General Counsels and Material Weaknesses in Internal Control

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February 2020

Preliminary Draft - Please do not quote or cite

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Abstract

This study examines the association between corporate general counsels (GCs) and internal control quality. GCs often manage the risk and compliance functions of their organizations, and it is an empirical question whether GCs influence the quality of internal controls. We find that the number of material weaknesses and the number of pervasive material weaknesses are negatively associated with the presence of a prominent GC (i.e., a GC who is a disclosed earner). Using a subsample of firms with a GC, we find that both the incidence and number of material weaknesses are negatively associated with the individual's tenure as GC. For prominent GCs only, we also find that the incidence and number of material weaknesses are negatively associated with the GC's cumulative external work experience in law, government, and business. These findings suggest that GCs influence internal control quality within their firms.

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I. INTRODUCTION

This study examines the association between corporate general counsels (GC) and the disclosure of material weaknesses in internal control. Prior studies find that top management, board of director, and auditor characteristics are associated with internal control effectiveness and material weakness remediation (e.g., Zhang, Zhou, and Zhou 2007; Goh 2009; Hoitash, Hoitash, and Bedard 2009; Li, Sun, and Ettredge 2010). However, this literature has largely ignored another important private sector governance mechanism – the GC (ABA 2003). GCs provide a combination of legal and business advice to the companies they serve (Nelson and Nielsen 2000; DeMott 2005), and they often manage the risk and compliance functions of their organizations (KPMG International 2016). The GC position has evolved from "fire-fighter" to a more strategic and proactive risk anticipator (KPMG International 2014), and today's GC works closely with a firm's finance team, internal audit team, and board of directors. The growing importance of the GC function leads us to examine the association between GCs and both the likelihood and severity of material weaknesses in internal control.

Because the GC is responsible for anticipating and managing risks, the GC may have a vested interest in ensuring the firm has strong internal controls to mitigate particularly concerning risks (e.g., reputation risk, technology risk, fraud). However, the GC has a unique relationship with her client (the firm), and Kim (2005) identifies three situational factors that may influence a GCs attentiveness to internal controls. First, Kim (2005) draws on psychological research and suggests that a GC's financial dependence on the firm and subordinate position to the CEO may lead a GC to consciously or subconsciously take actions to secure her position and/or compensation and avoid disruptions to the status quo. Second, an

attorney's typical self-concept is that she is a faithful agent of the client. This self-concept is complicated for a GC because the true client (the firm) does not have a physical presence, which Kim (2005) suggests may lead the GC to align her views with the firm's senior management and defer to their judgment. Third, Kim (2005) suggests that a GC may feel pressure to conform to management views or remain silent in order to prove her loyalty. Collectively, these situational factors may lead a GC to overlook material weaknesses in internal controls or leave it to management to take corrective actions when material weaknesses do exist. Thus, it is unclear whether there is an association between the presence of a GC and either the likelihood or severity of material weaknesses in internal control.

For firms with a GC, it is also unclear whether the GC's experience is associated with the likelihood or severity of material weaknesses in internal control. In a recent survey, GCs indicated that their experience is a key determinant of their influence within a firm (KPMG International 2014). The quality of a GC's prior experiences, either external-to-firm or internal-to-firm, may give her more credibility with firm management and help her better identify and address weaknesses in internal control. However, prior experiences that are predominantly internal-to-firm may lead to GC entrenchment or a strong sense of loyalty to the firm management. Thus, it is unclear whether there is an association between GC experience and either the likelihood or severity of material weaknesses in internal control.

In order to examine our research questions, we gather auditor-issued internal control opinions for 2005-2018 from Audit Analytics. We then use job titles of reported executives in BoardEx to determine if the firm employed a GC at the fiscal year end for which the internal control opinion was issued and create a GC indicator variable. For firms with a GC, we identify whether the GC held a prominent position in the firm (i.e., disclosed earner for the fiscal year)

and create a prominent GC indicator variable. We also gather several proxies of GC experience from BoardEx including (1) a composite measure of whether the GC has external-to-firm experience in law, government, or business, (2) the length of the individual's pre-GC tenure at the firm, (3) the length of the individual's GC tenure at the firm, and (4) an indicator variable set to one if the GC holds a seat on the firm's board of directors. Control variables which proxy for firm, top management, board of director, and auditor characteristics are collected from Compustat, BoardEx, and Audit Analytics. Our final sample consists of 38,891 firm-year observations, 67.8 percent of which have a GC and 10.6 percent of which have a prominent GC.

Our first set of multivariate tests are estimated using our full sample and examine whether an association exists between the presence of a GC and either the likelihood or severity of material weaknesses in internal control after controlling for known determinants of material weaknesses (Doyle, Ge, and McVay 2007a; Hoitash et al. 2009; Bentley-Goode, Newton, and Thompson 2017). The likelihood of a material weakness is captured with an indicator variable set to one if the internal control report identifies at least one material weakness and zero otherwise. The severity of material weaknesses is captured with three continuous measures which represent the number of reported material weaknesses, the number of account-specific material weaknesses, and the number of entity-specific material weaknesses, respectively. Among the account-specific and entity-specific material weaknesses, prior studies suggest that account-specific material weaknesses are easier to resolve (i.e., less severe) while entity-specific material weaknesses are more pervasive (i.e., more severe) (Doyle et al. 2007a; Bedard et al. 2012). We find no association between the likelihood of a reported material weakness and the presence of a GC. However, we do find that both the number of reported material weaknesses and the number of entity-specific material weaknesses are negatively associated with the

presence of a prominent GC. Thus, while firms with and without GCs are equally likely to experience material weaknesses in our sample, it is the presence of a prominent GC, not any GC, that is associated with less severe material weaknesses on average.

Our next set of multivariate tests examine whether an association exists between GC experience and either the likelihood or severity of material weaknesses in internal control after controlling for known determinants of material weaknesses. Because these analyses require data on GC experience, we estimate our models using the subsample of firm-year observations with a GC. For prominent GCs only, we find that the likelihood of a material weakness and all three measures of material weakness severity are negatively associated with the composite measure of GC external experience in law, government, or business. We also find that likelihood of a material weakness and all three measures of GC tenure (regardless of GC prominence). Collectively, these results suggest that among those firms with a GC, longer serving GCs and prominent GCs with more external work experiences are associated with a lower likelihood of material weaknesses and less severe material weaknesses when they do occur.

