resources and time are limited, and committee members must decide how to allocate their limited resources and time to complete all their responsibilities. Time spent focused on one monitoring activity is time that cannot be spent on another. Thus, there is an opportunity cost to allocating noncore duties to the AC: in a world of constrained resources, ACs that spend time on noncore duties must necessarily spend less time on core duties.

Consistent with this notion, research documents that firms with a standalone risk committee that can focus on risk management (i.e., rather than distracting an AC with risk management) experience long-term financial performance benefits (Ames et al. 2018). Research also finds evidence of a distraction effect that stems from a mix of responsibilities in the external auditor setting. Specifically, Beardsley et al. (2021) argue that focusing too much on the nonaudit side of the business can lower investment in audit quality; they find that audit offices that spend more time performing *nonaudit* services provide lower quality *audit* services. This distraction effect

likely also applies to ACs because noncore duties require time and resources that could otherwise be allocated to core (i.e., financial reporting-related) duties. Indeed, when asked to do many different things, ACs must allot their time and effort across the disparate tasks—some that ultimately benefit financial reporting and others that may not. These arguments have roots in attention and distraction theory (Kahneman 1973, Zhu 1992), which maintains that human beings have limited capacity to process information, that the total amount of attention available for deployment at any given time is limited, and that divided attention can impair effectiveness. The high demands placed on AC members and their limited time and information processing capacity require them to prioritize the committee's agenda in a zero-sum allocation. In other words, the more noncore oversight responsibility the AC has, the more likely it is to devote inadequate time and effort to financial reporting oversight activities, such that the quality of financial reporting is impaired. Following these arguments, we state our hypothesis in its alternative form.

**Hypothesis.** *Financial reporting quality decreases when audit committees perform noncore duties.*

In addition to the previously discussed theoretical support for our directional prediction, we acknowledge arguments that provide some tension to our hypothesis. Allocating duties to the AC outside of its core mandate may benefit financial reporting if extensive and varied oversight gives the AC a deeper understanding of a firm, its management, its risks and strategies, its financial reporting process, and the control environment. A better overall understanding of these areas may enable AC members to hold management more accountable for financial reporting (Simunic 1984, Koh et al. 2013). Furthermore, because audits are based on risk assessments,

AC members who better understand firm risks may provide better oversight of external auditors. These arguments suggest that greater AC noncore duties may *not* impair financial reporting quality.

### 3. Research Design

#### 3.1. Data

Between December 2000 and November 2006, the SEC required all public companies to include a copy of their AC charter as an appendix to their proxy statement at least once every three years (SEC 2000). This rule was relaxed, and the disclosure regime was changed, in November 2006; public companies are now only required to maintain just one *current* version of the AC charter on their company website and simply reference the website in the proxy statements (SEC 2006). The historical requirement to disclose the AC charter in proxy statements between 2000 and 2006, applicable to every public company, allows us to manually gather a comprehensive time series of AC charters from 2000 to 2006. In contrast, after 2006 only the most current AC charter is available on company websites. Aside from data availability, another advantage of this time period is that it provides a rich empirical setting to test our research question because, during this time, (i) concern about AC overload ballooned (Hunt and Carey 2001, Zaman 2001, Bill and Matthews 2007), and (ii) corporate governance and AC duties were in flux due to regulations imposed by stock exchanges and the SEC, yielding significant variation in audit committee responsibilities (e.g., SOX).

As summarized in Table 1, we begin our sample with 18,753 firm-year observations between 2000 and 2006 that are on Compustat and Audit Analytics and can be matched to AC data on BoardEx. We then identify 21,114 Schedule 14A proxy filings associated with these observations and filed on SEC EDGAR between

**Table 1.** Sample Selection

	Number of observations
Firm-year observations at the intersection of Compustat, Audit Analytics, and BoardEx during the period when the SEC required firms to publicly disclose AC charters in Schedule 14A filings (December 2000 to November 2006)	18,753
Less: Firm-year observations for which no AC charters were identified in Schedule 14A filings <sup>a,b</sup>	(8,679)
Less: Charters for firms not on NYSE, NASD, or AMEX	(44)
Base sample of firm-year observations with charters	10,030
Less: Observations missing data to compute necessary control variables	(3,353)
Final sample of firm-year observations used in restatements analyses	6,677
Number of unique firms in final sample	3,307

<sup>a</sup>We lose 8,679 observations because the SEC required firms to publicly disclose AC charters in Schedule 14A filings (filed between December 2000 and November 2006) every third year, rather than every year.

<sup>b</sup>In total, we identified 21,114 Schedule 14A filings on SEC EDGAR for our initial sample of 18,753 firm-year observations. The number of Schedule 14A filings exceeds the number of firm-year observations because, in some cases, firms file more than one Schedule 14A proxy filing during a year. The SEC requires firms to file a proxy statement prior to every solicitation of a proxy, be it in conjunction with the annual meeting or any other special meeting that facilitates shareholder approval of other corporate actions (17 CFR §240.14a-2). This is why our sample of Schedule 14A filings is larger than the number of firm-year observations.

December 15, 2000 (the start of SEC regulation requiring proxy filings to include AC charters at least every third year) and November 7, 2006 (the end of the SEC requirement to include AC charters in proxy filings). Using textual analysis, we eliminate 2,461 proxy filings that do not mention at least once the words “audit committee charter” or “charter of the audit committee” in Schedule 14A. We then enlist research assistants to help analyze the content of the 18,653 remaining proxy filings and manually extract the complete AC charter and the number of AC meetings from these filings.<sup>7</sup> This results in 10,074 firm-year observations for which we can identify an AC charter. We eliminate 44 observations that are not on a major U.S. stock exchange (i.e., NYSE, the National Association of Securities Dealers Automated Quotations (NASDAQ), and the American Stock Exchange (AMEX)), resulting in a base sample of 10,030 Compustat-Audit Analytics firm-year observations that have both hand-collected AC charter data and AC data available on BoardEx.<sup>8</sup> Firm-years *without* a charter observation are excluded from our sample. Finally, we lose 3,353 observations because of missing data to calculate necessary control variables. This results in a sample of 6,677 firm-year observations for our analyses.

### 3.2. Model

We test our hypothesis by estimating the following ordinary least squares (OLS) model:

$$\begin{aligned} RESTATE_{it} &= \beta_0 + \beta_1 RISK\_OVERSIGHT_{it} + \sum \beta_n Controls_{it} \\ &+ \sum \beta_i Stock\ Exchange\ FE + \sum \beta_j Industry\ FE \\ &+ \sum \beta_k Year\ FE + \varepsilon_{it}, \end{aligned} \quad (1)$$

where the dependent variable, *RESTATE*, is an indicator variable equal to one if firm *i*'s 10-K for year *t* is restated after the original issuance of the same 10-K (zero otherwise).<sup>9</sup> *RESTATE* encompasses both Big R (which require 8-K Item 4.02 disclosures) and little r restatements, all obtained from Audit Analytics. We focus on *RESTATE* because financial misstatements indicate poor financial reporting quality and are commonly used in the literature (Dechow et al. 2010). Furthermore, AC directors have strong incentives to prevent restatements, as prior research finds that there are significant negative labor market consequences for AC members following restatements (Srinivasan 2005). Our coefficient of interest is  $\beta_1$ , which captures the effect of our primary test variable, *RISK\_OVERSIGHT*.

To calculate *RISK\_OVERSIGHT*, we begin with the verbiage in stock exchange listing requirements related to financial risk oversight (SEC 2003a). We supplement this with additional words and phrases related to financial risk oversight that we identify from a manual review of

100 AC charters randomly selected from our sample. The financial risk-related terms we identify are as follows: *financial risk, financial exposure, hedg\*, derivativ\*, swaps, forward contract, commodity, commodities, interest rate, foreign exchange, exchange rate, currency, currencies, futures, trading, stock options, put options, call options, treasury, asset management, investments, investing, capital structure, debt, and equity* (including plural equivalents). We then apply textual analysis to identify the frequency with which these words or phrases appear in each charter in our sample. We measure *RISK\_OVERSIGHT* as the total number of financial risk-related terms in the charter of firm *i* in year *t* scaled by the count of audit and accounting terms (which is our measure of total duties in the charter, as captured by *TOTAL\_DUTIES*) and then multiplied by 100 for expositional convenience.<sup>10</sup> *RISK\_OVERSIGHT* therefore captures the relative focus on financial risk oversight duties performed by the AC. See Appendix B for an example of an audit committee charter and its financial risk-related duties. If a relatively greater emphasis on financial risk overloads an AC, then it likely detracts from effective oversight over financial reporting as predicted by our hypothesis. Accordingly, we expect the coefficient on *RISK\_OVERSIGHT* to be positive, indicating that more AC focus on financial risk oversight is associated with a greater propensity to restate (i.e., *worse* financial reporting quality).

We include a number of firm-year control variables in Equation (1). First, to ensure our results are not driven by a denominator effect, we include *LOG\_TOTAL\_DUTIES* (the log of *TOTAL\_DUTIES*, which is the denominator in *RISK\_OVERSIGHT*). Second, we include control variables that the literature has shown to impact the quality of a firm's corporate governance or financial reporting. Specifically, we control for *ACCT\_EXPERTISE*, *LEGAL\_EXPERTISE*, *AC\_BUSY*, *AC\_SIZE*, *AC\_TENURE*, *BOARD\_SIZE*, *BOARD\_INDEP*, and *CEO\_CHAIR* (Brickley et al. 1997, Core et al. 1999, Carcello and Neal 2000, Xie et al. 2003, Krishnan and Visvanathan 2008, Krishnan et al. 2011). We also control for *AC\_MEETINGS* in all multivariate analyses, defined as the number of meetings the AC of firm *i* holds during year *t*. We include these variables to ensure that our charter-based measure is distinct from other measures that may capture governance or financial report quality. We also control for a firm's risk management governance by including *RISK\_COMMITTEE* (an indicator for the existence of a dedicated board-level risk committee) to address the possibility that boards with risk committees might allocate financial risk-related duties differently.

Third, we control for factors commonly found in models of accounting misstatements, including *SIZE*, *MTB*, *LEVERAGE*, *ISSUANCE*, *ROA*, and *INST\_OWN* (Badolato et al. 2014, Ashraf 2024). We also include controls for audit quality (*BIGN*), audit effort (*AUDIT\_FEES*), going concern opinions (*GOING\_CONCERN*),



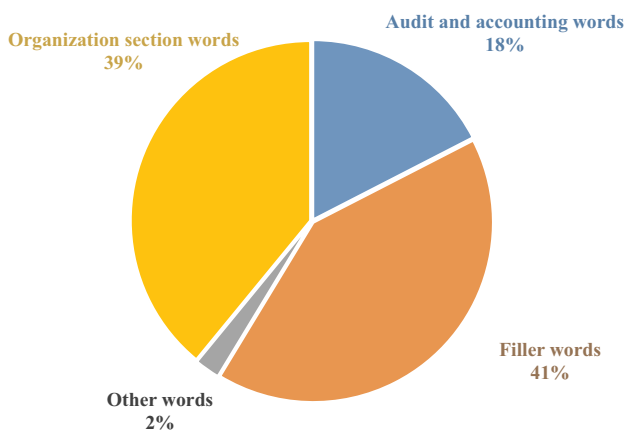
and whether the firm is subject to internal control audits (*SOX404\_AUDIT*). Fourth, because our primary test variable captures AC oversight of financial risk, we control for the firm's underlying exposure to financial risk by including the variables *RISK\_10KCOUNT* (the natural log of one plus the total number of times the 10-K of firm  $i$  in year  $t$  includes the same financial risk words used to calculate *RISK\_OVERSIGHT*), *DERIVATIVES*, *FOREIGN\_CURRENCY*, *SECURITIES*, *SEGMENTS*, *RESTRUCTURE*, and *ACQUISITION*. We also include *RESTATE\_ANNOUNCE* at years  $t - 1$  and  $t - 2$  to control for the possibility that ACs adjust their duties in response to revealed misstatements. Finally, we include fixed effects for industry (defined as two-digit standard industrial classification (SIC)), year, and stock exchange to address additional cross-sectional and time series variation. All control variables are defined in Appendix C.

## 4. Results

### 4.1. Descriptive Statistics and Pearson Correlations

We begin by providing summary statistics of AC charter content in our sample in Figure 1. The organization section of charters is where ACs describe their composition and procedural conventions; it comprises 39%

**Figure 1.** (Color online) Composition of Audit Committee Charters



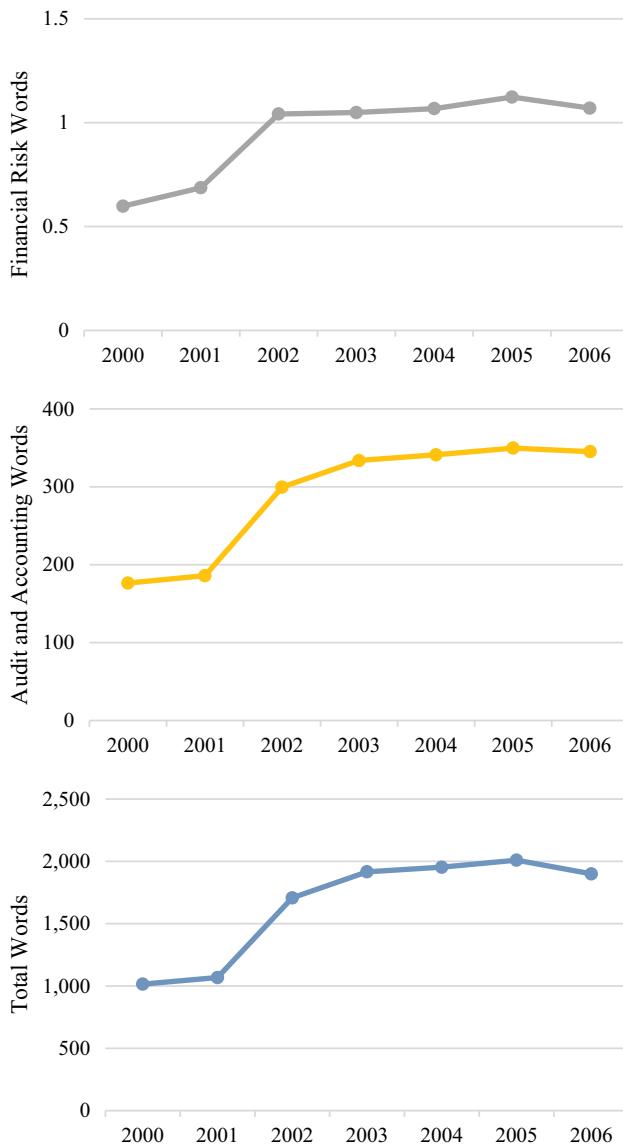
*Notes.* This figure depicts the average breakdown of AC charter content. Our proxy for the universe of audit and accounting words is the combination of terms from (1) *A Dictionary of Accounting* (Oxford University Press) and (2) the *Auditing Dictionary of Terms* from the CPA Accounting Institute for Success. Audit and accounting words include the financial risk-related words we use to calculate *RISK\_COUNT* and the internal control-related words we use to calculate *IC\_COUNT*. Organization section words are words used in the section of charters that describes the makeup, qualifications, compensation, meetings, and other characteristics and procedural conventions of the AC. Filler words are the words in the stop word list provided by Loughran and McDonald (2011). Other words is a catch-all category that includes all other words.

of charter content in our sample.<sup>11</sup> Accounting and auditing words used to describe AC duties (i.e., those included in the calculation of *TOTAL\_DUTIES*) comprise 18% of the total words in charters (on average) and include financial risk-related responsibilities, which are the focus of our study. Filler words—such as *and*, *the*, *a*, *of*, and *is*, based on the stop word list provided by Loughran and McDonald (2011)—comprise 41% of charter words, on average (*FILLER\_WORDS*). In total, our word lists cover about 98% of the charter content. These initial summary statistics highlight the dual focus of AC charters in describing the organization and duties of the committee.