Our study makes contributes to the accounting and finance literature. First, we provide evidence on GCs, an important private sector governance mechanism that has been largely ignored in prior studies of internal control. Although material weaknesses in internal control exist even when a GC is present, we find that the presence of a prominent GC is associated with fewer material weaknesses in total and fewer pervasive material weaknesses. Within firms with a GC, we find that the extent of the GC's experience (both external-to-firm and internal-to-firm) is associated with a lower likelihood of material weaknesses and less severe material weaknesses when they do occur.

Second, our study contributes to the relatively new accounting and finance literature on GCs. Prior studies have examined whether firm-level outcomes are associated with the presence of a GC, but the examination of GC characteristics in these studies has been sparse (e.g., Kwak, Ro, and Suk 2012; Hopkins, Maydew, and Venkatachalam 2015; Abernathy, Kubick, and Masli 2016). We provide evidence that both the presence of a GC and specific external-to-firm and internal-to-firm experiences of the GC are significant determinants of internal control quality. We encourage researchers to expand upon our examination of GC experience in future studies of GCs and firm-level outcomes.

The remainder of the paper is organized as follows. In Section II, we discuss prior research on material weaknesses in internal control, provide background on GCs, and develop our hypotheses. We explain our research design in Section III. In Section IV, we describe our sample and present both descriptive statistics and results of our multivariate tests. Section V concludes.

II. BACKGROUND AND DEVELOPMENT OF RESEARCH QUESTIONS Material Weaknesses in Internal Control

A primary intent of the Sarbanes Oxley Act of 2002 (SOX) is to emphasize the importance of internal controls for both prevention and detection of financial misstatements. Section 302 of SOX requires that management evaluate internal controls, state in firm quarterly reports whether the internal controls are effective, and disclose significant changes to internal controls. Section 404 of SOX requires that management perform an annual assessment of internal control over financial reporting and that the firm's financial statement auditor attest to management's internal control assessment. Management and/or the auditor disclose any

discovered internal control deficiencies – the most severe of which is labeled a material weakness.¹

Since SOX was passed by Congress, a growing stream of research has examined material weakness disclosures. Prior studies find that material weaknesses are associated with a variety of firm, top management (i.e., CEO, CFO), board of director, and auditor characteristics (e.g., Ge and McVay 2005; Doyle et al. 2007a; Zhang et al. 2007; Hoitash et al. 2009; Li et al. 2010; Lin, Wang, Chiou, and Huang 2014). The literature also documents several outcomes following the disclosure of a material weakness including lower quality accruals, audit report delays, lower stock prices, and subsequent turnover of the CEO, CFO, auditor, and board members (DeFranco, Guan, and Lu 2005; Ettredge, Li, and Sun 2006; Doyle, Ge, and McVay 2007b; Gupta and Nayar 2007; Hammersley, Myers, and Shakespeare 2008; Li et al. 2010; Ettredge, Heintz, Li, and Scholz 2011; Johnstone, Li, and Rupley 2011). Other studies find mixed evidence regarding an association between material weakness disclosures and cost of equity (Ogneva, Subramanyam, and Raghunandan 2007; Beneish, Billings, and Hodder 2008; Ashbaugh-Skaife, Collins, Kinney, and LaFond 2009). Collectively, the literature suggests that many factors contribute to the likelihood of a material weakness disclosure, and the material weakness disclosure is typically followed by lower financial reporting quality, a negative stock market reaction, and personal consequences for key individuals.

¹ The Public Company Accounting Oversight Board (PCAOB) Auditing Standard No. 2 defines a material weakness as "a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected" (PCAOB 2004).

General Counsel

An important private sector governance mechanism that has not been examined in prior studies of material weaknesses in internal control is the GC.² GC responsibilities include: (a) serving as a "gatekeeper" by monitoring firm and management compliance and representing shareholder interests; (b) managing the in-house legal team and providing legal advice to management and boards of directors; (c) serving as a member of the top management team and facilitating strategic business decisions; and (d) acting as an agent of the corporation in deals with third parties (e.g., Nelson and Nielsen 2000; DeMott 2005; Jagolinzer, Larcker, and Taylor 2011; Kwak et al. 2012; Hopkins et al. 2015; Ham and Koharki 2016). In recent years, GC responsibilities include a greater focus on risk management (KPMG International 2012, 2016), and the GC is involved in assessing the adequacy of internal controls and the firm's regulatory compliance (Jagolinzer et al. 2011). GCs are consistently recognized as an important part of the core management team, and GCs suggest that their experience is a key determinant of their level of influence within an organization (KPMG International 2014).

KPMG International (2012, 10) suggests that the GC "role is moving from one of 'firefighting' and reacting to events to being more strategic and proactively anticipating risks at an earlier stage." Key risk areas that require GC attention include regulation, reputation, contracts, technology, and litigation (KPMG International 2012, 2016). The KPMG studies suggest that risks around company brand and reputation are becoming particularly concerning to firms, and GCs expressed a responsibility for protecting the firm's reputation. In order to proactively anticipate and handle top corporate risks, GCs indicated that finance and internal audit are the

² *The American Bar Association Task Force on Corporate Responsibility* (March 2003) suggests that the four most important private sector governance mechanisms that can provide oversight of corporate conduct are boards of directors, public accounting firms, shareholders, and legal counsel (including both external law firms and corporate general counsels).

two most important areas with which they needed strong working relationships (KPMG International 2012, 12). The GC also works closely with the board of directors and regularly attends board meetings, even if she is not a board member.

Recent studies have examined the effects of GC presence on firm practices and image. Hopkins et al. (2015) find that the presence of a GC in the top management team is associated with lower financial reporting quality. Abernathy et al. (2016) find that GC appointments to the top management team are associated with increases in tax aggressiveness while Ham and Koharki (2016) find that bond market participants view GC appointments to top management as a signal of increased firm credit risk.

However, studies also provide evidence that GCs are effective monitors. Hopkins et al. (2015) find that the more aggressive accounting practices of firms with GCs in top management does not translate into an increased likelihood of financial misstatement. In fact, the authors find that financial misstatements are significantly lower for firms with a GC in top management. Mamun, Balachandran, Duong, and Gul (2018) find that the presence of a GC in top management is associated with lower stock price crash risk for the firm. Meanwhile, Jagolinzer et al. (2011) find that insider trading profit is significantly lower when GC approval is required for trades. In terms of voluntary disclosures, Kwak et al. (2012) find that firms with a GC are more likely to issue management earnings forecasts compared to firms without a GC. They also find that firms with GCs issue more bad news forecasts, less optimistic forecasts, and more accurate forecasts.

Hypotheses

GCs may have a vested interest in ensuring that a firm's internal controls are strong. As discussed in the previous section, GCs are charged with proactively anticipating risks and

handling corporate risks that do arise. Strong internal controls can help to mitigate these risks which may incentivize GCs to monitor the effectiveness of internal controls and promote a corporate culture of strong internal control. GCs are also responsible for upholding professional and ethical standards as licensed attorneys, and Section 307 of SOX solidifies the GC's role as a "gatekeeper" (Kim 2005) and establishes standards of professional conduct for attorneys who represent firms³. Failure to comply with these professional obligations can result in serious personal consequences, which may encourage GCs to be particularly attentive to internal controls that can help to prevent fraudulent activity.⁴

However, Kim (2005) outlines several situational factors that may influence a GC's decision making and which are relevant to an examination of internal controls. She describes these economic, psychological, and ideological factors as the "ethical ecology of inside lawyers." First, GCs are employees of the firm who typically report to the CEO. Drawing on psychological research, Kim (2005, 1003) suggests that GCs are often socialized to obey the CEO and "avoid awkward or embarrassing disruptions." GCs are also financially dependent on one client – the firm. This dependence can incentivize GCs to consciously or subconsciously take actions that secure their employment position, maximize their cash- and equity-based compensation, and justify their value and the value of the legal departments they oversee. These factors may lead GCs to overlook material weaknesses in internal control either because they do not want to "rock the boat" or because they have a self-interest in weak internal controls.

³ See SEC 17 CFR Part 205 – Implementation of Standards of Professional Conduct for Attorneys.

⁴ GCs who fail to comply with professional obligations can face disbarment, civil penalties, censure, or being denied the ability to appear before the SEC. Lowenfels, Bromberg, and Sullivan (2006) find heightened public scrutiny of GCs after SOX with nearly 80 enforcement actions from 2002-2005 naming lawyers (either internal or external) as respondents.

Second, a typical GC's self-concept (i.e., belief about oneself) is that she is a faithful agent of the client. Since the GC's true client (the firm) does not have a physical presence, the GC will perceive the firm's senior management as the client. Kim (2005, 1008) argues that the GC's accountability to a client "creates pressures to align her views with those of her client" – in this case, senior management. This alignment pressure can then affect the GC's judgments. As a faithful agent, the GC's judgments can also be affected by how she views the role of a corporate attorney (i.e., role ideology). Kim (2005) suggests that the dominant role ideology for today's GC is an "agnostic" view where the law is a neutral constraint for firms and the GC is responsible for assessing risks but is morally detached from the law. If GCs are in fact faithful agents with agnostic views of the law, they may simply view it as their responsibility to identify potential risks due to internal control weaknesses. However, they may leave it to senior management to decide if weak internal controls should be strengthened or disclosed.

Third, GCs are members of the corporate team and may feel pressure to conform or remain silent in order to prove their loyalty. Drawing on literature related to conformity and whistleblowing, Kim (2005) suggests that GCs may conform to the views of other senior managers because they do not want to be stigmatized as a dissident. Meanwhile, Milliken, Morrison, and Hewlin (2003) surveyed business professionals and found that it is common for individuals to remain silent at work when faced with issues. The most common reasons respondents gave for remaining silent include: (1) fear of being viewed negatively, (2) fear of damaging relationships with colleagues, (3) a belief that it would be futile to speak up, and (4) fear of retaliation or punishment. The pressures for GCs to act as a team player and either conform or remain silent may be strongest when internal control weaknesses are more severe.

These conflicting forces make it difficult to predict whether there is an association between the incidence of a material weakness in internal controls and the presence of a GC. It is also difficult to predict whether the severity of material weaknesses differ for firms with and without a GC. We present our first two hypotheses in the null form:

H1: The incidence of a material weakness is not associated with the presence of a GC.

H2: The severity of material weaknesses is not associated with the presence of a GC.

GCs perceive that their experience is a key determinant of their influence within a firm. KPMG International's interviews of GCs reveals that firms intentionally seek out GCs with external experiences at law firms or in government because these GCs are expected to have the confidence to handle complex issues and a strong understanding of regulation (KPMG International 2014, 21). Survey respondents also indicated that experience within a firm is crucial for the GC to gain confidence in her decision making and to develop a reputation with top management (KPMG International 2014, 7). Academic research on the benefits of prior experiences are mixed. For example, Dragoni, Oh, Vankatwyk, and Tesluk (2011) find that an individual's accumulated work experience is positively associated with the individual's strategic thinking competency. Meanwhile, Dokko, Wilk, and Rothbard (2009) find that individuals carry "baggage" (namely cognitive and behavioral rigidities) from their prior experiences in other organizations to their new firm, and this baggage negatively affects performance at the new firm. Experience that is primarily internal-to-firm may also lead a GC to suffer from entrenchment and a strong sense of loyalty to management which may exacerbate the economic, psychological, and ideological factors described by Kim (2005). Thus, it is unclear if GC experience is associated with the incidence or severity of material weaknesses. We present our final two hypotheses in the null form:

H3: The incidence and severity of a material weakness is not associated with external-to-firm GC experience.

H4: The incidence and severity of a material weakness is not associated with internal-to-firm GC experience.

III. RESEARCH DESIGN

To test for an association between the incidence of a material weakness and the presence of a GC (H1), we estimate the following logistic regression model.

$$\begin{split} MW &= \beta_0 + \beta_1 GC + \beta_2 \; GCPROMINENT + \beta_3 LNMVE + \beta_4 LOSS + \beta_5 SEGMENTS + \beta_6 FOREIGN \\ &+ \beta_7 MERGER + \beta_8 EXTREMEGROWTH + \beta_9 RESTRUCTURE + \beta_{10} BIG4 \\ &+ \beta_{11} AUDITORCHANGE + \beta_{12} RESTATEMENT + \beta_{13} EXECTURN + \beta_{14} BODTURN \\ &+ \beta_{15} BODINDEP + \beta_{16} INDEPBUSY + \beta_{17} ACSIZE + \beta_{19} ACFE + \beta_3 INDUSTRY + \epsilon \quad (1) \end{split}$$