As reported in Figure 2, there is time series variation in the content of AC charters. We observe that the prevalence of financial risk-related words in AC charters generally rises over time. The average number of references to audit and accounting words (i.e., *TOTAL\_DUTIES*) in AC charters also increases over time, from under 200 words before SOX (i.e., before 2002) to 300 or more words after SOX (i.e., after 2002). This increase in duties is consistent with greater AC oversight mandated by SOX, providing descriptive corroboration of the validity of charter-based measures. In Figure 3, we provide additional detail on the prevalence of financial risk-related terms in AC charters. Thirty-eight percent of charters make no mention of financial risk oversight, 41% use one of the financial risk-related terms, 13% use two, and 8% use three or more. Thus, although some ACs describe significant financial risk oversight duties in their charters, many do not: 79% of charters include one or zero financial risk-related terms.

Table 2 presents descriptive statistics for our main sample. On average, AC charters contain roughly one reference to financial risk oversight (*RISK\_COUNT*); the maximum number of references to financial risk oversight in our sample is eight (untabulated). The average value of *RISK\_OVERSIGHT* (which has *TOTAL\_DUTIES* as a scalar and represents a relative focus on financial risk oversight duties) is 0.33. The average number of audit and accounting words in AC charters (*TOTAL\_DUTIES*) in our sample is 298, with an interquartile range of 173 words, suggesting economically significant variation across ACs, consistent with Carcello et al. (2002). On average in our sample, ACs meet roughly seven times per year and have close to four members (unlogged). On average, firms in our sample have a market capitalization of \$845 million (unlogged), return on assets of 1%, and market-to-book of 3.16. In general, the descriptive statistics of our variables are comparable to those of prior studies (Carcello and Neal 2003, Krishnan et al. 2011, Badolato et al. 2014). There are very few observations in our sample (1%) that have a risk committee (*RISK\_COMMITTEE*), but among those that do, there is significant membership overlap

**Figure 2.** (Color online) Time Trends of Financial Risk Oversight Words, Audit and Accounting Words, and Total Charter Length in AC Charters



Note. This figure depicts the time trend in the average number of financial risk-related words, audit and accounting words, and total words in AC charters over our sample period.

between committees: 77% of risk committees in our sample include at least one AC member (untabulated).

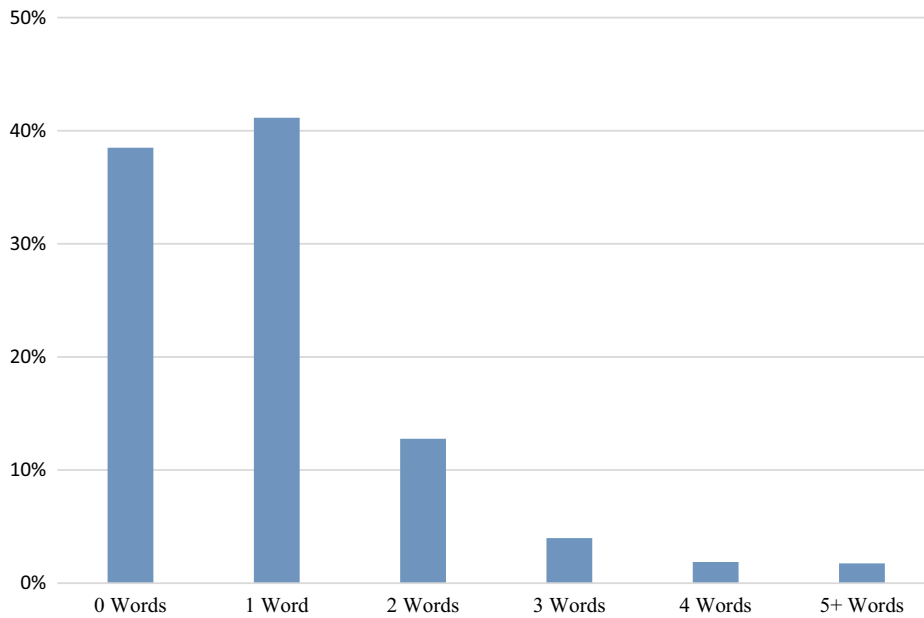
In Table 3, we present Pearson correlations among *RISK\_OVERSIGHT*, *RESTATE*, and the control variables included in Equation (1). *RESTATE* exhibits a positive and significant correlation with *RISK\_OVERSIGHT* ( $\rho = 0.03$ ;  $p < 0.01$ ), consistent with noncore duties distracting ACs and impairing their oversight of financial reporting. We evaluate this relation in more detail in subsequent multivariate analyses.

## 4.2. AC Financial Risk Oversight Duties and Financial Reporting Reliability

**4.2.1. Main, Additional, and Sensitivity Analyses.** We begin our analyses by examining the on-average relation between AC financial risk oversight and restatements using Equation (1). Results of this analysis are presented in column 1 of Table 4. The coefficient on *RISK\_OVERSIGHT* is positive and significant ( $p < 0.05$ ). This suggests that the on-average quality of financial reports is lower when the AC is more focused on financial risk oversight, consistent with the notion that noncore duties distract the AC from performing its oversight over financial reporting. A one-standard-deviation increase in *RISK\_OVERSIGHT* is associated with an increase of 8.1% in restatements, relative to the overall incidence rate of restatements in our sample. Coefficients on control variables are generally comparable to those in the literature (Abbott et al. 2004, Archambeault et al. 2008, Carcello et al. 2011, Sharma and Iselin 2012, Badolato et al. 2014, Cohen et al. 2014, Ashraf et al. 2020, Omer et al. 2020).

To strengthen confidence in our main result in column 1 and to assess whether it reflects an effect that is material and meaningful, we next examine whether our inferences remain consistent when studying material (Big R) Item 4.02 restatements (*RESTATE\_MATERIAL*). In our main analysis, we do not explicitly focus on Item 4.02 restatements because the categorization of Item 4.02 and non-Item 4.02 exists only from August 2004 onward, which would greatly restrict our sample, and because little *r* restatements can be significant in their own right and are often leading indicators of poor financial reporting quality (Choudhary et al. 2021). Nonetheless, for this additional analysis, we identify Big R restatements as those that are accompanied by an amended filing in a 60-day window centered on restatement disclosure dates or are identified by Audit Analytics as having been filed in an Item 4.02 8-K disclosure. We report results using this alternate dependent variable in column 2 of Table 4. The coefficient on *RISK\_OVERSIGHT* remains positive and significant ( $p < 0.01$ ), suggesting that the impact of AC distraction from noncore duties on financial reporting oversight extends to material misstatements.<sup>12</sup>

Next, to further mitigate the concern that our results arise because *RISK\_OVERSIGHT* captures firms' underlying financial risk exposure rather than AC oversight over financial risk, we re-estimate our main model after separating the dependent variable into restatements that relate to financial risk (*RESTATE\_FINRISK*) and those that do not (*RESTATE\_NOT\_FINRISK*).<sup>13</sup> We expect a firm's underlying exposure to financial risk to be positively associated with the likelihood of a misstatement related to financial risk. We observe this result for the control variable *RISK\_10KCOUNT* in column 3 of Table 4 when *RESTATE\_FINRISK* is the dependent

**Figure 3.** (Color online) Proportion of AC Charters That Include Financial Risk-Related Words

Note. This figure depicts the percentage of AC charters that include zero, one, two, three, four, and five or more of the financial risk-related terms that make up *RISK\_COUNT* (see Appendix C for a list of these terms).

variable: the coefficient on *RISK\_10KCOUNT* is positive and significant ( $p < 0.01$ ). However, in column 4, when *RESTATE\_NOT\_FINRISK* is the dependent variable, *RISK\_10KCOUNT* is insignificant ( $p > 0.10$ ). These results provide reassurance that *RISK\_10KCOUNT* is appropriately controlling for the misstatement risk that exists due to a firm's underlying financial risk exposure. If our test variable, *RISK\_OVERSIGHT*, also simply reflects a firm's underlying exposure to financial risk, one would expect a similar pattern of results (i.e., a positive association with *RESTATE\_FINRISK*). Contrary to this, the coefficient on *RISK\_OVERSIGHT* is insignificant ( $p > 0.10$ ) in column 3 but significantly positive ( $p < 0.05$ ) in column 4.<sup>14</sup> This mitigates the possibility that *RISK\_OVERSIGHT* is simply capturing

firms with greater underlying financial risk exposure that may be more likely to restate. We interpret these results as corroboration for our inference that financial reporting quality can suffer when ACs become overloaded by noncore duties that distract them from their core duties. However, these results also suggest that financial reporting quality may *not* suffer if ACs are assigned noncore duties that are specifically related to the accounting risk area; in our case, having the AC oversee financial risk oversight appears to *not* be harmful to financial risk-related financial reporting quality. In summary, the combination of results in Table 4 support the hypothesis of AC overload by distraction and the validity of *RISK\_OVERSIGHT* as a proxy for AC financial risk oversight duties.

**Table 2.** Descriptive Statistics ( $n = 6,677$ )

Variable	Mean	Standard deviation	25%	Median	75%
Main test variable					
<i>RISK_OVERSIGHT</i> (% of words)	0.33	0.39	0.00	0.27	0.50
<i>RISK_COUNT</i> (# of words)	0.96	1.14	0.00	1.00	1.00
Dependent variable					
<i>RESTATE</i>	0.16	0.36	0.00	0.00	0.00
Governance control variables					
<i>LOG_TOTAL_DUTIES</i> (unlogged)	297.98	125.17	203.00	286.00	376.00
<i>AC_MEETINGS</i>	6.70	3.35	4.00	6.00	9.00
<i>ACCT_EXPERTISE</i>	0.58	0.49	0.00	1.00	1.00
<i>LEGAL_EXPERTISE</i>	0.38	0.49	0.00	0.00	1.00
<i>AC_BUSY</i>	3.36	1.68	2.17	3.00	4.20

**Table 2.** (Continued)

Variable	Mean	Standard deviation	25%	Median	75%
<i>AC_SIZE</i>	1.31	0.27	1.10	1.39	1.39
<i>AC_TENURE</i>	6.75	4.20	3.70	5.90	9.03
<i>BOARD_SIZE</i>	2.15	0.31	1.95	2.08	2.40
<i>BOARD_INDEP</i>	0.64	0.18	0.56	0.67	0.75
<i>CEO_CHAIR</i>	0.60	0.49	0.00	1.00	1.00
<i>RISK_COMMITTEE</i>	0.01	0.12	0.00	0.00	0.00
Other control variables					
<i>SIZE</i>	6.74	1.78	5.55	6.67	7.86
<i>MTB</i>	3.16	3.62	1.50	2.23	3.67
<i>LEVERAGE</i>	0.17	0.19	0.01	0.12	0.28
<i>ISSUANCE</i>	0.33	0.47	0.00	0.00	1.00
<i>ROA</i>	0.01	0.15	0.00	0.03	0.07
<i>INST_OWN</i>	0.55	0.28	0.33	0.57	0.77
<i>BIGN</i>	0.90	0.30	1.00	1.00	1.00
<i>AUDIT_FEES</i>	13.31	1.26	12.38	13.19	14.11
<i>GOING_CONCERN</i>	0.00	0.07	0.00	0.00	0.00
<i>SOX404_AUDIT</i>	0.22	0.42	0.00	0.00	0.00
<i>RISK_10KCOUNT</i>	5.33	0.67	4.88	5.31	5.75
<i>DERIVATIVES</i>	0.28	0.45	0.00	0.00	1.00
<i>FOREIGN_CURRENCY</i>	0.39	0.49	0.00	0.00	1.00
<i>SECURITIES</i>	0.45	0.50	0.00	0.00	1.00
<i>SEGMENTS</i>	4.45	2.91	2.00	4.00	6.00
<i>RESTRUCTURE</i>	0.23	0.42	0.00	0.00	0.00
<i>ACQUISITION</i>	0.11	0.32	0.00	0.00	0.00
<i>RESTATE_ANNOUNCE<sub>t-1</sub></i>	0.04	0.20	0.00	0.00	0.00
<i>RESTATE_ANNOUNCE<sub>t-2</sub></i>	0.03	0.18	0.00	0.00	0.00
<i>NYSE_2002</i>	0.34	0.47	0.00	0.00	1.00

Notes. This table reports descriptive statistics. All continuous variables are winsorized at the 1st and 99th percentiles. The sample period is from 2000 through 2006. All variable definitions are provided in Appendix C.

In Table 5, we present sensitivity tests related to how we measure AC financial risk oversight. Our main measure of financial risk oversight is calculated using a continuous count of financial risk-related terms in the AC charter and scaled by a continuous measure of total AC duties. To provide robustness around measurement of *RISK\_OVERSIGHT*, we first seek to address the potential concern that some of the search terms we use in defining *RISK\_OVERSIGHT* capture underlying financial reporting complexity. The concern here is that some of the words that we use to calculate *RISK\_OVERSIGHT* may represent AC oversight over the accounting related to those words rather than oversight over real activities. We address this concern by re-estimating Equation (1) with the alternate test variable *RISK\_OVERSIGHT\_THIN*. In calculating this variable, we limit the financial risk-related search terms to *financial risk*, *financial exposure*, *asset management*, and *treasury*; this methodology excludes all the other terms used to calculate *RISK\_OVERSIGHT*, such as *hedg\** and *derivative\**. We pick these four terms because they are clearly and unambiguously related to AC oversight over financial risk management real activities, whereas the other words may be capturing financial risk-related accounting or reporting oversight. As reported in column 1 of

Table 5, the coefficient on *RISK\_OVERSIGHT\_THIN* is positive and significant ( $p < 0.05$ ).