The dependent variable (*MW*) is an indicator variable set equal to one if the auditor issues an adverse opinion in the firm's SOX 404 report year *t*, signaling the presence of at least one material weakness, and zero otherwise. *GC* is an indicator variable set equal to one if the firm employed a GC at the end of fiscal year *t*, and zero otherwise. Consistent with prior studies (e.g., Kwak et al. 2012; Hopkins et al. 2015), we identify firms with GCs by examining job titles of reported executives. We consider GCs to be those firm executives with the following titles in BoardEx: "general counsel," "chief legal officer," "chief corporate counsel," "chief counsel," "general legal counsel," "executive legal counsel," "executive VP – Legal," "Senior VP – Legal," "VP – Legal," "President – Legal," or "Vice President – Legal."⁵ We use BoardEx and not ExecuComp to identify GCs because BoardEx contains information on several executives for

⁵ We carefully read through the job titles in BoardEx and did not classify individuals as the GC if their title included a prefix or postfix that suggests the individual reports to the GC, such as: "associate general counsel", "assistant general counsel", "general counsel - International".

most firms (gathered from SEC filings and extensive searching procedures) while ExecuComp only tracks a firm's five highest paid executives. *GCPROMINENT* is an indicator variable set equal to one if the firm has a GC who is identified as a disclosed earner (i.e., one of the top five highest paid executives) for year *t*, and zero otherwise. The *GC* and *GCPROMINENT* coefficients, β_1 and β_2 , respectively, are our coefficients of interest in Model 1.

The remaining independent variables in Model 1 are based on prior studies and control for other potential determinants of a material weakness in internal controls (Doyle et al. 2007a; Hoitash et al. 2009; Bentley-Goode et al. 2017). LNMVE is the natural logarithm of the firm's market value of equity which controls for firm size. LOSS is an indicator variable that controls for recent financial distress. We also include several proxies for firm complexity and growth in our model (SEGMENTS, FOREIGN, MERGER, EXTREMEGROWTH, and RESTRUCTURE). Because we rely on the auditor's SOX 404 report to identify material weaknesses, we control for whether the firm retains a Big 4 auditor (BIG4) and whether the firm changed its auditor within the past year (AUDITORCHANGE). We also control for whether the firm announced a restatement in the same year that the material weakness was disclosed (*RESTATEMENT*). EXECTURN and BODTURN control for recent turnover in the CEO or CFO and the board of directors, respectively. Because the board of directors, and the audit committee in particular, provide important oversight of a firm's financial reporting and internal controls, our model controls for characteristics of these groups. Specifically, we control for the percentage of board members who are independent (*BODINDEP*), the average number of other directorships held by independent board members (INDEPBUSY), the size of the audit committee (ACSIZE), and the percentage of audit committee members who are classified as financial experts (ACFE). Lastly, we include industry indicator variables and cluster standard errors by firm and year to control for time-series and cross-sectional correlation (Gow, Ormazabal, and Taylor 2010). All control variables are defined in the Appendix.

To test for an association between the severity of material weaknesses and the presence of a GC (H2), we estimate the following regression model.

$$SEVERITY = \beta_0 + \beta_1 GC + \beta_2 GCPROMINENT + \beta_3 LNMVE + \beta_4 LOSS + \beta_5 SEGMENTS$$

$$+ \beta_6 FOREIGN + \beta_7 MERGER + \beta_8 EXTREMEGROWTH + \beta_9 RESTRUCTURE$$

$$+ \beta_{10} BIG4 + \beta_{11} AUDITORCHANGE + \beta_{12} RESTATEMENT + \beta_{13} EXECTURN$$

$$+ \beta_{14} BODTURN + \beta_{15} BODINDEP + \beta_{16} INDEPBUSY + \beta_{17} ACSIZE + \beta_{19} ACFE$$

$$+ \beta_J INDUSTRY + \varepsilon$$
(2)

SEVERITY represents three different dependent variables which measure different aspects of material weakness severity. *MWCOUNT* is the number of material weaknesses identified by the auditor in the year *t* SOX 404 report. We interpret larger values of *MWCOUNT* as a signal of more severe material weaknesses in internal controls. In addition to reporting the number of material weaknesses, Audit Analytics also assigns material weakness reason codes to each adverse SOX 404 report. *AMWCOUNT* is the number of account-specific material weakness reason codes reported for the firm's year *t* SOX 404 report, and *EMWCOUNT* is the number of entity-level material weakness reason codes reported for the firm's year *t* SOX 404 report. Prior studies suggest that entity-level material weaknesses are more pervasive and require significant resources to remediate while account-specific material weaknesses are typically easier to resolve (Doyle et al. 2007a; Bedard et al. 2012). We estimate Model 2 as a negative binomial regression. The *GC* and *GCPROMINENT* coefficients, β_1 and β_2 , respectively, are our coefficients of interest in Model 2.

To test H3 and H4, we first restrict our sample to those firm-year observations where GCis set to one, and we gather the following data for our sample of GCs. GCGOV is an indicator variable set to one if the GC held a federal, state, or local government position prior to his or her employment at the firm, and zero otherwise. GCLAW is an indicator variable set to one if the GC held a position at a law firm prior to his or her employment at the corporate firm, and zero otherwise. GCBUS is an indicator variable set to one if the GC holds a business degree (e.g., BBA, MBA, EMBA, Masters in Accounting or Taxation) or a business-related certification (e.g., CPA, CMA, CFA, Chartered Financial Consultant, Chartered Accountant, Certified Internal Auditor), and zero otherwise. We then sum GCGOV, GCLAW, and GCBUS to create GCEXTERNAL which is our proxy for the extent of the GC's external-to-firm experiences that may influence her decision making regarding internal controls. *PRE_GCTENURE* equals the number of years the GC served at the firm before being appointed as its GC, and GCTENURE equals the number of years the GC has held the GC position at the firm. GCBOD is an indicator variable set to one if the GC is a member of the firm's board of directors and zero otherwise. PRE_GCTENURE, GCTENURE, and GCBOD proxy for the GC's internal-to-firm experiences which may influence her decision making regarding internal controls. Recall from our earlier discussion that both external-to-firm and internal-to-firm experiences may help the GC better identify and resolve internal control problems before they reach the point of material weakness. However, extensive internal-to-firm experiences may also lead the GC to be overly loyal to or entrenched in the firm. We then modify Model 1 and Model 2 by replacing GC and GCPROMINENT with GCEXTERNAL, PRE_GCENTURE, GCTENURE, and GCBOD. The four GC experience coefficients are our coefficients of interest in the revised models.

IV. DESCRIPTIVE STATISTICS AND EMPIRICAL RESULTS

Sample Selection

Our sample selection process begins with 50,454 auditor-issued SOX 404 reports not claiming an exemption and not restating a prior internal control opinion from 2005-2018 in Audit Analytics. We merge this sample with data from Audit Analytics Director and Officer Changes, BoardEx, and Compustat. We eliminate 11,563 observations that are missing data needed for Models 1 and 2. Our final sample contains 38,891 firm-year observations.

Descriptive Statistics

Table 1, Panel A presents descriptive statistics for our full sample of 38,891 firm-year observations. The mean value for *MW* indicates that the auditor identifies at least one material weakness for 4.8 percent of the sample observations. Across the full sample, the average number of material weaknesses (*MWCOUNT*) reported is 0.107. Meanwhile, the average number of account-related (*AMWCOUNT*) and entity-related (*EMWCOUNT*) material weakness reasons identified by Audit Analytics is 0.120 and 0.174, respectively.⁶ In terms of our GC measures, we identify a GC for 67.8 percent of the sample (*GC*), and 10.6 percent of the sample has a prominent GC who is one of the top five highest paid executives at the firm (*GCPROMINENT*). Within the subsample of firm-year observations having a GC, 15.6 percent of the GCs are in the top five highest paid executives at the firm. Descriptive statistics for most control variables are similar to prior studies (Hoitash et al. 2009; Bentley-Goode et al. 2017). The one exception is *FOREIGN*; we find that 49.7 percent of our sample observations have foreign operations compared to 28 percent in Hoitash et al. (2009).

⁶ Because Audit Analytics often provides more than one reason code for a specific material weakness, the sum of *AMWCount* and *EMWCount* do not equal *MWCount*.

We also find that means and medians for all variables in Panel A significantly differ for firms with a GC compared to firms without a GC (*p*-value < 0.05 level). Differences suggest that firms with a GC have a significantly lower incidence of a material weakness and a significantly lower number of reported material weaknesses (in total and for both accountspecific and entity-specific reasons). Key takeaways from the control variables are that firms with a GC are significantly larger, more complex (*SEGMENTS*, *FOREIGN*), have undergone recent business changes (*MERGER*, *RESTRUCTURE*), have higher audit quality (*BIG4*, less *AUDITORCHANGE*), and have busier independent directors compared to firms without a GC. Because firm characteristics significantly differ for firms with and without a GC, it is imperative that we use multivariate analyses to examine our research questions.

Table 1, Panel B presents descriptive statistics for the subsample of 24,098 firm-year observations for which we could collect data on GC experience. This subsample is slightly smaller than the subsample in Panel A where *GC* is set to one because: (1) not all GCs identified in Panel A have information available in the BoardEx Individual Profile Employment data set, which we require in order to gather *PRE_GCTENURE*, *GCLAW*, *GCBUS*, *GCGOV*, and *GCBUS*, and (2) some firm-year observations where *GC* is set to one have more than one individual with "general counsel" in their title, and we are unable to determine which of these individuals should be examined when collecting the experience data. Panel B shows that 56 percent of our GC subsample have prior work experience at a law firm (*GCLAW*), 54 percent have prior work experience in a government position (*GCGOV*), and 13 percent have prior business experience (*GCBUS*). The average value of the composite external experience measure (*GCEXTERNAL*) is 1.2. In terms of internal-to-firm experience, the average tenure at the firm before appointment to GC is 2.5 years (*PRE_GCTENURE*), and the average tenure as a GC is

5.3 years (*GCTENURE*). Only 1.3 percent of the GCs in our sample hold a board seat at their employer firm (*GCBOD*).

Table 2 displays Pearson correlations for all of our variables. Panel A presents correlations for our full sample, and we find a significantly negative correlation (*p*-value < 0.05) between *GC* and all four of our dependent variables: *MW*, *MWCOUNT*, *AMWCOUNT*, and *EMWCOUNT*. We also find a significantly negative correlation between *GCPROMINENT* and all of the dependent variables except *AMWCOUNT*. However, the values of these correlations is low (r = -0.03 to -0.02).

Table 2, Panel B presents correlations for the dependent variables and GC experience variables in the subsample where *GC* is set to one and GC experience data is available. None of the external-to-firm experience measures are significantly correlated with the incidence or number of material weaknesses. In terms of internal-to-firm experiences, *PRE_GCTENURE* (*GCTENURE*) is negatively and significantly correlated with three (all four) dependent variables (r = -0.05 to -0.02).

Several correlations do exist in Panel B between our proxies for external-to-firm and internal-to-firm experiences. GC experience in a law firm (*GCLAW*) is highly correlated with GC experience in the government (*GCGOV*) (r = 0.91). Due to the high collinearity between these two measures, we include *GCEXTERNAL* in our regression models instead of the three separate external experience indicators. *PRE_GCTENURE* and *GCTENURE* are both negatively and significantly correlated with GC experience in law firms and the government (r = -0.19 to - 0.13) positively and positively and significantly correlated with our indicators for GC prominence and GC board membership (r = 0.04 to 0.08) and. Significantly negative correlations also exist between the GC's presence on the board and both law firm and

government experience (r = -0.04 to -0.02). The correlations between our several of our experience measures underscores the importance of simultaneously including GC internal-to-firm and external-firm experience variables in our regression model.

Multivariable Results

Table 3 presents results for our tests of H1 and H2. The first set of results presented are for a logistic regression model which tests H1. The dependent variable in this model is *MW*, our indicator which represents the presence of at least one material weakness. The coefficients for both *GC* and *GCPROMINENT* are insignificantly different from zero, which suggests that the incidence of a material weakness is not associated with the presence of a GC. This finding differs from Table 1 where the mean and median of *MW* was significantly lower for firms with a GC, and underscores the importance of multivariate analyses in our study. With respect to the control variables, several of the coefficients are statistically significant and their sign is consistent with prior literature.