Second, our main measure *RISK\_OVERSIGHT* counts the instances of all the search terms from our list, such that duplicate uses of the same term within a charter are counted each time. We made this choice because arguably the more times an AC repeats financial risk-related words in their charters, the more likely they are to emphasize that oversight in their activities. To examine whether this design choice impacts our results, we re-estimate Equation (1) using the test variable *RISK\_OVERSIGHT\_UNIQUE*, which is calculated like *RISK\_OVERSIGHT* except that we count each unique search term only once per AC charter. In column 2 of Table 5, we report consistent results using this alternate test variable ( $p < 0.01$ ). Third, we use unscaled measures *RISK\_COUNT* and *LOG\_RISK\_COUNT*. In columns 3 and 4 of Table 5, the coefficients on these unscaled measures are both positive and significant ( $p < 0.05$ ). Fourth, we estimate a specification using *RISK\_OVERSIGHT\_HIGH* as a binary indicator of risk oversight. For this variable, we sort observations into terciles based on *RISK\_OVERSIGHT*. We assign observations in the top tercile to *RISK\_OVERSIGHT\_HIGH* = 1, with observations in the middle and bottom tercile being assigned to

**Table 3.** Pearson Correlations ( $n = 6,677$ )

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
1 RISK_OVERSIGHT																			
2 RESTATE	0.03																		
3 LOG_TOTAL_DUTIES	-0.04	-0.01																	
4 AC_MEETINGS	0.00	0.02	0.32																
5 ACCT_EXPERTISE	0.00	-0.01	0.14	0.14															
6 LEGAL_EXPERTISE	-0.03	0.00	0.04	0.02	-0.03														
7 AC_BUSY	0.01	0.01	-0.05	0.01	0.00	0.01													
8 AC_SIZE	-0.02	-0.05	0.07	0.17	0.13	0.18	0.00												
9 AC_TENURE	-0.03	-0.01	-0.07	-0.02	-0.13	0.07	-0.13	0.07											
10 BOARD_SIZE	-0.03	-0.06	0.01	0.17	0.04	0.14	0.05	0.55	0.12										
11 BOARD_INDEP	0.00	-0.04	0.20	0.22	0.15	-0.01	0.02	0.28	0.02	0.09									
12 CEO_CHAIR	0.00	0.01	-0.06	-0.05	-0.03	0.01	0.01	0.06	0.03	0.04	0.16								
13 RISK_COMMITTEE	-0.01	-0.02	0.04	0.08	-0.02	0.06	0.03	0.12	-0.01	0.15	0.04	0.01							
14 SIZE	-0.02	0.01	-0.03	0.19	0.03	0.10	0.24	0.31	0.05	0.48	0.11	0.16	0.11						
15 MTB	0.00	-0.01	-0.05	-0.05	0.01	-0.01	0.09	-0.06	-0.04	-0.07	0.03	0.01	-0.04	0.18					
16 LEVERAGE	0.00	0.03	0.02	0.02	0.01	0.06	0.08	0.04	-0.05	0.10	-0.06	0.07	-0.01	0.12	-0.07				
17 ISSUANCE	0.00	0.01	0.02	-0.07	0.01	-0.03	0.07	-0.15	-0.16	-0.12	-0.07	-0.01	-0.03	0.08	0.05	0.33			
18 ROA	-0.02	-0.02	0.00	0.00	0.01	0.02	-0.12	0.09	0.13	0.08	0.05	0.08	0.01	0.25	0.04	-0.02	-0.12		
19 INST_OWN	-0.01	0.06	0.04	0.21	0.08	0.01	0.13	0.11	0.03	0.08	0.20	0.09	0.02	0.47	0.04	0.12	0.02	0.20	
20 BIGN	-0.01	0.03	-0.03	0.05	0.02	0.04	0.17	0.06	-0.02	0.14	0.03	0.07	0.02	0.37	0.02	0.13	0.05	0.04	
21 AUDIT_FEES	-0.04	0.03	0.16	0.38	0.13	0.08	0.21	0.32	-0.04	0.40	0.21	0.12	0.09	0.70	-0.01	0.18	-0.01	0.09	
22 GOING_CONCERN	-0.02	-0.01	0.00	0.01	0.01	0.02	-0.01	0.00	-0.01	-0.03	0.00	-0.02	-0.01	-0.07	-0.01	-0.01	0.01	-0.11	
23 SOX404_AUDIT	-0.01	-0.05	0.24	0.38	0.14	0.00	-0.01	0.11	-0.01	0.09	0.24	-0.06	0.06	0.13	-0.01	-0.01	-0.03	0.06	
24 RISK_10KCOUNT	0.01	0.01	0.17	0.28	0.07	0.07	0.13	0.30	-0.07	0.40	0.10	0.07	0.14	0.46	-0.07	0.28	0.05	-0.01	
25 DERIVATIVES	-0.01	-0.01	0.18	0.22	0.06	0.05	0.05	0.21	0.03	0.21	0.18	0.06	0.11	0.30	-0.05	0.20	0.03	0.12	
26 FOREIGN_CURRENCY	0.00	0.04	0.00	0.10	0.06	-0.06	0.09	0.03	0.02	-0.01	0.09	0.03	-0.04	0.21	0.06	-0.05	-0.06	0.07	
27 SECURITIES	0.00	-0.01	0.03	0.12	0.00	-0.02	0.05	0.12	0.07	0.18	0.09	-0.06	0.09	0.16	0.00	-0.18	-0.15	-0.10	
28 SEGMENTS	-0.01	0.03	-0.04	0.11	0.06	0.02	0.10	0.13	0.07	0.08	0.07	0.08	-0.06	0.31	-0.01	0.05	-0.05	0.09	
29 RESTRUCTURE	0.02	0.05	0.09	0.19	0.08	-0.02	0.08	0.09	-0.04	0.06	0.14	0.00	-0.01	0.11	-0.04	0.03	-0.05	-0.13	
30 ACQUISITION	0.01	0.03	-0.03	-0.02	0.01	-0.03	0.06	-0.07	-0.05	-0.05	-0.03	0.04	-0.02	0.05	0.02	0.02	0.13	0.00	
31 RESTATE_ANNOUNCE <sub>t-1</sub>	-0.01	0.03	0.07	0.12	0.04	-0.02	-0.04	0.00	-0.03	-0.02	0.04	-0.01	0.02	-0.02	-0.02	0.03	0.00	-0.05	
32 RESTATE_ANNOUNCE <sub>t-2</sub>	0.00	0.02	0.06	0.12	0.02	0.03	-0.02	-0.02	0.01	-0.02	0.04	0.01	0.00	-0.03	-0.01	0.02	0.01	-0.02	
33 NYSE_2002	0.01	-0.01	0.34	0.27	0.10	0.08	0.03	0.24	0.05	0.21	0.19	0.08	0.05	0.35	-0.06	0.21	0.03	0.15	

**Table 3.** (Continued)

	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
1 RISK_OVERSIGHT														
2 RESTATE														
3 LOG_TOTAL_DUTIES														
4 AC_MEETINGS														
5 ACCT_EXPERTISE														
6 LEGAL_EXPERTISE														
7 AC_BUSY														
8 AC_SIZE														
9 AC_TENURE														
10 BOARD_SIZE														
11 BOARD_INDEP														
12 CEO_CHAIR														
13 RISK_COMMITTEE														
14 SIZE														
15 MTB														
16 LEVERAGE														
17 ISSUANCE														
18 ROA														
19 INST_OWN														
20 BIGN	0.35													
21 AUDIT_FEES	0.42	0.33												
22 GOING_CONCERN	-0.05	-0.01	0.01											
23 SOX404_AUDIT	0.22	0.01	0.36	0.01										
24 RISK_10KCOUNT	0.16	0.16	0.54	0.01	0.15									
25 DERIVATIVES	0.19	0.11	0.36	0.01	0.17	0.37								
26 FOREIGN_CURRENCY	0.25	0.13	0.35	-0.02	0.06	0.09	0.11							
27 SECURITIES	-0.04	-0.01	0.09	-0.04	0.10	0.24	0.04	-0.02						
28 SEGMENTS	0.24	0.17	0.47	0.00	0.04	0.20	0.19	0.52	-0.05					
29 RESTRUCTURE	0.15	0.09	0.30	0.04	0.05	0.15	0.16	0.29	0.06	0.27				
30 ACQUISITION	0.10	0.05	0.05	-0.02	-0.01	-0.04	-0.02	0.07	-0.04	0.06	0.04			
31 RESTATE_ANNOUNCE <sub>t-1</sub>	-0.01	-0.03	0.09	0.05	0.10	0.06	0.03	0.02	0.00	0.02	0.07	0.00		
32 RESTATE_ANNOUNCE <sub>t+2</sub>	0.00	-0.02	0.06	-0.01	0.10	0.04	0.02	0.00	0.00	0.03	0.04	-0.02	0.09	
33 NYSE_2002	0.26	0.15	0.43	-0.02	0.19	0.33	0.39	0.07	-0.04	0.20	0.11	-0.03	0.03	0.04

Notes. This table provides Pearson correlations for variables in our main model. The sample period is from 2000 through 2006. All variable definitions are provided in Appendix C. Correlations in bold are significant at the 10% level or lower.

**Table 4.** Association Between AC Financial Risk Oversight and Restatements

	(1)		(2)		(3)		(4)	
	Coefficient	t statistic	Coefficient	t statistic	Coefficient	t statistic	Coefficient	t statistic
RISK_OVERSIGHT (pred):	(+) 0.0332	2.20**	(+) 0.0383	2.63***	(?) 0.0079	0.79	(+) 0.0244	1.76**
LOG_TOTAL_DUTIES	-0.0229	-1.59	-0.0217	-1.60	-0.0169	-1.64	-0.0137	-1.08
AC_MEETINGS	0.0003	0.17	0.0010	0.60	-0.0006	-0.46	0.0013	0.86
ACCT_EXPERTISE	-0.0052	-0.46	-0.0041	-0.39	-0.0048	-0.58	-0.0026	-0.26
LEGAL_EXPERTISE	0.0034	0.29	0.0077	0.72	0.0088	1.02	-0.0060	-0.59
AC_BUSY	-0.0018	-0.45	-0.0040	-1.06	-0.0056	-2.14**	0.0033	0.89
AC_SIZE	-0.0279	-1.20	-0.0260	-1.21	-0.0288	-1.67*	-0.0097	-0.48
AC_TENURE	0.0009	0.67	0.0006	0.46	0.0007	0.66	0.0004	0.34
BOARD_SIZE	-0.0626	-2.47**	-0.0560	-2.32**	-0.0142	-0.74	-0.0677	-3.00***
BOARD_INDEP	-0.1136	-3.02***	-0.0651	-1.88*	-0.0663	-2.33**	-0.0956	-2.82***
CEO_CHAIR	0.0075	0.65	0.0067	0.62	-0.0076	-0.88	0.0200	1.99**
RISK_COMMITTEE	0.0063	0.14	0.0275	0.60	0.0116	0.25	0.0140	0.40
SIZE	-0.0040	-0.63	-0.0021	-0.35	-0.0124	-2.80**	0.0045	0.79
MTB	0.0003	0.20	0.0015	0.99	-0.0006	-0.58	0.0002	0.18
LEVERAGE	0.0748	1.81*	0.0823	2.06**	0.0020	0.07	0.0806	2.10**
ISSUANCE	-0.0001	0.00	0.0036	0.32	0.0172	1.84*	-0.0081	-0.78
ROA	-0.0486	-1.31	-0.0436	-1.24	-0.0435	-1.66*	-0.0135	-0.41
INST_OWN	0.0926	3.37***	0.0908	3.55***	0.0358	1.79*	0.0843	3.44***
BIGN	-0.0090	-0.48	0.0059	0.35	0.0058	0.45	-0.0160	-0.96
AUDIT_FEES	0.0206	2.15**	0.0154	1.66*	0.0214	2.83***	0.0077	0.91
GOING_CONCERN	-0.0612	-1.09	-0.0497	-0.94	-0.0332	-0.73	-0.0561	-1.32
SOX404_AUDIT	-0.0383	-2.02**	-0.0395	-2.21**	-0.0236	-1.70*	-0.0284	-1.70*
RISK_10KCOUNT	0.0122	0.97	0.0101	0.86	0.0258	2.74***	-0.0060	-0.55
DERIVATIVES	-0.0096	-0.66	-0.0166	-1.18	0.0094	0.82	-0.0204	-1.60
FOREIGN_CURRENCY	0.0195	1.28	0.0198	1.37	0.0098	0.86	0.0183	1.35
SECURITIES	0.0141	1.12	0.0153	1.31	-0.0003	-0.03	0.0170	1.51
SEGMENTS	0.0014	0.51	0.0035	1.35	0.0030	1.41	-0.0005	-0.22
RESTRUCTURE	0.0034	0.24	-0.0061	-0.47	-0.0054	-0.53	0.0075	0.60
ACQUISITION	0.0114	0.72	0.0187	1.23	0.0137	1.12	0.0065	0.45
RESTATE_ANNOUCE <sub>t-1</sub>	0.0316	1.26	0.0380	1.55	-0.0021	-0.12	0.0326	1.36
RESTATE_ANNOUCE <sub>t-2</sub>	0.0185	0.65	0.0154	0.60	-0.0100	-0.50	0.0379	1.46
NYSE_2002	-0.0210	-0.99	0.0153	0.81	-0.0311	-1.94*	0.0043	0.23
Industry fixed effects	Yes		Yes		Yes		Yes	
Year fixed effects	Yes		Yes		Yes		Yes	
Exchange fixed effects	Yes		Yes		Yes		Yes	
Adjusted R <sup>2</sup>	0.055		0.061		0.037		0.067	
Number of observations where the dependent variable = 1	1,048		838		423		706	
Total observations	6,677		6,467		6,052		6,335	

Notes. This table reports results from OLS regressions relating AC oversight over financial risk management to financial reporting quality. All variables are defined in Appendix C. Industry is defined at the 2-digit SIC level. T-statistics are based on robust standard errors clustered at the firm level.

\*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively, using one-tailed tests for coefficients with a sign that matches the directional prediction (if a directional prediction is made) and two-tailed tests otherwise.

**Table 5.** Sensitivity Analyses Around Measurement of AC Financial Risk Oversight

	(1)		(2)		(3)		(4)		(5)		(6)	
	Using RISK_OVERSIGHT THIN		Using RISK_OVERSIGHT UNIQUE		Using RISK COUNT		Using LOG RISK COUNT		Using RISK OVERSIGHT_HIGH		Entropy balanced	
(pred)	Coefficient	t statistic	Coefficient	t statistic	Coefficient	t statistic	Coefficient	t statistic	Coefficient	t statistic	Coefficient	t statistic
RISK_OVERSIGHT_THIN	0.0542	1.94**										
RISK_OVERSIGHT_UNIQUE			0.0126	2.72***								
RISK_COUNT					0.0084	1.71**						
LOG_RISK_COUNT							0.0231	1.96**				
RISK_OVERSIGHT_HIGH									0.0337	2.71***	0.0332	2.66***
Entropy balanced	No	No	No	No	No	No	No	No	No	No	Yes	Yes
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Exchange fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R <sup>2</sup>	0.055	0.056	0.055	0.056	0.055	0.055	0.055	0.055	0.056	0.056	0.062	0.062
Observations	6,677	6,677	6,677	6,677	6,677	6,677	6,677	6,677	6,677	6,677	6,677	6,677

Notes. This table reports results from OLS regressions relating AC oversight over financial risk management to financial reporting quality. All variables are defined in Appendix C. The same control variables as Table 4 are included in all columns but suppressed for parsimony. Industry is defined at the two-digit SIC level. t statistics are based on robust standard errors clustered at the firm level.

\*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% levels, respectively, using one-tailed tests for coefficients with a sign that matches the directional prediction (if a directional prediction is made) and two-tailed tests otherwise.



$RISK\_OVERSIGHT\_HIGH = 0$ . The coefficient on  $RISK\_OVERSIGHT\_HIGH$  is positive and significant ( $p < 0.01$ ) in column 5 of Table 5. In an untabulated test, we confirm that results remain consistent if we instead drop observations in the middle tercile.

Finally, we use entropy balancing to strengthen our inferences by adjusting for inequalities in the control variables' distributions between treatment and control samples (Hainmueller 2012, Wilde 2017). Because entropy balancing requires a binary treatment, the test variable in this analysis is  $RISK\_OVERSIGHT\_HIGH$ , and we entropy balance the first and second moments of each covariate (excluding fixed effects, although results hold if we instead include fixed effects [untabulated]), ensuring that the means and variances of each covariate are not statistically different between the treatment ( $RISK\_OVERSIGHT\_HIGH = 1$ ) and control groups ( $RISK\_OVERSIGHT\_HIGH = 0$ ). As reported in column 6 of Table 5, we re-estimate Equation (1) on this entropy balanced sample and find consistent results, further supporting the conclusion that ACs with more focus on noncore duties are less-effective monitors of financial reporting.

**4.2.2. Cross-Sectional Analyses: Mitigating the Harm of AC Overload.** Our evidence thus far suggests that AC overload by distraction (i.e., adding noncore duties to the committee agenda, like financial risk oversight) is associated with reduced financial reporting quality. We build on this baseline inference by examining cross-

sectional variation where we expect the detrimental on-average impact of AC overload to be mitigated.

First, we expect the on-average positive association between financial risk oversight and restatements to be weaker when ACs have more members. This expectation is based on capacity theory of attention: Total attention available for deployment at any given time is limited (Kahneman 1973). It follows then that larger ACs reduce the extent and impact of overload. To examine this, we supplement Equation (1) with an interaction between  $AC\_SIZE$  (defined as the log of the number of directors on the audit committee for firm  $i$  in year  $t$ ) and  $RISK\_OVERSIGHT$ . Column 1 of Table 6 presents the results.<sup>15</sup> In this model, the coefficient on  $RISK\_OVERSIGHT$  remains positive and significant ( $p < 0.05$ ), and the interaction term ( $\beta_3$ ) is negative and significant ( $p < 0.10$ ). This result is consistent with the notion that ACs with more members can better absorb noncore duties and avoid overload. In fact, financial risk-related duties appear to bear no statistically significant relation to restatements for firms with  $AC\_SIZE$  one standard deviation above the mean (i.e., the total effect of  $RISK\_OVERSIGHT$  [ $\beta_1 + \beta_3$ ] is not significantly different from zero,  $p > 0.10$ ). This suggests that increasing AC size may help mitigate the harm of assigning noncore duties to the committee.

Given that external monitoring (i.e., auditors) and internal monitoring (i.e., the audit committee) can be substitutes, we also expect the presence of expert auditors to mitigate the detrimental financial reporting quality impact of assigning noncore duties to the AC.

**Table 6.** Mitigating the Adverse Impact of AC Financial Risk Oversight

	(Pred.)	(1)		(2)	
		RESTATE		RESTATE	
		Coefficient	<i>t</i> statistic	Coefficient	<i>t</i> statistic
$RISK\_OVERSIGHT$	$[\beta_1]$	0.0125	2.18**	0.0761	2.90***
$AC\_SIZE$	$[\beta_2]$	-0.0071	-1.14		
$RISK\_OVERSIGHT \times AC\_SIZE$	$[\beta_3]$ (-)	-0.0068	-1.38*		
$EXP\_AUDITOR$	$[\beta_4]$			0.0224	1.56
$RISK\_OVERSIGHT \times EXP\_AUDITOR$	$[\beta_5]$ (-)			-0.0668	-2.27**
Total Effects of $RISK\_OVERSIGHT$	$\beta_1 + \beta_3$	0.0057	[0.74]		
[F-stats in brackets]	$\beta_1 + \beta_3$			0.0093	[0.30]
Control variables		Yes		Yes	
Industry fixed effects		Yes		Yes	
Year fixed effects		Yes		Yes	
Exchange fixed effects		Yes		Yes	
Adjusted $R^2$		0.055		0.056	
Observations		6,677		6,520	

Notes. This table reports results from OLS regressions examining cross-sectional variation in the relation between AC oversight over financial risk management and financial reporting quality. All variables are defined in Appendix C. The same control variables as Table 4 are included in all columns but suppressed for parsimony. To ease interpretation of the interaction term,  $RISK\_OVERSIGHT$  and  $AC\_SIZE$  in column 1 are standardized to have a mean of zero and standard deviation of one. Industry is defined at the two-digit SIC level. *t* statistics are based on robust standard errors clustered at the firm level.

\*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% level, respectively, using one-tailed tests for coefficients with a sign that matches the directional prediction (if a directional prediction is made) and two-tailed tests otherwise.

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As reported in column 2 of Table 6, we interact *RISK\_OVERSIGHT* with *EXP\_AUDITOR*, which equals one if the external auditor of firm *i* for year *t* is an industry expert, where an industry expert is an audit office that possesses 30% or more market share of the industry for firm *i* in an MSA-year (Reichelt and Wang 2010). The interaction term ( $\beta_5$ ) is negative and significant ( $p < 0.05$ ), whereas the total effect of *RISK\_OVERSIGHT* ( $\beta_1 + \beta_5$ ) is *not* significantly different from zero ( $p > 0.10$ ). These results are consistent with expert auditors being able to mitigate the detrimental impact of AC overload by distraction due to noncore duties.

**4.2.3. Cross-Sectional Analyses: Exacerbating the Harm of AC Overload.** We next examine situations where the on-average positive association between AC financial risk oversight and restatements is likely exacerbated. First, attention and distraction theory (Kahneman 1973) suggests that adding significant and varied responsibilities to AC agendas could overtax members' time and attention, especially if they are constrained in the first place. Thus, we expect the positive association between AC financial risk oversight and restatements to be exacerbated when AC members are busier. To examine this, we supplement Equation (1) with an interaction between *AC\_BUSY* (defined as the average number of board positions across firms held by the AC members of firm *i* in year *t*, where higher values represents busier members) and *RISK\_OVERSIGHT*. Column 1 of Table 7

presents results.<sup>16</sup> In this model, the coefficient on *RISK\_OVERSIGHT* remains positive and significant ( $p < 0.05$ ), and the interaction term ( $\beta_3$ ) is also positive and significant ( $p < 0.10$ ). We interpret this result as evidence that AC overload from noncore duties is exacerbated when AC members are busier with multiple board appointments.

Finally, because oversight provided by auditors and ACs can be substitutes, we also expect the busyness of the external auditor to exacerbate the on-average harm of AC financial risk oversight, because auditors strapped for time and attention may be less likely to compensate for slack in monitoring caused by AC overload or because busy auditors may be more likely to cut corners that the AC overlooks. As reported in column 2 of Table 7, we interact *RISK\_OVERSIGHT* with *AUDITOR\_BUSY* (which is an indicator variable equal to one for December fiscal year-end client firms and zero otherwise). The interaction term ( $\beta_5$ ) is positive and significant ( $p < 0.05$ ), whereas the coefficient on *RISK\_OVERSIGHT* ( $\beta_1$ ) is insignificant.<sup>17</sup> Thus, the positive association between AC financial risk oversight and restatements appears most likely to arise when the external auditor is busy. Consistent with the findings of column 2 of Table 6, the detrimental impact of AC financial risk oversight can be mitigated by external auditors that are relatively less busy and can compensate for any slack in monitoring by the AC.

**Table 7.** Exacerbating the Adverse Impact of AC Financial Risk Oversight

	(Pred.)	(1)		(2)	
		RESTATE		RESTATE	
		Coefficient	<i>t</i> statistic	Coefficient	<i>t</i> statistic
<i>RISK_OVERSIGHT</i>	$[\beta_1]$	0.0122	2.16 **	-0.0189	-0.75
<i>AC_BUSY</i>	$[\beta_2]$	-0.0032	-0.50		
<i>RISK_OVERSIGHT</i> * <i>AC_BUSY</i>	$[\beta_3]$ (+)	0.0101	1.43 *		
<i>AUDITOR_BUSY</i>	$[\beta_4]$			-0.0616	-3.19 ***
<i>RISK_OVERSIGHT</i> * <i>AUDITOR_BUSY</i>	$[\beta_5]$ (+)			0.0713	2.30 **
Total Effects of <i>RISK_OVERSIGHT</i>					
[ <i>F</i> -stats in brackets]	$\beta_1 + \beta_3$	0.0223	[5.24] **	0.0524	[8.27] ***
	$\beta_1 + \beta_5$				
Control variables		Yes		Yes	
Industry fixed effects		Yes		Yes	
Year fixed effects		Yes		Yes	
Exchange fixed effects		Yes		Yes	
Adjusted <i>R</i> <sup>2</sup>		0.056		0.058	
Observations		6,677		6,677	

*Notes.* This table reports results from OLS regressions examining cross-sectional variation in the relation between AC oversight over financial risk management and financial reporting quality. All variables are defined in Appendix C. The same control variables as Table 4 are included in all columns but suppressed for parsimony. To ease interpretation of the interaction term, *RISK\_OVERSIGHT* and *AC\_BUSY* in column 1 are standardized to have a mean of zero and standard deviation of one. Industry is defined at the two-digit SIC level. *t* statistics are based on robust standard errors clustered at the firm level.

\*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% levels, respectively, using one-tailed tests for coefficients with a sign that matches the directional prediction (if a directional prediction is made) and two-tailed tests otherwise.

### 4.3. Construct Validity and Generalizability

**4.3.1. Effect of RISK\_OVERSIGHT on Direct Measures of Audit Committee Overload.** Throughout our analyses, we use *RISK\_OVERSIGHT* as a proxy for the extent of AC oversight responsibilities that are unrelated to the committee's core financial reporting mandate—noncore responsibilities that may lead to AC overload by distraction. Until this point, we focused on the harm of overload as proxied by restatements. Now we corroborate our results by analyzing direct proxies of AC overload.

Our AC overload arguments suggest that *RISK\_OVERSIGHT* should correlate positively with measures

of AC effort and turnover. We begin by examining whether *RISK\_OVERSIGHT* is associated with the number of AC meetings, considering that ACs with more responsibilities will meet more often to satisfy their duties. In column 1 of Table 8, we report a positive and significant association between *RISK\_OVERSIGHT* and *AC\_MEETINGS* ( $p < 0.10$ ), consistent with ACs having to expend additional effort to fulfill noncore duties.

Next, we examine whether *RISK\_OVERSIGHT* is associated with turnover among AC members (*AC\_TURNOVER*, defined as the number of AC directors that leave the AC of firm  $i$  in year  $t + 1$ ). If an AC is

**Table 8.** Association Between AC Financial Risk Oversight and AC Meetings/AC Turnover

	(1)			(2)		
	<i>AC_MEETINGS</i>			<i>AC_TURNOVER</i>		
	(pred)	Coefficient	<i>t</i> statistic	(pred)	Coefficient	<i>t</i> statistic
<i>RISK_OVERSIGHT</i>	(+)	0.1515	1.54*	(+)	0.0414	1.66**
<i>LOG_TOTAL_DUTIES</i>		0.5243	5.30***		0.0212	0.87
<i>ACCT_EXPERTISE</i>		0.1929	2.38**		0.0712	3.82***
<i>LEGAL_EXPERTISE</i>		0.0089	0.10		0.0482	2.45**
<i>AC_BUSY</i>		-0.0582	-2.30**		0.0001	0.02
<i>AC_SIZE</i>		-0.1703	-0.94		1.0311	20.64***
<i>AC_TENURE</i>		-0.0055	-0.51		-0.0184	-8.35***
<i>BOARD_SIZE</i>		0.6202	3.35***		-0.1645	-3.86***
<i>BOARD_INDEP</i>		-0.1137	-0.43		-0.2464	-3.94***
<i>CEO_CHAIR</i>		-0.2810	-3.28***		-0.0095	-0.47
<i>RISK_COMMITTEE</i>		0.4543	1.32		0.1904	1.89*
<i>SIZE</i>		0.0622	1.37		-0.0048	-0.46
<i>MTB</i>		-0.0260	-2.30**		0.0037	1.31
<i>LEVERAGE</i>		0.0492	0.18		0.1332	2.10**
<i>ISSUANCE</i>		-0.2824	-3.34***		-0.0523	-2.42**
<i>ROA</i>		-0.4925	-1.54		-0.1597	-2.27**
<i>INST_OWN</i>		1.1874	6.22***		0.0348	0.81
<i>BIGN</i>		-0.1982	-1.26		0.0182	0.53
<i>AUDIT_FEES</i>		0.4878	6.91***		0.0214	1.44
<i>GOING_CONCERN</i>		0.5697	0.79		-0.0505	-0.28
<i>SOX404_AUDIT</i>		1.4611	8.97***		0.0980	2.52**
<i>RISK_10KCOUNT</i>		0.3796	4.22***		-0.0103	-0.48
<i>DERIVATIVES</i>		0.0700	0.62		-0.0070	-0.28
<i>FOREIGN_CURRENCY</i>		-0.1665	-1.54		-0.0236	-0.95
<i>SECURITIES</i>		0.1083	1.14		0.0152	0.69
<i>SEGMENTS</i>		0.0274	1.39		-0.0018	-0.43
<i>RESTRUCTURE</i>		0.3838	3.50***		0.0250	0.91
<i>ACQUISITION</i>		-0.1981	-1.82*		0.0522	1.75*
<i>RESTATE_ANNOUNCE<sub>t-1</sub></i>		0.7559	3.55***		0.0358	0.68
<i>RESTATE_ANNOUNCE<sub>t-2</sub></i>		1.0770	4.81***		-0.0018	-0.03
<i>NYSE_2002</i>		0.3460	2.46**		-0.0019	-0.05
Industry fixed effects		Yes			Yes	
Year fixed effects		Yes			Yes	
Exchange fixed effects		Yes			Yes	
Adjusted $R^2$		0.346			0.154	
Observations		6,677			6,682	

*Notes.* This table reports results from OLS regressions relating AC oversight over financial risk management to AC meetings and AC turnover. All variables are defined in Appendix C. Industry is defined at the two-digit SIC level. *t* statistics are based on robust standard errors clustered at the firm level.

\*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% levels, respectively, using one-tailed tests for coefficients with a sign that matches the directional prediction (if a directional prediction is made) and two-tailed tests otherwise.

truly overloaded, we expect higher turnover in the committee. This turnover can arise because some AC members seek to avoid the greater time demands required to fulfill both core and noncore duties and/or as a consequence of decreased AC performance that overload by distraction may bring. In column 2 of Table 8, we report evidence consistent with greater turnover: *RISK\_OVERSIGHT* is positively associated with *AC\_TURNOVER* ( $p < 0.05$ ). In summary, the tests in Table 8 provide reassurance that our *RISK\_OVERSIGHT* measure is capturing the construct we intend to capture and support our assertions that AC noncore duties require additional effort to fulfill and can lead to overload.

**4.3.2. Alternate Charter-Based Measures.** In our final tests, we evaluate the effects of two other charter-based measures that do *not* proxy for noncore duties. First, we examine AC oversight over internal controls using *IC\_OVERSIGHT*, which is calculated the same as *RISK\_OVERSIGHT* except we count internal control-related terms in the AC charter rather than financial risk-related terms.<sup>18</sup> Because internal control oversight is a *core* AC duty that relates directly to financial reporting (DeFond and Zhang 2014), we expect financial reporting quality to improve with AC oversight in this area. Consistent with this argument, we observe a *negative* association between *IC\_OVERSIGHT* and restatements ( $p < 0.05$ ) in column 1 of Table 9.

Next, we conduct a placebo analysis with the variable *FILLER\_WORDS*. This measure is calculated by counting filler words in AC charters (words such as

*and, the, a, of, and is* using the stop word list of Loughran and McDonald (2011)) scaled by total charter length and multiplied by 100 for expositional convenience.<sup>19</sup> We use *FILLER\_WORDS* to capture the content of the charter unrelated to duties; conceptually, there should be no correlation between *FILLER\_WORDS* and financial reporting quality because the variables do not capture AC responsibilities. Consistent with our expectation, the coefficient on *FILLER\_WORDS* is insignificant in column 2 of Table 9 ( $p > 0.10$ ). Collectively, the results in Table 9 enhance the construct validity of using content-based measures from AC charters.