The remaining results presented in Table 3 are for negative binomial regressions where the dependent variable represents the number of material weaknesses identified (MWCOUNT), the number of account-specific material weakness reason codes identified by Audit Analytics (AMWCOUNT), or the number of entity-specific material weakness reason codes identified by Audit Analytics (EMWCOUNT) (tests of H2). Our assumption is that a large number of material weaknesses in total and a large number of entity-specific material weakness reason codes suggest more severe material weaknesses. The GC coefficient is insignificantly different from zero in all three model specifications while the GCPROMINENT coefficient is negative and significant in the MWCOUNT and EMWCOUNT models (p-value < 0.05 and p-value < 0.10, respectively). These findings suggest that the number of material weaknesses reported as well as the number of

entity-specific material weaknesses are significantly smaller only when the firm's GC is prominent. Thus, while firms with and without GCs in our sample are equally likely to experience material weaknesses, it is the presence of a prominent GC, not any GC, that is associated with less severe material weaknesses on average. Several of the control variable coefficients are statistically significant and their sign is consistent with prior literature. Collectively, the results in Table 3 suggest that the null form of H1 cannot be rejected but the results do suggest rejection of the null form of H2.

In order to test H3 and H4, we first estimate our models for the subsample of observations with GC experience information and where GC is set to one. Across all four model specifications, the *GCTENURE* coefficient is negative and significant (*p*-value < 0.01). This finding suggests that longer tenure in the GC position, on average, is associated with a lower likelihood of a material weakness and less severe material weaknesses when they do occur. All other GC experience coefficients are insignificantly different from zero. These findings support rejection of the null form of H3.

We continue our examination of H3 and H4, by next estimating our models for the subsample of observations with GC experience information and where *GCPROMINENT* is set to one. The *GCEXTERNAL* coefficient is negative and significant in all model specifications (p-value < 0.01). In terms of internal-to-firm experiences, the *GCTENURE* coefficient remains negative and significant in each of the model specifications and the *PRE_GCTENURE* coefficient is also negatively and significantly associated with each of the dependent variables that captures the number of material weaknesses. Collectively, these results suggest that for firms with prominent GCs, the GC's extent of external work experiences in law, government, and business as well as the GC's overall tenure at the firm are associated with a lower likelihood

of material weaknesses and less severe material weaknesses when they do occur. These findings support rejection of the null form of both H3 and H4.

As a sensitivity test, we examine whether our regression results are influenced by extreme observations of our three dependent variables that measure the number of material weaknesses (*MWCOUNT*, *AMWCOUNT*, *EMWCOUNT*) and our two measures of GC tenure while at the firm (*PRE_GCTENURE*, *GCTENURE*). We winsorize these continuous measures at the top and bottom one percent and then re-estimate our regression models. Untabulated results are consistent with those presented in Tables 3-5, and our inferences are unchanged.

Conclusion

This study examines whether general counsels (GCs) are associated with internal control quality. Specifically, we examine whether the presence of a GC or specific GC experiences that are external-to-the firm or internal-to-the firm are associated with either the likelihood of a material weakness or the number of reported material weaknesses. We find that the likelihood of a material weakness does not differ for GC firms compared to non-GC firms; however, we find that the presence of a prominent GC (i.e., disclosed earner GC) is associated with fewer material weaknesses in total and fewer pervasive material weaknesses. Within the subsample of firms that employ a GC, we find that the GC's tenure in the position and prior work experience in law, government, or business are associated with a lower likelihood of material weaknesses and less severe material weaknesses when they do occur. These results obtain after controlling for other known determinants of material weaknesses and material weakness severity. Our findings suggest that the presence of a GC and the GC's experience gained through both external-to-firm and internal-to-firm activities are associated with internal control quality.

Our research is subject to limitations. First, our sample consists primarily of large firms required to file SOX 404 reports (i.e., accelerated filers). Our results may not generalize to small firms or foreign firms. Second, our tests may suffer from endogeneity issues if firms with stronger internal controls are more inclined to employ a GC. Although we have attempted to control for firm, board of director, and top management characteristics in our multivariate tests, this approach may not be sufficient to address potential endogeneity issues.

Subject to these limitations, our study contributes to the literature in two key ways. First, we provide evidence that GC presence and specific GC experiences are significant determinants of internal control quality. These findings contribute to the literature stream that has also documented associations between internal control quality and other important private sector governance mechanisms (i.e., top management, boards of directors, external auditor). Second, we contribute to the GC literature by providing evidence that specific experiences of the GC (namely tenure as GC and prior external work experiences) are associated with firm-level outcomes. Prior studies in the GC literature have largely focused their attention on whether the presence of a GC is associated with firm-level outcomes and their attention to GC experience is sparse. Our findings suggest that it would be fruitful for researchers to examine whether GC experience or other GC characteristics are associated with firm-level outcomes beyond proxies for internal control quality.

APPENDIX A Variable Definitions

	variable Definitions
Variable	Definition
MW Variables	
MW	Indicator variable that equals 1 if the firm's auditor reports a material weakness in the SOX 404 report, 0 otherwise. Source: Audit Analytics
MWCOUNT	Number of material weaknesses reported in the SOX 404 report. Source: Audit Analytics
AMWCount	Number of account-specific material weaknesses based on Audit Analytics MW type codes. Source: Audit Analytics
EMWCount	Number of entity-specific material weaknesses based on Audit Analytics MW type codes. Source: Audit Analytics
GC Variables	
GC	Indicator variable that equals 1 if the firm has an exective with a role name indicating GC (General Counsel, VP of law, etc; but excluding associate GC/assistant GC and other titles that indicate a lower level title) at year end date, 0 otherwise. Source: BoardEx
GCPROMINENT	Indicator variable that equals 1 if the firm has a disclosed earner with a role name indicating GC (General Counsel, VP of law, etc; but excluding associate GC/assistant GC and other titles that indicate a lower level title) at year end date, 0 otherwise. Source: BoardEx
GCTENURE	The tenure of the GC executive calcuated at fiscal year end from the earliest start date in the GC role. Source: BoardEx
PRE_GCTENURE	The tenure between the date the individual started at the firm and the date the invidual becomes GC. Source: BoardEx
GCBOD	Indicator variable that equals 1 if the GC is also a board of director member at the annual report date, 0 otherwise. Source: BoardEx
GCLAW	Indicator variable that equals 1 if the GC worked in a law firm prior to starting the current GC role at the firm, 0 otherwise. Source: BoardEx
GCGOV	Indicator variable that equals 1 if the GC worked at a government entity prior to starting the current GC role at the firm, 0 otherwise. Source: BoardEx
GCBUS	Indicator variable that equals 1 if the GC has a business degree (MBA, Masters in Accounting/Taxation, BBA, BSBA, Bacheor in Business, etc) or has a finance/accounting certification (CPA, CMA, CFA, Chartered Finanical, etc), 0 otherwise. Source: BoardEx
GCEXTERNAL	Composite measure of external GC experience: sum of GCLAW, GCGOV, and GCBUS.