**4.3.3. AC Oversight over Financial Risk Management in Recent Years.** As already discussed, our sample is restricted to the years 2000 through 2006. We argue that this is a rich setting to test our research question because concern about AC overload ballooned during this time period and because corporate governance and AC duties were in flux, due to regulations imposed by stock exchanges and regulators (e.g., SOX). However, we acknowledge that restricting the analysis to this period does not allow us to speak to current trends. To assess how AC charters and duties have evolved since our sample period, we analyze a random sample of 100 AC charters collected from company websites in June 2022. In Table 10, we report summary statistics for these charters alongside the summary statistics from our sample period for comparison. Average overall charter length has increased by 54% between the two sample periods. Furthermore, the relative portion of the charters that is

**Table 9.** Alternate Test Variables: AC Oversight over Internal Controls and Filler Words in AC Charters

	(1)		(2)	
	RESTATE		RESTATE	
	Coefficient	<i>t</i> statistic	Coefficient	<i>t</i> statistic
<i>IC_OVERSIGHT</i> (-)	-0.0110	-2.18**		
<i>FILLER_WORDS</i> (?)			-0.0007	-0.22
<i>LOG_TOTAL_DUTIES</i>	-0.0269	-1.85*	-0.0242	-1.67*
<i>AC_MEETINGS</i>	0.0005	0.26	0.0004	0.22
<i>ACCT_EXPERTISE</i>	-0.0054	-0.48	-0.0052	-0.46
<i>LEGAL_EXPERTISE</i>	0.0033	0.29	0.0029	0.25
<i>AC_BUSY</i>	-0.0017	-0.42	-0.0017	-0.42
<i>AC_SIZE</i>	-0.0255	-1.09	-0.0276	-1.18
<i>AC_TENURE</i>	0.0009	0.62	0.0008	0.62
<i>BOARD_SIZE</i>	-0.0629	-2.48**	-0.0638	-2.52**
<i>BOARD_INDEP</i>	-0.1117	-2.97***	-0.1118	-2.97***
<i>CEO_CHAIR</i>	0.0072	0.63	0.0075	0.66
<i>RISK_COMMITTEE</i>	0.0054	0.12	0.0053	0.12
<i>SIZE</i>	-0.0039	-0.63	-0.0040	-0.64
<i>MTB</i>	0.0003	0.20	0.0003	0.22
<i>LEVERAGE</i>	0.0736	1.78*	0.0748	1.80*
<i>ISSUANCE</i>	-0.0007	-0.06	-0.0006	-0.05
<i>ROA</i>	-0.0503	-1.36	-0.0494	-1.34
<i>INST_OWN</i>	0.0911	3.33***	0.0919	3.34***
<i>BIGN</i>	-0.0090	-0.48	-0.0096	-0.51

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**Table 9.** (Continued)

	(1)		(2)	
	RESTATE		RESTATE	
	Coefficient	<i>t</i> statistic	Coefficient	<i>t</i> statistic
AUDIT_FEES	0.0208	2.17**	0.0200	2.09**
GOING_CONCERN	−0.0677	−1.22	−0.0647	−1.15
SOX404_AUDIT	−0.0366	−1.93*	−0.0379	−2.00**
RISK_10KCOUNT	0.0127	1.01	0.0129	1.03
DERIVATIVES	−0.0086	−0.58	−0.0100	−0.68
FOREIGN_CURRENCY	0.0194	1.27	0.0195	1.28
SECURITIES	0.0140	1.11	0.0141	1.12
SEGMENTS	0.0013	0.49	0.0014	0.50
RESTRUCTURE	0.0043	0.31	0.0039	0.28
ACQUISITION	0.0123	0.77	0.0119	0.74
RESTATE_ANNOUNCE <sub><i>t</i>−1</sub>	0.0306	1.22	0.0313	1.25
RESTATE_ANNOUNCE <sub><i>t</i>−2</sub>	0.0189	0.67	0.0187	0.66
NYSE_2002	−0.0142	−0.67	−0.0177	−0.83
Industry fixed effects		Yes		Yes
Year fixed effects		Yes		Yes
Exchange fixed effects		Yes		Yes
Adjusted <i>R</i> <sup>2</sup>		0.055		0.054
Observations		6,677		6,677

Notes. Column 1 in this table reports results from OLS regressions relating AC oversight over internal controls to financial reporting quality. Column 2 in this table reports results of a placebo test relating filler words in AC charters to financial reporting quality. All variables are defined in Appendix C. Industry is defined at the two-digit SIC level. *t* statistics are based on robust standard errors clustered at the firm level.

\*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% levels, respectively, using one-tailed tests for coefficients with a sign that matches the directional prediction (if a directional prediction is made) and two-tailed tests otherwise.

devoted to financial risk oversight appears to have increased, although only slightly: the mean (median) of *RISK\_OVERSIGHT* is 0.33 (0.27) in the 2000–2006 sample and 0.51 (0.29) in the 2022 sample.

## 5. Conclusion

Regulators and stock exchanges advocate expanding the number of duties assigned to the AC (SEC 2003b, Beasley et al. 2012). In sharp contrast, practitioners argue that doing so may represent harmful scope creep that can

overload ACs and impair the effectiveness of their monitoring of financial reporting (Sweeney and Vallario 2002, Computer Sciences 2003, KPMG 2003). We investigate whether assigning noncore duties to the AC leads to overload by distraction and impairs financial reporting quality.

Using a new measure of AC financial risk oversight (a noncore AC duty) that we develop based on hand-collected AC charters, we provide the following important insights. First, emphasis on AC financial risk oversight is associated with a higher likelihood of misstating

**Table 10.** Comparison of AC Charter Content Across Time

Variable	Charters from 2000 to 2006 ( <i>n</i> = 6,677)			Charters from 2022 ( <i>n</i> = 100)		
	Mean	Median	Standard deviation	Mean	Median	Standard deviation
<i>RISK_OVERSIGHT</i>	0.33	0.27	0.39	0.51	0.29	0.56
<i>RISK_COUNT</i>	0.96	1.00	1.14	2.34	1.00	2.76
<i>IC_OVERSIGHT</i>	2.27	2.14	1.13	2.53	2.59	1.03
<i>IC_COUNT</i>	7.00	6.00	4.71	11.45	12.00	5.43
<i>LOG_TOTAL_DUTIES</i> (unlogged)	297.98	286.00	125.17	448.29	444.50	134.26
AC charter word count	1,708.17	1,632.00	711.76	2,626.04	2,581.50	712.00
Filler words	704.33	669.00	288.21	1,076.68	1,040.00	311.75
Organization section words	667.26	639.00	265.49	1,005.07	991.00	275.13

Note. This table presents descriptive statistics of AC charter-based variables for the sample of 6,677 charters from the period 2000–2006 and for a random sample of 100 charters obtained from company websites in 2022.

financial statements (including material Big R restatements), consistent with AC overload by distraction. Second, we find the positive association between AC financial risk oversight and restatements only holds for restatements unrelated to financial risk, corroborating our distraction hypothesis and indicating our results are *not* simply capturing increased restatement risk in firms with more financial risk-related transactions (i.e., more underlying financial risk-related exposure). Third, we find that the unfavorable relation between AC financial risk oversight and restatements is (i) mitigated when ACs have more members and when the external auditor has more expertise but (ii) exacerbated when AC members and auditors are busier with outside appointments and busy season audits. Fourth, we find that AC financial risk oversight is positively associated with AC meetings and turnover of AC directors, which corroborates our overload argument. Finally, we find AC internal control-related oversight (a core AC duty) is negatively associated with restatements, whereas a placebo measure based on filler words in charters exhibits no significant association with restatements.

Our evidence is consistent with practitioner concerns that noncore duties can distract the AC from performing its core duties and thus impair financial reporting quality. We document potential strategies to mitigate this unfavorable impact. We also find evidence consistent with the perspective of regulators and stock exchanges that greater AC duties can benefit financial reporting *but* that this benefit is contingent on those duties relating directly to financial reporting oversight (e.g., internal controls). These are all particularly important insights given the divergent perspectives of practitioners and regulators, where regulators lean toward assigning greater oversight responsibilities to the AC and practitioners raise concerns that

overload may make ACs less effective. Overall, our findings contribute to literature regarding governance, boards, and committees and should be of interest to academics, regulators, practitioners, and investors who are looking to improve monitoring effectiveness.

Our results come with caveats. First, as stated previously, our results are for the period 2000–2006 only. Second, although our charter-based measures have many advantages relative to measures used in the literature to capture AC oversight, we acknowledge there are limitations. For example, activities carried out by the AC likely extend beyond those explicitly listed in the charter. Furthermore, many charters are carefully vetted by legal counsel to limit disclosures that could increase potential liability for the firm or AC members. These effects may reduce the informativeness of the charters. Third, our study does not speak to the net benefits or costs of assigning greater financial risk oversight to the AC. We document lower financial reporting quality, but we do not examine non-financial-reporting outcomes of the additional AC oversight. Finally, we focus on financial risk oversight duties and do not purport to identify or examine all potential distractions; future research may explore the implications of other AC duties.

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### Appendix A. Topics in Audit Committee Charters

Based on manual analysis of 100 AC charters and mapped to related regulation	Required by (as of year)				
	SEC	Auditing standards	NYSE	NASD	AMEX
Organization / membership					
Independence of members	(B) 2003-04		(I) 2001	(G) 2001	(K) 2001
Independence exception			(I) 2001	(G) 2001	(K) 2001
Financial literacy of members			(I) 2001	(G) 2001	(K) 2001
Financial expertise of members			(I) 2001	(G) 2001	(K) 2001
Review and update charter annually			(I) 2001	(G) 2001	(K) 2001
Prepare audit committee report	(A) 2000				
Authority to engage advisors	(B) 2003-04				
Report to the board			(I) 2004		
Maintain minutes					
Review of audit committee performance			(I) 2004		
Member compensation					
Serve on limited no. of other boards					
Minimum number of meetings					(L) 2004
Number of members					
Request other committees to also monitor			(I) 2001	(G) 2001	(K) 2001
Financial reporting and disclosure					
Discuss accounting/reporting matters and policies			(I) 2004		
Judgment, estimates	(A) 2000	(D) 1989 (F) 2000			
Alternative GAAP					
Interim statements review by auditor	I) 1992		(I) 2004		
MDA					
Press releases / guidance			(I) 2004		
Off-balance sheet			(I) 2004		
Review SEC filings			(I) 2004		

## Appendix A. (Continued)

	Required by (as of year)			NYSE	NASDAQ	AMEX
	SEC	Auditing standards				
Internal controls						
Review/evaluate internal controls		(C) 1988		(I) 2004		
Review internal control findings of independent auditor				(I) 2004		
Review information system controls						
Independent auditor						
Auditor selection	(B) 2003-04			(I) 2001	(G) 2001	(K) 2001
Audit fee approval	(B) 2003-04					
Nonaudit services approval	(B) 2003-04					
Independence: general				(I) 2001	(G) 2001	(K) 2001
Independence: partner rotation				(I) 2004		
Independence: firm rotation				(I) 2004		
Independence: former employees				(I) 2001	(G) 2001	(K) 2001
Independence: written auditor statement						
Audit scope						
Meet separately with auditor		(D) 1989		(I) 2004		
Disagreements and difficulties						
Auditor communications	(B) 2003-04	(D) 1989		(I) 2004		
Auditor's quality control						
Evaluation of auditor				(I) 2004		
Audit adjustments				(I) 2004		
Employing other audit firms						
Auditor consultation with national office				(I) 2004		
Internal auditor						
Scope				(I) 2004		
Meet separately				(I) 2004		
Other						
Fraud						
Procedure to receive complaints	(B) 2003-04					
Fraud						



**Appendix A.** (Continued)

	Required by (as of year)				
	SEC	Auditing standards	NYSE	NASD	AMEX
Based on manual analysis of 100 AC charters and mapped to related regulation					
Regulatory/accounting compliance					
General legal, regulatory compliance			(I) 2004		
Meet with general counsel					
Code of ethics / code of conduct					
Illegal acts					
Foreign corrupt practices					
Other					
Risk management			(I) 2004		
Related parties				(H) 2004	
Other areas of oversight described in AC charters relate to evaluating accounting personnel, executive officer expense accounts, tax, asset management, investments, employee benefit plans, pensions, auditor assessment of materiality, insurance, budgeting, capital structure, SEC comment letters, dividends, operational efficiency, and environmental compliance.					
Disclaimers					
Not the responsibility of the AC to plan/conduct audits					
Not the responsibility of the AC to determine that financials are complete/accurate					
Not the duty of the AC to assure compliance with laws, regulations, code of ethics and conduct					
Not the duty of the AC to conduct investigations or resolve disagreements between management and auditors					
Reliance on information from management					

*Note.* Relevant regulations: A, Release No. 34-42266; B, SOX; C, SAS 60; D, SAS 61; E, SAS 71; F, SAS 90; G, SR-NASD-99-48; H, Release No. 34-48745; I, SR-NYSE-99-39; J, SR-NYSE-2002-33; K, SR-AMEX-99-38; L, SR-AMEX-2003-65.

## Appendix B

Figure B.1. Sample Audit Committee Charter

**CHARTER OF THE AUDIT COMMITTEE**  
**OF THE BOARD OF DIRECTORS OF ROHM AND HAAS COMPANY**

**Purpose**

The purposes of the Audit Committee of the Board of Directors (the “Board”) of Rohm and Haas Company (the “Company”) shall be to: (A) assist the Board’s oversight of (1) the integrity of the Company’s disclosures, including its financial statements and disclosure and financial accounting controls and procedures, (2) the Company’s compliance with legal and regulatory requirements, and (3) the performance of the Company’s internal audit function and independent auditor; (B) engage the independent auditor and review and oversee its qualifications, performance and independence; (C) prepare the report required by the rules of the Securities and Exchange Commission to be included in the Company’s proxy statement; (D) review the Company’s financial plans and strategies, particularly its policies regarding capital structure and dividend payments; (E) recommend to the Board all dividend declarations and payments; (F) review the Company’s foreign financial programs and currency exposure policies and practices, including derivative and hedging transactions; (G) oversee the function of the Company’s Benefits Investment Committee; and (H) fulfill the other responsibilities set out herein.

In discharging its responsibilities, the Audit Committee is not itself responsible for the planning or conduct of audits or for any determination that the Company’s financial statements are complete or accurate or in accordance with generally accepted accounting principles. This responsibility is that of management and the independent auditor.

**Organization and Membership Qualifications**

1. The Audit Committee shall be appointed by the Board and be composed of at least three (3) directors, each of whom shall meet, as affirmatively determined by the Board at least annually, the independence requirements of governing law, rules, regulations and the listing standards of the New York Stock Exchange.
2. The members of the Audit Committee shall be nominated and recommended to the Board by the Nominating Committee. The Board shall designate a member of the Audit Committee to serve as Chairperson. No member of the Audit Committee shall be removed except by majority vote of the independent directors of the full Board.
3. All members of the Audit Committee shall be financially literate. The Board shall appoint at least one member with accounting or related financial management expertise, and, to the extent possible, appoint at least one member who it has determined is an “audit committee financial expert” as the term is defined by SEC rules, and shall disclose the identity of any committee member possessing those attributes in the Company’s annual proxy statement.
4. If an Audit Committee member simultaneously serves on the audit committee of more than three public companies, the Board must determine that, as a condition of such member serving on the Company’s Audit Committee, such simultaneous service does not impair the ability of the member to serve effectively on the Company’s Audit Committee, and shall disclose this determination in the Company’s annual proxy statement.

**Member Compensation**

Director’s fees are the only compensation an Audit Committee member may receive from the Company for his/her service. Members of the Audit Committee may receive additional director’s fees if, in the judgment of the full Board, the time and effort they expend to fulfill their duties so warrants.

**Meetings and Procedures**

- The Audit Committee shall fix its own rules of procedure, which shall be consistent with the Company’s Bylaws and this Charter.
- The Audit Committee shall meet as often as it may deem necessary and appropriate in its judgment, and in no event less than four (4) times per year, and members are encouraged to attend in person. A majority of the members of the Audit Committee shall constitute a quorum, and a member may participate in a meeting by telephone if necessary to constitute a quorum or otherwise to conduct the business of the committee.

## Appendix B

- The Chairperson of the Audit Committee or a majority of its members may call a special meeting of the Audit Committee.
- An agenda, together with materials relating to the subject matter of each meeting, should be sent to the Audit Committee members prior to each meeting. Minutes for all meetings shall be prepared to document the Audit Committee's discharge of its responsibilities. The minutes shall be circulated in draft form to all Audit Committee members to ensure an accurate final record, shall be approved at a subsequent meeting of the Audit Committee and shall be distributed periodically to the Board. The approved minutes shall be maintained with the books and records of the Company.
- The Audit Committee shall meet in separate executive sessions with the independent auditor, with the Company's director of internal audit, with the general counsel and with management as often as it deems necessary and appropriate in its judgment.
- The Audit Committee may form and delegate authority to subcommittees when appropriate, or may delegate to one or more of its members the authority to act on behalf of the Committee, subject to any requirements under governing law, rule, regulation, listing standard or Company Bylaw requiring such authority to be exercised or overseen by the Audit Committee as a whole.
- The Audit Committee may request that any directors, officers or employees of the Company, or other persons whose advice and counsel are sought by the Audit Committee, attend any meeting to provide such information as the Audit Committee requests.

### Duties and Responsibilities

To fulfill its duties and responsibilities, the Audit Committee shall:

- Have the sole authority (with the input of management) to retain, set compensation and retention terms for, oversee and review the performance of, renew and terminate the Company's independent auditor, and shall approve in advance the retention of the independent auditor for the performance of all audit services and non-audit services, all as required by governing law and listing standards.
- In order to assess the auditor's independence, annually review all relationships between the independent auditor and the Company and, at least annually, obtain and review a report by the independent auditor describing: (i) the independent auditor's internal quality-control procedures; (ii) any material issues raised by the most recent internal quality-control review or peer review of the independent auditor, or by any inquiry or investigation by governmental or professional authorities, or private sector regulatory board within the preceding five years, respecting one or more independent audits carried out by the independent auditor, and (iii) any steps taken to deal with any such issues.
- Discuss with management and the independent auditor the annual audited financial statements, quarterly financial statements and any other financial disclosures, including the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations."
- Prepare the report required by the rules of the SEC to be included in the Company's annual proxy statement.
- Discuss earnings press releases, as well as the financial information and earnings guidance provided to analysts and rating agencies. These discussions may occur generally, at any time, as frequently and in as much detail as is deemed appropriate by the Audit Committee.
- As appropriate and without the necessity of Board approval, obtain advice and assistance from outside legal, accounting and other advisors to carry out its duties and responsibilities. Funding for the retention of any such advisors will be provided by the Company.
- Discuss policies with respect to risk assessment and risk management, including discussion of the Company's major financial exposures and the steps management has taken to monitor and control such exposures.
- Meet separately, periodically, with management, with the internal audit function and with the independent auditor.
- Review with the independent auditor any audit problems or difficulties and management's response, resolve any disagreements between management and the independent auditor, and review any written communications between the auditor and management, including any management letter and schedule of unadjusted differences.
- Set clear hiring policies for employees or former employees of the independent auditor, which at a minimum shall provide that the Company may not hire as its CEO, CFO, Controller or equivalent function, any employee or former employee of the auditor that participated in any capacity in the audit of the Company during the one-year period preceding the date of initiation of the audit.

## Appendix B

- Review the financial plans and strategies of the Company, particularly its policies regarding capital structure, dividend payments and return on assets.
- Recommend to the Board all dividend declarations and payments.
- Review the Company's foreign financial programs and currency exposure policies and practices, including derivative and hedging transactions.
- Oversee the function of the Company's Benefits Investment Committee.
- Report regularly to the Board.
- Establish procedures for (A) the receipt, retention, and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters; and (B) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters. Procedures for confidential and anonymous reporting of complaints will be posted on the Company's web site.
- Reassess on at least an annual basis, the adequacy of this Charter and recommend any proposed changes to the Board for its approval.
- Perform an annual self-evaluation of its performance and deliver a report to the Board setting forth the results of its evaluation.

*Note.* Financial risk-related items are highlighted in gray.

## Appendix C. Variable Definitions

Variable	Definition	Source
Charter variables		
<i>FILLER_WORDS</i>	= the total count of filler words in the charter, scaled by total charter length. We multiply this number by 100 for expositional convenience. Filler words are the words in the stop word list provided by Loughran and McDonald (2011).	AC Charters
<i>IC_COUNT</i>	= the total number of times any of the following words appear in the AC charter of firm <i>i</i> in year <i>t</i> (including both singular and plural forms if applicable): internal control, material weakness, significant deficiency, control deficiency, control weakness, internal quality control, financial control, reporting control, disclosure control, and accounting control.	AC Charters
<i>IC_OVERSIGHT</i>	= <i>IC_COUNT</i> scaled by <i>TOTAL_DUTIES</i> . We multiply this number by 100 for expositional convenience.	AC Charters
<i>LOG_RISK_COUNT</i>	= the log of one plus <i>RISK_COUNT</i> .	AC Charters
<i>RISK_COUNT</i>	= the total number of times any of the following words appear in the AC charter of firm <i>i</i> in year <i>t</i> (including both singular and plural forms if applicable): financial risk, financial exposure, hedg*, derivativ*, swaps, forward contract, commodity, commodities, interest rate, foreign exchange, exchange rate, currency, currencies, futures, trading, stock options, put options, call options, treasury, asset management, investments, investing, capital structure, debt, and equity.	AC Charters
<i>RISK_OVERSIGHT</i>	= <i>RISK_COUNT</i> scaled by <i>TOTAL_DUTIES</i> . We multiply this number by 100 for expositional convenience.	AC Charters
<i>RISK_OVERSIGHT_HIGH</i>	= one if the AC charter is in the top tercile of <i>RISK_OVERSIGHT</i> and zero otherwise.	AC Charters
<i>RISK_OVERSIGHT_THIN</i>	= the total number of times the following words appear in the AC charter of firm <i>i</i> in year <i>t</i> (including both singular and plural forms if applicable): financial risk, financial exposure, treasury, and asset management. The resulting count is then scaled by <i>TOTAL_DUTIES</i> and multiplied by 100 for expositional convenience.	AC Charters
<i>RISK_OVERSIGHT_UNIQUE</i>	= <i>RISK_OVERSIGHT</i> , except that each unique search term is counted only once per charter.	AC Charters
<i>TOTAL_DUTIES</i>	= the total number of audit and accounting words in the AC charter. Our proxy for the universe of such words is the combination of word lists from (1) A Dictionary of Accounting (Oxford University Press) and (2) the Auditing Dictionary from the CPA Accounting Institute for Success. We also include all the financial risk-related words we use to calculate <i>RISK_COUNT</i> and all the internal control-related words we use to calculate <i>IC_COUNT</i> .	AC Charters
<i>LOG_TOTAL_DUTIES</i>	= the log of <i>TOTAL_DUTIES</i> .	AC Charters
Other variables		
<i>AC_BUSY</i>	= the average number of boards the AC members of firm <i>i</i> concurrently serve on in year <i>t</i> .	BoardEx
<i>AC_MEETINGS</i>	= the number of times the AC of firm <i>i</i> held formal meetings in year <i>t</i> .	Proxy Stmt
<i>AC_SIZE</i>	= the log of the number of directors on the AC for firm <i>i</i> in year <i>t</i> .	BoardEx
<i>AC_TENURE</i>	= the average number of years the AC directors of firm <i>i</i> have served on the AC as of year <i>t</i> .	BoardEx
<i>AC_TURNOVER</i>	= the number of AC directors that leave the AC of firm <i>i</i> in year <i>t</i> +1.	BoardEx
<i>ACCT_EXPERTISE</i>	= one if firm <i>i</i> has an accounting financial expert on the AC in year <i>t</i> (zero otherwise); accounting financial expert is defined as someone who has prior experience working as a(n): Auditor, CFO, Accounting Officer, Chief Accountant, Controller, Certified Public Accountant, Chartered Accountant, Head of Accounting, Vice President of Accounting, Accounting Director, VP of Finance, or Treasurer.	BoardEx
<i>ACQUISITION</i>	= one if firm <i>i</i> has an acquisition in year <i>t</i> that contributes to sales or income (zero otherwise), where acquisition is identified based on nonmissing and nonzero Compustat items AQS and AQI.	Compustat
<i>AUDIT_FEES</i>	= the natural log of audit fees charged to firm <i>i</i> in year <i>t</i> .	Audit Analytics
<i>AUDITOR_BUSY</i>	= one if the fiscal year for firm <i>i</i> in year <i>t</i> ends in December (zero otherwise).	Compustat
<i>BIGN</i>	= one if firm <i>i</i> retained a Big 4 auditor for year <i>t</i> (zero otherwise).	Audit Analytics
<i>BOARD_INDEP</i>	= total independent board members scaled by total board members for firm <i>i</i> in year <i>t</i> .	BoardEx
<i>BOARD_SIZE</i>	= the log of the number of directors on the board for firm <i>i</i> in year <i>t</i> .	BoardEx
<i>CEO_CHAIR</i>	= one if the CEO is the Chairman of the Board for firm <i>i</i> in year <i>t</i> (zero otherwise).	BoardEx
<i>DERIVATIVES</i>	= one if firm <i>i</i> uses derivative instruments in year <i>t</i> (zero otherwise), where use of derivatives is identified based on nonmissing and nonzero Compustat items AOCIDERGL, CIDERGL, DERAC, DERALT, DERHEDGL, DERLC, and DERLLT.	Compustat

## Appendix C. (Continued)

Variable	Definition	Source
EXP_AUDITOR	= one if the external auditor of firm $i$ for year $t$ is an industry expert, where an industry expert is an audit office that possesses 30% or more market share of the industry for firm $i$ in a MSA-year (zero otherwise)	Audit Analytics
FOREIGN_CURRENCY	= one if firm $i$ transacts in foreign currency in year $t$ (zero otherwise), where use of foreign currency is identified based on nonmissing and nonzero Compustat items PIFO or FCA.	Compustat
GOING_CONCERN	= one if firm $i$ received a going concern opinion in year $t$ (zero otherwise).	Audit Analytics
INST_OWN	= the percent of firm $i$ owned by institutional owners in year $t$ .	Thoms. Reuters
ISSUANCE	= one if firm $i$ issued equity or debt in year $t$ equal to 10% or more of total assets in year $t$ (zero otherwise).	Compustat
LEGAL_EXPERTISE	= one if firm $i$ had a legal expert in year $t$ on the audit committee (zero otherwise); legal expert is defined as someone who has prior experience working as an attorney, lawyer, or general counsel or possesses a JD or Doctor of Jurisprudence degree.	BoardEx
LEVERAGE	= long term debt scaled by total assets for firm $i$ in year $t$ .	Compustat
NYSE_2002	= one if firm $i$ is listed on the NYSE and the fiscal-year end for year $t$ is after the NYSE proposed its rule change in 2002 (zero otherwise)	Compustat
MTB	= market value of equity scaled by book value of equity for firm $i$ in year $t$ .	Compustat
RESTATE	= one if firm $i$ restates the 10-K for year $t$ (zero otherwise).	Audit Analytics
RESTATE_FINRISK	= one if firm $i$ restates the 10-K for year $t$ for reasons related to financial risk (zero otherwise), where financial risk-related restatements are identified as Audit Analytics restatement categories financial derivatives/hedging accounting (code #8); comprehensive income (#35); foreign current/inflation (#37); intercompany investment in subs/affiliate (#24); debt, quasi-debt, warrants, and equity securities (#4); consolidations including FIN 46 variable interest and off-balance-sheeting financing (#13); asset retirement (#71); accounts/loan receivable, investments, and cash (#14); debt and equity classification (#26); PPE, intangibles, or fixed assets (#3); and security issuance (#16).	Audit Analytics
RESTATE_MATERIAL	= one if firm $i$ has a Big R restatement for the 10-K for year $t$ (zero otherwise).	Audit Analytics, EDGAR
RESTATE_NOT_FINRISK	= one if firm $i$ restates the 10-K for year $t$ for reasons that are not related to financial risk (i.e., all restatement categories other than those listed in the definition of <i>RESTATE_FINRISK</i> ); zero otherwise.	Audit Analytics
RESTATE_ANNOUCE <sub><math>t-1</math></sub>	= one if firm $i$ announced a restatement during year $t-1$ (zero otherwise).	Audit Analytics
RESTATE_ANNOUCE <sub><math>t-2</math></sub>	= one if firm $i$ announced a restatement during year $t-2$ (zero otherwise).	Audit Analytics
RESTRUCTURE	= one if firm $i$ incurred restructuring costs in year $t$ (zero otherwise), where restructuring costs are identified based on nonmissing and nonzero Compustat items RCP, RCA, RCEPS, and RCD.	Compustat
RISK_10KCOUNT	= the log of one plus the total number of times any of the risk words (as listed under <i>RISK_OVERSIGHT</i> ) appear in the 10-K of firm $i$ in year $t$ .	10-Ks
RISK_COMMITTEE	= one if the board of directors of firm $i$ includes a separate risk committee in year $t$ (zero otherwise).	BoardEx
ROA	= net income scaled by total assets for firm $i$ in year $t$ .	Compustat
SECURITIES	= one if firm $i$ bought, sold, or held securities in year $t$ (zero otherwise), where buying, selling, and holding securities is identified based on nonmissing and nonzero Compustat items ISEQ, ISFI, ISLG, ISLT, ISNG, ISOTH, ISSU, IST, ISUT, MSA, SECU, TDSCD, TDSCF, TDSCG, TDSCM, TDSCN, TDSD, TDSS, TDST, CISECGL, IDIIS, IDITS, ISGR, ISGT, ISGU, TDSCG, and UFRETSD.	Compustat
SEGMENTS	= the total number of reported geographic, business, and operating segments for firm $i$ in year $t$ .	Compustat Segments
SIZE	= the natural log of market value of equity for firm $i$ in year $t$ .	Compustat
SOX404_AUDIT	= one if firm $i$ is subject to a SOX 404(b) integrated audit in year $t$ (zero otherwise).	Audit Analytics