	APPENDIX A (continued)
Control Variables	
LNMVE	Natural log of market value of equity. Source: Compustat
LOSS	Indicator variable of 1 if the company has a negative net income in either of the prior two years, 0 otherwise. Source: Compustat
SEGMENTS	Number of business and geographic segements. Source: Compustat
FOREIGN	Indicator variable of 1 if the company has non-zero foreign currency translation, 0 if missing or zero. Source: Compustat
MERGER	Indicator variable if the firm experienced a merger in the prior two years, 0 otherwise. Mergers are identified by non-zero amounts for acquisition items in Compustat. Source: Compustat
EXTREMEGROWTH	Indicator variable of 1 if the industry-adjusted sales growth is in the top quintile of the sample, 0 otherwise. Source: Compustat
RESTRUCTURE	Indicator variable if the firm experienced a restructure, 0 otherwise. Restructurings are identified by non-zero amounts fo restructuring items in Compustat. Source: Compustat
BIG4	Indicator variable that equals 1 if the firm is audited by a Big 4 audit firm, 0 otherwise. Source: Audit Analytics
AUDITORCHANGE	Indicator variable that equals 1 if the firm has a different auditor compared to the prior fiscal year, 0 otherwise. Source: Audit Analytics
RESTATEMENT	Indicator variable that equals 1 if the firm announces a restatement in the current year, 0 otherwise. Source: Audit Analytics
EXECTURN	Indicator variable that equals 1 if the firm experienced a turnover in the CEO or CFO in the current year, 0 otherwise. Source: Audit Analytics
BODTURN	Indicator variable that equals 1 if the firm experienced a turnover in the board of directors in the current year, 0 otherwise. Source: Audit Analytics
BODINDEP	Proportion of independent board members on the board. Source: BoardEx
INDEPBUSY	Average number of listed board seats held by independent board members. Source: BoardEx
ACSIZE	Number of directors that sit on the audit committee. Source: BoardEx
ACFE	Number of audit committee members that are financial experts. Source: BoardEx

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Descriptive Statistics Panel A: Full Sample Descriptive Statistics Full Sample (n = 38,891) GC=0 (n = 12,519) GC=1 (n = 26,372) Std. Med. Variable Mean Q1 Q3 Mean Med. Mean Med. Dev. MW Variables MW 0.048 0.000 0.0000.0000.213 0.043 0.000 0.058 0.000 MWCOUNT 0.000 0.0000.0000.692 0.095 0.000 0.132 0.000 0.107 0.701 0.000 0.139 AMWCOUNT 0.120 0.000 0.000 0.000 0.110 0.000 0.000 EMWCOUNT 0.174 0.000 0.000 0.000 0.867 0.156 0.212 0.000 GC Dummy 0.000 1.000 1.000 0.000 0.6781.000 1.0000.4670.000 GCGCPROMINENT 0.1060.000 0.0000.0000.307 0.156 0.000 0.000 0.000 **Control Variables** 6.996 6.869 5.665 8.144 1.791 7.448 7.370 6.045 5.837 LNMVE LOSS 0.333 0.000 0.0001.0000.471 0.326 0.000 0.347 0.000 2.595 1.000 2.022 SEGMENTS 1.000 1.000 3.000 2.935 2.867 1.000 FOREIGN 0.497 0.000 0.000 1.000 0.500 0.572 1.000 0.339 0.000 MERGER 0.322 0.000 0.000 1.000 0.467 0.352 0.000 0.258 0.000 **EXTREMEGROWTH** 0.196 0.000 0.000 0.000 0.397 0.192 0.000 0.203 0.000 RESTRUCTURE 0.295 0.000 0.000 1.000 0.456 0.351 0.000 0.176 0.000 BIG4 0.798 1.000 1.000 1.000 0.402 0.882 1.000 0.620 1.000 AUDITORCHANGE 0.043 0.000 0.0000.000 0.204 0.036 0.000 0.060 0.000 RESTATEMENT 0.081 0.000 0.0000.0000.273 0.085 0.000 0.074 0.000 EXECTURN 0.236 0.000 0.0000.0000.425 0.248 0.000 0.212 0.000 BODTURN 0.5041.000 0.0001.000 0.5000.531 1.000 0.447 0.000 BODINDEP 0.834 0.857 0.8000.889 0.091 0.842 0.875 0.816 0.846 **INDEPBUSY** 1.771 1.667 1.286 2.143 0.646 1.869 1.800 1.564 1.400

5.000

0.667

1.216

0.280

4.265

0.512

4.000

0.400

4.042

0.425

4.000

0.333

TABLE 1 Descriptive Statistics

Panel B: Descriptive Statistics for the Subsample of GCs

4.193

0.484

ACSIZE

ACFE

GC Sample (n = 24,098)

3.000

0.250

Variables	Mean	Median	25%	75%	Std. Dev.
MW Variables					
MW	0.044	0.000	0.000	0.000	0.205
MWCOUNT	0.097	0.000	0.000	0.000	0.686
AMWCOUNT	0.112	0.000	0.000	0.000	0.692
EMWCOUNT	0.159	0.000	0.000	0.000	0.827
GC Experience Variable	es				
GCLAW	0.560	1.000	0.000	1.000	0.496
GCGOV	0.540	1.000	0.000	1.000	0.498
GCBUS	0.130	0.000	0.000	0.000	0.337
GCEXTERNAL	1.230	2.000	0.000	2.000	1.019
PRE_GCTENURE	2.545	0.000	0.000	3.003	4.961
GCTENURE	5.346	4.144	1.915	7.669	4.469
GCBOD	0.013	0.000	0.000	0.000	0.114
GCPROMINENT	0.159	0.000	0.000	0.000	0.366

4.000

0.333

The descriptive statistics in Panel A are shown for the full set of observations and separately for the subsamples where GC=1 and GC=0, respectively. Bold means and medians significantly differ between the subsamples with and without GCs at the 5 percent level. In Panel B, the subsample includes those firm-year observations with a GC and for which GC experience information is available.

All variables are defined in Appendix A.