Appendix D. Additional Descriptive Statistics

Variable	(1)		(2)	(3)	(4)		(5)	(6)	(7)
	<i>RESTATE_FINRISK</i> equal to:		0	Diff. (1) – (2)	<i>RESTATE_NOT_FINRISK</i> equal to:		0	Diff. (4) – (5)	Diff. (1) – (4)
	1	0			1	0			
	<i>n</i> = 423	<i>n</i> = 5,629	<i>n</i> = 706	<i>n</i> = 5,629	Mean	Mean	Diff. (4) – (5)	Diff. (1) – (4)	
Main test variable									
<i>RISK_OVERSIGHT</i>	0.34	0.32	0.02	0.36	0.32	0.04**	–0.02		
<i>RISK_COUNT</i>	0.99	0.96	0.03	0.99	0.96	0.03	0.00		
Governance control variables									
<i>TOTAL_DUTIES</i>	297.93	298.68	–0.75	291.41	298.68	–7.27	6.52		
<i>AC_MEETINGS</i>	6.85	6.68	0.17	6.91	6.68	0.23*	–0.06		
<i>ACCT_EXPERTISE</i>	0.55	0.58	–0.03	0.58	0.58	0.00	–0.03		
<i>LEGAL_EXPERTISE</i>	0.42	0.38	0.04*	0.35	0.38	–0.03*	0.07***		
<i>AC_BUSY</i>	3.24	3.35	–0.11	3.51	3.35	0.16**	–0.27***		
<i>AC_SIZE</i>	1.30	1.31	–0.01	1.26	1.31	–0.05***	0.04***		
<i>AC_TENURE</i>	6.72	6.77	–0.05	6.56	6.77	–0.21	0.16		
<i>BOARD_SIZE</i>	2.17	2.16	0.01	2.07	2.16	–0.09***	0.10**		
<i>BOARD_INDEP</i>	0.61	0.64	–0.03***	0.62	0.64	–0.02**	–0.01		
<i>CEO_CHAIR</i>	0.59	0.60	–0.01	0.64	0.60	0.04*	–0.05**		
<i>RISK_COMMITTEE</i>	0.02	0.02	0.00	0.01	0.02	–0.01*	0.01		
Other control variables									
<i>SIZE</i>	6.82	6.73	0.09	6.79	6.73	0.06	0.03		
<i>MTB</i>	2.56	3.18	–0.62***	3.32	3.18	0.14	–0.76***		
<i>LEVERAGE</i>	0.21	0.17	0.04***	0.18	0.17	0.01	0.03**		
<i>ISSUANCE</i>	0.40	0.33	0.07***	0.31	0.33	–0.02	0.09**		
<i>ROA</i>	0.00	0.01	–0.01*	0.01	0.01	0.00	–0.01*		
<i>INST_OWN</i>	0.56	0.54	0.02	0.61	0.54	0.07***	–0.05***		
<i>BIGN</i>	0.94	0.90	0.04**	0.92	0.90	0.02*	0.02		
<i>AUDIT_FEES</i>	13.59	13.29	0.30***	13.34	13.29	0.05	0.25***		
<i>GOING_CONCERN</i>	0.00	0.00	0.00	0.00	0.00	0.00*	0.00		
<i>SOX404_AUDIT</i>	0.15	0.23	–0.08***	0.18	0.23	–0.05***	–0.03		
<i>RISK_10KCOUNT</i>	5.57	5.33	0.24***	5.24	5.33	–0.09***	0.33***		
<i>DERIVATIVES</i>	0.35	0.28	0.07***	0.23	0.28	–0.05***	0.12***		
<i>FOREIGN_CURRENCY</i>	0.42	0.38	0.04	0.45	0.38	0.07***	–0.03		
<i>SECURITIES</i>	0.45	0.45	0.00	0.44	0.45	–0.01	0.01		
<i>SEGMENTS</i>	5.02	4.41	0.61***	4.55	4.41	0.14	0.47**		
<i>RESTRUCTURE</i>	0.27	0.22	0.05**	0.29	0.22	0.07***	–0.02		
<i>ACQUISITION</i>	0.14	0.11	0.03*	0.14	0.11	0.03**	0.00		
<i>RESTATE_ANNOUNCE<sub>t-1</sub></i>	0.04	0.04	0.00	0.06	0.04	0.02**	–0.02		
<i>RESTATE_ANNOUNCE<sub>t-2</sub></i>	0.03	0.03	0.00	0.05	0.03	0.02**	–0.02*		
<i>NYSE_2002</i>	0.40	0.34	0.06***	0.30	0.34	–0.04**	0.10***		

Notes. This table reports descriptive statistics. All continuous variables are winsorized at the 1st and 99th percentiles. The sample period is from 2000 through 2006. All variable definitions are provided in Appendix C.

\*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% levels, respectively, using two-tailed tests.

Endnotes

<sup>1</sup> Throughout the paper, we use the term “risk” to refer to risks other than those directly related to the AC’s main duty of financial reporting oversight. For example, the risk we refer to excludes internal control risk, financial reporting risk, and audit risk.

<sup>2</sup> For example, fraud charges have been brought against individuals for “failure to carry out their responsibilities as ... Audit Committee members” (*SEC v. Krantz*). An AC may perform responsibilities beyond those listed in its charter. Although empirically this is a limitation of our measure, it should not bias toward our findings.

<sup>3</sup> Financial risk oversight is distinct from financial reporting risk oversight. Financial risk oversight (a noncore duty) is oversight of the activities, transactions, and contracts that relate to financing issues or volatility in financial performance (Bender and Panz 2021). Financial reporting risk oversight (a core AC duty) relates to the risk that the financial statements contain material misstatements but is distinct from oversight of real activities and transactions themselves.

<sup>4</sup> In addition to a charter, ACs must provide a report of their activities in the firm’s proxy statement after year-end. In practice, the disclosures made in these AC reports are limited, prompting concerns that the disclosures are ineffective in providing investors

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with meaningful information regarding the activities and effectiveness of the AC (SEC 2015). Bratten et al. (2022) report that the activities voluntarily disclosed in AC reports generally relate to oversight of the external auditor.

<sup>5</sup> Beginning in 1999, the stock exchanges started to require listed firms to have fully independent ACs, and this requirement is also legally mandated by the Sarbanes Oxley Act of 2002 (Klein 2002, SEC 2003c). Additionally, SOX Section 407 requires that issuers disclose whether they have at least one financial expert on the AC, the name of the expert, and whether the expert is independent.

<sup>6</sup> For example, more AC meetings may represent better oversight but may also represent a response by the AC to problems with financial reporting or internal control or other issues. Some studies find that the number of AC meetings is associated with improved monitoring, others conclude the opposite, and many report insignificant results. Examples include Abbott et al. (2004), Bédard et al. (2004), Abbott and Parker (2000), Abbott and Parker (2002), Farber (2005), Sharma and Iselin (2012), Krishnan and Visvanathan (2008), Lin et al. (2006), Krishnan (2005), and Abbott et al. (2003). We control for AC meetings in our analyses to identify the incremental effects of our charter-based measures. Relative to AC meetings, we believe our charter-based measures more closely capture the nature of AC duties.

<sup>7</sup> Research assistants manually examined each proxy statement to locate the AC charter if the proxy statement has one and copied and pasted the whole AC charter into a unique text file (i.e., one charter per file). We use these text files, which contain only AC charters, for all subsequent analyses. To ascertain that AC charters were properly identified and accurately extracted, we randomly selected proxy filings every time a research assistant finished the assigned task. This resulted in a manual analysis by at least one co-author of 600 proxy filings. In so doing, we observed type one and type two error rates of less than 1%.

<sup>8</sup> Data availability in BoardEx is relatively limited in the years 2000 and 2001. We note that our main results remain consistent if we restrict the sample to 2002 forward (untabulated).

<sup>9</sup> Our main dependent variable (*RESTATE*) is binary. To avoid the incidental parameters problem (Greene 2004) and because interactions can be difficult to interpret in nonlinear models (Ai and Norton 2003), we report results of using a linear probability model instead of a logistic model. To ensure our results are not driven by this design choice, we rerun our main analysis with logistic regression and find consistent results (untabulated).

<sup>10</sup> We scale the count of financial risk-related terms to reduce concerns that larger, more complex firms are likely to have more AC duties. For the scalar we use the count of audit and accounting terms, which is our proxy for total AC duties detailed in a charter. To generate a list of audit and accounting terms, we combine the word lists from (1) *A Dictionary of Accounting* by Oxford University Press and (2) the *Auditing Dictionary of Terms* from the CPA Accounting Institute for Success. These dictionaries are available at <https://www.ais-cpa.com/glosa/> and <https://www.oxfordreference.com/view/10.1093/acref/9780198743514.001.0001/acref-9780198743514-e41?rskey=3yXny7&result=1> (last accessed 07/10/2022). We also include in this word list all the financial risk-related words we use to calculate *RISK\_COUNT* and all the internal control-related words we use to calculate *IC\_COUNT*. To ensure that the association between *RISK\_OVERSIGHT* and *RESTATE* is not driven by variation in this scalar, we include the scalar (in logged form) as a control variable in all tests. Our results are robust to alternatively scaling by total charter length in words (untabulated).

<sup>11</sup> We identify the organization section content in AC charters by first extracting the text of the organization sections in 100 randomly selected AC charters. We then remove any words from that text that are used to calculate *RISK\_COUNT*, *IC\_COUNT*,

*TOTAL\_DUTIES*, or *FILLER\_WORDS*. We categorize words that remain as organization section words and count their frequency in each AC charter to capture its organization section content.

<sup>12</sup> The mean of *RESTATE\_MATERIAL* is 0.13 (untabulated). In this analysis, we eliminate observations that have a value of one for *RESTATE* but zero for *RESTATE\_MATERIAL*. Results remain consistent if we retain the full sample in this analysis (untabulated).

<sup>13</sup> We follow prior literature (Ashraf et al. 2020) in grouping restatements into buckets based on Audit Analytics' categorization of which area of accounting each restatement impacts. Specifically, after each coauthor reviewed the taxonomy individually, we identify financial risk-related restatements as ones that Audit Analytics notes relate to financial derivatives/hedging accounting (code #8); comprehensive income (#35); foreign current/inflation (#37); intercompany investment in subs/affiliate (#24); debt, quasi-debt, warrants, and equity securities (#4); consolidations including FIN 46 variable interest and off-balance-sheeting financing (#13); asset retirement (#71); accounts/loan receivable, investments, and cash (#14); debt and equity classification (#26); PPE, intangibles, or fixed assets (#3); and security issuance (#16). For these restatements, *RESTATE\_FINRISK* equals one (with a mean, untabulated, of 0.06). For all other restatements, *RESTATE\_NOT\_FINRISK* equals one (with a mean, untabulated, of 0.11). We compare descriptive statistics of these samples in Appendix D. *RISK\_OVERSIGHT* does not vary significantly between observations where *RESTATE\_FINRISK* = 1 versus 0 but does vary significantly ( $p < 0.05$ ) between observations where *RESTATE\_NON\_FINRISK* = 1 versus 0.

<sup>14</sup> We eliminate observations from the sample in column 3 that have a restatement (i.e., *RESTATE* = 1) but that restatement is not a financial risk-related restatement (i.e., *RESTATE\_FINRISK* = 0). We do the same in column 4 but eliminate observations that have a restatement that is a financial risk-related restatement. Results remain consistent if we retain the full sample for both columns (untabulated).

<sup>15</sup> To facilitate interpretation of the interaction term, *RISK\_OVERSIGHT* and *AC\_SIZE* are standardized to have a mean of zero and standard deviation of one in column 1 of Table 6.

<sup>16</sup> To facilitate interpretation of the interaction term, *RISK\_OVERSIGHT* and *AC\_BUSY* are standardized to have a mean of zero and standard deviation of one in column 1 of Table 7.

<sup>17</sup> Unexpectedly, the coefficient on *AUDITOR\_BUSY* ( $\beta_4$  in Table 7) is negative and significant. The main effect is not the focus of our analysis; however, we observe similar results (i.e., negative coefficients on this variable in restatement models) in prior papers (Czerney et al. 2014, Christensen et al. 2021).

<sup>18</sup> As with *RISK\_OVERSIGHT*, to calculate *IC\_OVERSIGHT*, we create a list of internal control-related words by reading 100 randomly selected AC charters and manually identifying terms that relate to oversight of internal controls. These terms are as follows: *internal control*, *material weakness*, *significant deficiency*, *control deficiency*, *control weakness*, *internal quality control*, *financial control*, *reporting control*, *disclosure control*, *accounting control*, and their plural equivalents. The mean of *IC\_OVERSIGHT* is 2.27 (untabulated).

<sup>19</sup> We scale *FILLER\_WORDS* by charter length (instead of *TOTAL\_DUTIES*) because the numerator does not capture duties. Conceptually we are trying to capture the relative focus of the charter on discussion unrelated to duties; therefore, we scale by total charter length. *FILLER\_WORDS* produces similar insignificant results when scaled by *TOTAL\_DUTIES* (untabulated). The mean of *FILLER\_WORDS* is 41.39 (untabulated).

## References

- Abbott LJ, Parker S (2000) Auditor selection and audit committee characteristics. *Auditing* 19(2):46–66.
- Abbott LJ, Parker S (2002) Audit committee characteristics and auditor switches. *Res. Accounting Regulations* 15:151–166.



- Abbott LJ, Park Y, Parker S (2000) The effects of audit committee activity and independence on corporate fraud. *Management Finance* 26(11):55–67.
- Abbott LJ, Parker S, Peters GF (2004) Audit committee characteristics and restatements. *Auditing* 23(1):69–87.
- Abbott LJ, Parker S, Peters GF, Raghunandan K (2003) An empirical investigation of audit fees, nonaudit fees, and audit committees. *Contemporary Accounting Res.* 20(2):215–234.
- Abbott LJ, Parker S, Peters GE, Rama DV (2007) Audit quality, corporate governance, and the Sarbanes-Oxley Act: Evidence from internal audit outsourcing. *Accounting Rev.* 82(4):803–835.
- Ai C, Norton EC (2003) Interaction terms in logit and probit models. *Econom. Lett.* 80(1):123–129.
- Alderman J, Jollineau SJ (2020) Can audit committee expertise increase external auditors' litigation risk? The moderating effect of audit committee independence. *Contemporary Accounting Res.* 37(2):717–740.
- Ames DA, Hines CS, Sankara J (2018) Board risk committees: Insurer financial strength ratings and performance. *J. Accounting Public Policy* 37(2):130–145.
- Archambeault DS, DeZoort FT, Hermanson DR (2008) Audit committee incentive compensation and accounting restatements. *Contemporary Accounting Res.* 25(4):965–992.
- Ashraf M (2024) Does automation improve financial reporting? Evidence from internal controls. *Rev. Accounting Stud.* Forthcoming.
- Ashraf M, Michas PN, Russomanno D (2020) The impact of audit committee information technology expertise on the reliability and timeliness of financial reporting. *Accounting Rev.* 95(5):23–56.
- Badolato PG, Donelson DC, Ege M (2014) Audit committee financial expertise and earnings management: The role of status. *J. Accounting Econom.* 58(2–3):208–230.
- BDO (2022) Why are audit committees so important to an organization's overall governance? Accessed July 10, 2022, <https://www.bdo.com/resource-centers/institute-for-nonprofit-excellence/effective-audit-committee/the-whys/why-audit-committees-important-organization-gov>.
- Beardsley EL, Imdieke AJ, Omer TC (2021) The distraction effect of non-audit services on audit quality. *J. Accounting Econom.* 71(2–3):1–20.
- Beasley M, Oxley M, Sarbanes P (2012) The Sarbanes-Oxley Act: The first decade [interview transcript]. Accessed July 10, 2022, [http://3197d6d14b5f19f2f440-5e13d29c4c016cf96cbbfd197c579b45.r81.cf1.rackcdn.com/collection/programs/sechistorical\\_073012\\_transcript.pdf](http://3197d6d14b5f19f2f440-5e13d29c4c016cf96cbbfd197c579b45.r81.cf1.rackcdn.com/collection/programs/sechistorical_073012_transcript.pdf).
- Beasley MS, Carcello JV, Hermanson DR, Neal TL (2009) The audit committee oversight process. *Contemporary Accounting Res.* 26(1):65–122.
- Beck MJ, Mauldin EG (2014) Who's really in charge? Audit committee vs. CFO power and audit fees. *Accounting Rev.* 89(6):2057–2085.
- Becker GS (1965) A theory of the allocation of time. *Econom. J. (London)* 75(299):493–517.
- Bédard J, Gendron Y (2010) Strengthening the financial reporting system: Can audit committees deliver? *Internat. J. Auditing* 210(14):174–210.
- Bédard J, Chtourou SM, Courteau L (2004) The effect of audit committee expertise, independence, and activity on aggressive earnings management. *Auditing* 32(2):13–35.
- Behrend J, Eulerich M (2019) Four decades of audit committee research: A bibliometric analysis (1977–2018). Working paper, University of Duisburg-Essen, Duisburg, Germany.
- Bender M, Panz S (2021) A general framework for the identification and categorization of risks: An application to the context of financial markets. *J. Risk* 23(4):21–49.
- Bill A, Matthews MP (2007) Audit committee overload. Accessed July 10, 2022, <https://www.foley.com/-/media/files/insights/publications/2007/03/audit-committee-overload/files/audit-committee-overload/fileattachment/auditcommitteeload.pdf>.
- Blue Ribbon Commission on Improving the Effectiveness of Corporate Audit Committees (1999) Report and recommendations of the blue ribbon committee on improving the effectiveness of corporate audit committees. *Bus. Lawyer* 54(3):1067–1095.
- Böhm F, Bollen LH, Hassink HF (2016) Audit committee charter scope: Determinants and effects on audit committee effort. *Internat. J. Auditing* 20(2):119–132.
- Bonham SS (2008) *Actionable Strategies Through Integrated Performance, Process, Project, and Risk Management* (Artech House, Norwood, MA).
- Bratton B, Causholli M, Sulcaj V (2022) Overseeing the external audit function: Evidence from audit committees. *Auditing* 41(4):1–31.
- Brickley JA, Coles JL, Jarrell G (1997) Leadership structure: Separating the CEO and Chairman of the Board. *J. Corporate Finance* 3(3):189–220.
- Brock-Kyle A (2019) Is your audit committee overloaded? Accessed June 28, 2022, <https://www.nasdaq.com/articles/is-your-audit-committee-overloaded-2019-04-01>.
- Carcello JV, Neal TL (2000) Audit committee composition and auditor reporting. *Accounting Rev.* 75(4):453–467.
- Carcello JV, Neal TL (2003) Audit committee characteristics and auditor dismissals following “new” going-concern reports. *Accounting Rev.* 78(1):95–117.
- Carcello JV, Hermanson DR, Neal TL (2002) Disclosures in audit committee charters and reports. *Accounting Horizon* 16(4):291–304.
- Carcello JV, Neal TL, Palmrose ZV, Scholz S (2011) CEO involvement in selecting board members, audit committee effectiveness, and restatements. *Contemporary Accounting Res.* 28(2):396–430.
- Carter ME, Lynch LJ, Martin MA (2022) Board committee overlap and the use of earnings in CEO compensation contracts. *Management Sci.* 68(8):6268–6297.
- Cassell CA, Myers LA, Schmardebeck R, Zhou J (2018) The monitoring effectiveness of co-opted audit committees. *Contemporary Accounting Res.* 35(4):1732–1765.
- Chan KC, Li J (2008) Audit committee and firm value: Evidence on outside top executives as expert-independent directors. *Corporate Governance* 16(1):16–31.
- Cheng S, Felix R, Indjejikian R (2019) Spillover effects of internal control weakness disclosures: The role of audit committees and board connections. *Contemporary Accounting Res.* 36(2):934–957.
- Choudhary P, Merkley K, Schipper K (2021) Immaterial error corrections and financial reporting reliability. *Contemporary Accounting Res.* 38(4):2423–2460.
- Christensen BE, Newton NJ, Wilkins MS (2021) How do team workloads and team staffing affect the audit? Archival evidence from US audits. *Accounting Organ. Soc.* 92:101225.
- Cohen L, Frazzini A, Malloy CJ (2012) Hiring cheerleaders: Board appointments of “independent” directors. *Management Sci.* 58(6):1039–1058.
- Cohen JR, Hoitash U, Krishnamoorthy G, Wright AM (2014) The effect of audit committee industry expertise on monitoring the financial reporting process. *Accounting Rev.* 89(1):243–273.
- Coles JL, Daniel ND, Naveen L (2008) Boards: Does one size fit all? *J. Financial Econom.* 87(2):329–356.
- Computer Sciences (2003) Letter Re: File No. SR-NYSE-2002-33. Accessed July 10, 2022, <https://www.sec.gov/rules/sro/nyse200233/computersci050503.htm>.
- Connelly KM, Eadie CC, Harper VR (2010) The growing role of the board in risk oversight. Accessed February 1, 2024, [https://www.spencerstuart.com/~media/pdf%20files/research%20and%20insight%20pdfs/the-growing-role-of-the-board-in-risk-oversight\\_06dec2010.pdf](https://www.spencerstuart.com/~media/pdf%20files/research%20and%20insight%20pdfs/the-growing-role-of-the-board-in-risk-oversight_06dec2010.pdf).
- Core J, Holthausen R, Larcker D (1999) Corporate governance, chief executive officer compensation, and firm performance. *J. Financial Econom.* 51:371–406.

- Cyert RM, Kang SH, Kumar P (2002) Corporate governance, takeovers, and top-management compensation: Theory and evidence. *Management Sci.* 48(4):453–469.
- Czerney K, Schmidt JJ, Thompson AM (2014) Does auditor explanatory language in unqualified audit reports indicate increased financial misstatement risk? *Accounting Rev.* 89(6):2115–2149.
- Dechow P, Ge W, Schrand C (2010) Understanding earnings quality: A review of the proxies, their determinants and their consequences. *J. Accounting Econom.* 50(2–3):344–401.
- DeFond M, Zhang J (2014) A review of archival auditing research. *J. Accounting Econom.* 58(2–3):275–326.
- Deloitte (2013) Sample audit committee charter. Accessed July 10, 2022, [https://www2.deloitte.com/content/dam/Deloitte/il/Documents/risk/CCG/sample\\_audit\\_committee\\_charter.pdf](https://www2.deloitte.com/content/dam/Deloitte/il/Documents/risk/CCG/sample_audit_committee_charter.pdf).
- Dey A (2008) Corporate governance and agency conflicts. *J. Accounting Res.* 46(5):1143–1181.
- DeZoort FT, Hermanson DR, Archambeault DS (2002) Audit committee effectiveness: A synthesis of the empirical audit committee literature. *J. Accounting Literature* 21:38–75.
- Ernst & Young (2014) Leading practices for audit committees. Accessed November 8, 2019, [http://www.ey.com/Publication/vwLUAssets/Leading\\_practices\\_for\\_audit\\_committees/\\$FILE/EY-Leading-practices-for-audit-committees.pdf](http://www.ey.com/Publication/vwLUAssets/Leading_practices_for_audit_committees/$FILE/EY-Leading-practices-for-audit-committees.pdf).
- Farber DB (2005) Restoring trust after fraud: Does corporate governance matter? *Accounting Rev.* 80(2):539–561.
- Farber DB, Huang SX, Mauldin EG (2018) Audit committee accounting expertise, analyst following, and market liquidity. *J. Accounting Audit Finances* 33(2):174–199.
- Field L, Lowry M, Mkrtychyan A (2013) Are busy boards detrimental? *J. Financial Econom.* 109(1):63–82.
- Foster J (2022) The importance of the audit committee. Accessed July 10, 2022, <http://jonathanffoster.com/the-importance-of-the-audit-committee/>.
- Greene WH (2004) Interpreting estimated parameters and measuring individual heterogeneity in random coefficient models. Working paper, New York University, New York City.
- Greene EF, Falk BB (1979) The audit committee: A measured contribution to corporate governance: A realistic appraisal of its objectives and functions. *Bus. Lawyer* 34(3):1229–1249.
- Hainmueller J (2012) Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies. *Political Anal.* 20(1):25–46.
- He X, Pittman JA, Rui OM, Wu D (2017) Do social ties between external auditors and audit committee members affect audit quality? *Accounting Rev.* 92(5):61–87.
- Healy PM, Palepu KG (2001) Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *J. Accounting Econom.* 31(1–3):405–440.
- Hines CS, Masli A, Mauldin EG, Peters GF (2015) Board risk committees and audit pricing. *Auditing* 34(4):59–84.
- Huang H, Lobo GJ, Zhou J (2009) Determinants and accounting consequences of forming a governance committee: Evidence from the United States. *Corporate Governance* 17(6):710–727.
- Hunt J, Carey A (2001) Audit committees: Effective against risk or just overloaded? *Balance Sheet* 9(4):37–39.
- Jaggi J (2023) When does the internal audit function enhance audit committee effectiveness? *Accounting Rev.* 98(2):329–359.
- Kahneman D (1973) *Attention and Effort*, vol. 1063 (Prentice-Hall, Englewood Cliffs, NJ).
- Kalbers LP, Fogarty TJ (1993) Audit committee effectiveness: An empirical investigation of the contribution of power. *Auditing* 12(1):24–49.
- Klein A (1998) Firm performance and board committee structure. *J. Law Econom.* 41(1):275–304.
- Klein A (2002) Audit committee, board of director characteristics, and earnings management. *J. Accounting Econom.* 33(3):375–400.
- Koh K, Rajgopal S, Srinivasan S (2013) Non-audit services and financial reporting quality: Evidence from 1978 to 1980. *Rev. Accounting Stud.* 18(1):1–33.
- KPMG (2003) Letter Re: File No. SR-NYSE-2002-33, Self-Regulatory Organizations; Notice of Filing of Proposed Rule Change and Amendment No. 1 Thereto by the New York Stock Exchange, Inc. Relating to Corporate Governance. Accessed July 10, 2022, <https://www.sec.gov/rules/sro/nyse200233/kpmg050803.htm>.
- KPMG (2014) Audit Committee Workload: Keeping an Eye on the Ball. Accessed July 10, 2022, <https://assets.kpmg/content/dam/kpmg/my/pdf/External/aci/issue-5-audit-committee-workload-keeping-an-eye-on-the-ball-nov-2014.pdf>.
- KPMG (2015) 2015 Global Audit Committee Survey. Accessed July 10, 2022, <https://assets.kpmg/content/dam/kpmg/pdf/2015/03/2015-global-audit-committee-survey.pdf>.
- Krishnan J (2005) Audit committee quality and internal control: An empirical analysis. *Accounting Rev.* 80(2):649–675.
- Krishnan GV, Visvanathan G (2008) Does the SOX definition of an accounting expert matter? The association between audit committee directors' accounting expertise and accounting conservatism. *Contemporary Accounting Res.* 25(3):827–858.
- Krishnan J, Wen Y, Zhao W (2011) Legal expertise on corporate audit committees and financial reporting quality. *Accounting Rev.* 86(6):2099–2130.
- Laux C, Laux V (2009) Board committees, CEO compensation, and earnings management. *Accounting Rev.* 84(3):869–891.
- Lee WM (2020) The determinants and effects of board committees. *J. Corporate Finance* 65:101747.
- Lin JW, Li JF, Yang JS (2006) The effect of audit committee performance on earnings quality. *Management Auditing J.* 21(9):921–933.
- Lipman FR (2015) *Potential Liability of Audit Committee Members* (Bureau of National Affairs, Arlington, VA).
- Lisic LL, Myers LA, Seidel TA, Zhou J (2019) Does audit committee accounting expertise help to promote audit quality? Evidence from auditor reporting of internal control weaknesses. *Contemporary Accounting Res.* 36(4):2521–2553.
- Liu X, Lobo GJ, Yu HC (2021) Is audit committee equity compensation related to audit fees? *Contemporary Accounting Res.* 38(1):740–769.
- Loughran T, McDonald B (2011) When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *J. Finance* 66(1):35–65.
- Mangena M, Pike R (2005) The effect of audit committee shareholding, financial expertise and size on interim financial disclosures. *Accounting Bus. Res.* 35(4):327–349.
- Myers LA, Schmardebeck R, Slavov S (2021) Audit committee chair succession and financial reporting quality: Does firm-specific knowledge matter? Working paper, University of Tennessee, Knoxville, TN.
- Omer TC, Shelley MK, Tice FM (2020) Do director networks matter for financial reporting quality? Evidence from audit committee connectedness and restatements. *Management Sci.* 66(8):3361–3388.
- PwC (2018) Audit committee guide. Accessed July 10, 2022, <https://www.pwc.com.au/assurance/assets/audit-committee-guide/audit-committee-guide.pdf>.
- PwC and IIA (2011) Audit committee effectiveness: What works best. Accessed July 10, 2022, <https://www.pwc.com/jg/en/publications/audit-comm-effectiveness-what-works-best-2011.pdf>.
- Ragunandan K, Rama DV (2007) Determinants of audit committee diligence. *Accounting Horizons* 21(3):265–279.
- Reichelt KJ, Wang D (2010) National and office-specific measures of auditor industry expertise and effects on audit quality. *J. Accounting Res.* 48(3):647–686.
- SEC (1999a) NYSE Chair Richard Grasso, NASD Chair Frank Zarb, and Blue Ribbon Panel Co-Chairs Ira Millstein and John Whitehead Announce “Ten-Point Plan” to Improve Oversight of Financial Reporting Process (SEC, Washington, DC).

- SEC (1999b) NYSE Rulemaking: Order Approving Proposed Rule Change Amending the Audit Committee Requirements and Notice of Filing and Order Granting Accelerated Approval of Amendments No. 1 and No. 2 Thereto (SEC, Washington, DC).
- SEC (1999c) AMEX Rulemaking: Order Approving Proposed Rule Change Amending the Audit Committee Requirements and Notice of Filing and Order Granting Accelerated Approval of Amendments No. 1 and No. 2 Thereto (SEC, Washington, DC).
- SEC (1999d) NASD Rulemaking: Order Approving Proposed Rule Change Amending the Audit Committee Requirements and Notice of Filing and Order Granting Accelerated Approval of Amendments No. 1 and No. 2 Thereto (SEC, Washington, DC).
- SEC (2000) Final Rule: Audit Committee Disclosure (SEC, Washington, DC).
- SEC (2003a) Self-Regulatory Organizations; Notice of Filing of Proposed Rule Change and Amendment No. 1 Thereto by the New York Stock Exchange, Inc. Relating to Corporate Governance (SEC, Washington, DC).
- SEC (2003b) NASD and NYSE Rulemaking: Relating to Corporate Governance (SEC, Washington, DC).
- SEC (2003c) Standards Relating to Listed Company Audit Committees (SEC, Washington, DC).
- SEC (2006) Executive Compensation and Related Person Disclosure (SEC, Washington, DC).
- SEC (2015) Possible Revisions to Audit Committee Disclosures (SEC, Washington, DC).
- SEC (2020) Investor advisory committee meeting on Thursday, February 27, 2020. Accessed July 10, 2022, <https://www.sec.gov/news/sec-webcasts#y2020>.
- Sharma VD, Iselin ER (2012) The association between audit committee multiple-directorships, tenure, and financial misstatements. *Auditing* 31(3):149–175.
- Simunic DA (1984) Auditing, consulting, and auditor independence. *J. Accounting Res.* 22(2):679–702.
- Srinivasan S (2005) Consequences of financial reporting failure for outside directors: Evidence from accounting restatements and audit committee members. *J. Accounting Res.* 43(2):291–334.
- Sweeney P, Vallario CW (2002) NYSE sets audit committees on new road. *J. Accountancy* 194(5):51.
- Vasani B (2022) India: Regulatory overload on audit committees: Is there a need to have a fresh look at its role? Accessed July 10, 2022, <https://conventuslaw.com/report/india-regulatory-overload-on-audit-committees-is-there-a-need-to-have-a-fresh-look-at-its-role/>.
- Wilde JH (2017) The deterrent effect of employee whistleblowing on firms' financial misreporting and tax aggressiveness. *Accounting Rev.* 92(5):247–280.
- Xie B, Davidson WN, DaDalt PJ (2003) Earnings management and corporate governance: The roles of the board and the audit committee. *J. Corporate Finance* 9:295–316.
- Yermack D (1997) Good timing: CEO stock option awards and company news announcements. *J. Finance* 52(2):449–476.
- Zaman M (2001) Turnbull: Generating undue expectations of the corporate governance role of audit committees. *Management Audit J.* 16:5–9.
- Zhu JH (1992) Issue competition and attention distraction: A zero-sum theory of agenda-setting. *J. Quart.* 69(4):825–836.