									Correl	ation T	able											
Pane	A: Correlations for tl	he Full S	Sample	•																		
Varia	ble	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
(1)	MW																					
(2)	MWCOUNT	0.69																				
(3)	AMWCOUNT	0.76	0.81																			
(4)	EMWCOUNT	0.90	0.81	0.83																		
(5)	GC	-0.03	-0.03	-0.02	-0.03																	
(6)	GCPROMINENT	-0.02	-0.02	-0.01	-0.02	0.24																
(7)	LNMVE	-0.12	-0.08	-0.09	-0.10	0.37	0.24															
(8)	LOSS	0.12	0.10	0.10	0.11	-0.02	-0.05	-0.36														
(9)	SEGMENTS	-0.01	-0.01	-0.02	-0.01	0.14	-0.01	0.22	-0.04													
(10)	FOREIGN	0.02	0.02	0.03	0.03	0.22	0.11	0.27	-0.01	0.26												
(11)	MERGER	0.01	0.01	0.01	0.01	0.09	-0.01	0.13	-0.03	0.22	0.16											
(12)	EXTREMEGROWTH	-0.01	-0.01	-0.02	-0.01	-0.01	-0.02	0.04	-0.06	0.00	-0.06	0.05										
(13)	RESTRUCTURE	0.03	0.02	0.03	0.03	0.18	0.11	0.12	0.13	0.20	0.33	0.16	-0.09									
(14)	BIG4	-0.05	-0.03	-0.02	-0.04	0.31	0.14	0.40	-0.04	0.09	0.20	0.03	-0.01	0.16								
(15)	AUDITORCHANGE	0.10	0.09	0.09	0.11	-0.05	-0.03	-0.11	0.05	-0.02	-0.02	0.01	0.00	-0.01	-0.15							
(16)	RESTATEMENT	0.17	0.16	0.17	0.18	0.02	0.01	-0.03	0.06	0.02	0.03	0.01	-0.01	0.04	0.03	0.06						
(17)	EXECTURN	0.07	0.08	0.08	0.08	0.04	0.04	-0.04	0.11	0.02	0.05	0.01	-0.03	0.12	0.02	0.01	0.05					
(18)	BODTURN	0.03	0.03	0.02	0.03	0.08	0.04	0.06	0.05	0.03	0.06	0.04	0.00	0.09	0.05	-0.01	0.02	0.21				
(19)	BODINDEP	-0.03	-0.02	-0.02	-0.02	0.13	0.11	0.19	-0.02	0.10	0.07	0.07	-0.03	0.16	0.14	-0.04	0.00	0.07	0.13			
(20)	INDEPBUSY	-0.03	-0.02	-0.01	-0.03	0.22	0.16	0.37	0.05	0.08	0.22	0.02	-0.03	0.17	0.31	-0.06	0.01	0.02	0.03	0.11		
(21)	ACSIZE	-0.03	-0.02	-0.02	-0.02	0.09	0.10	0.26	-0.13	0.08	0.04	0.03	0.01	0.08	0.07	-0.02	-0.01	0.04	0.21	0.28	0.06	
(22)	ACFE	-0.04	-0.03	-0.03	-0.04	0.14	0.07	0.20	-0.04	0.11	0.11	0.06	0.00	0.10	0.16	-0.04	0.00	0.02	0.02	0.05	0.14	-0.10
Pane	B: Correlations for th	he Subs	ample	of GCs	6																	
Varia	ble	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)										
(1)	MW																					
(2)	MWCOUNT	0.66																				
(3)	AMWCOUNT	0.76	0.80																			
(4)	EMWCOUNT	0.90	0.79	0.83																		
(5)	GCLAW	0.01	0.01	0.01	0.01																	
(6)	GCGOV	0.01	0.02	0.01	0.02	0.91																
(7)	GCBUS	0.00	0.00	0.00	0.01	-0.03	-0.03															
(8)	GCEXTERNAL	0.01	0.01	0.01	0.02	0.92	0.92	0.30														
(9)	PRE_GCTENURE	-0.03	-0.02	-0.02	-0.02	-0.19	-0.17	-0.02	-0.18													
(10)	GCTENURE	-0.05	-0.04	-0.04	-0.05	-0.15	-0.13	-0.00	-0.14	0.06												
(11)	GCBOD	0.00	-0.00	-0.00	-0.00	-0.04	-0.02	-0.01	-0.04	0.04	0.08											
(12)	GCPROMINENT	-0.02	-0.02	-0.00	-0.01	0.00	0.00	0.01	0.00	0.05	0.08	0.06										
Panel	A presents Pearson correlation	ons among	g the reg	ression y	variables	for the f	ull samp	le. Pane	l B prese	ents corre	elations a	among th	ne depen	dent vari	ables and	d indepe	ndent va	riables of	f interest	for the	subsamp	e

TABLE 2

where GC = 1 and GC experience information is available. Bold correlations are significant at the 5 percent level.

All variables are defined in Appendix A.

	(1) <i>M</i>	IW	(2) <i>M</i> V	VCOUNT	(3) AM	WCOUNT	(4) EMWCOUNT		
	Coeff.	z-statistic	Coeff.	z-statistic	Coeff.	z-statistic	Coeff.	z-statistic	
GC	-0.080	(0.065)	-0.042	(0.089)	0.077	(0.086)	0.015	(0.090)	
GCPROMINENT	-0.034	(0.142)	-0.277**	(0.127)	-0.163	(0.128)	-0.225*	(0.130)	
LNMVE	-0.211***	(0.036)	-0.263***	(0.040)	-0.295***	(0.034)	-0.252***	(0.041)	
LOSS	0.583***	(0.076)	0.747***	(0.093)	0.703***	(0.087)	0.650***	(0.084)	
SEGMENTS	-0.013	(0.030)	-0.012	(0.015)	0.000	(0.014)	-0.006	(0.015)	
FOREIGN	0.212*	(0.113)	0.217**	(0.099)	0.270***	(0.088)	0.174*	(0.096)	
MERGER	0.163**	(0.072)	0.204**	(0.097)	0.205**	(0.084)	0.099	(0.084)	
EXTREMEGROWTH	0.015	(0.094)	0.165**	(0.083)	0.187**	(0.085)	0.192**	(0.089)	
RESTRUCTURE	0.025	(0.068)	0.006	(0.100)	0.074	(0.085)	0.142	(0.096)	
BIG4	-0.122	(0.103)	-0.120	(0.098)	-0.029	(0.095)	-0.152	(0.096)	
AUDITORCHANGE	0.905***	(0.094)	0.969***	(0.097)	1.038***	(0.104)	1.016***	(0.096)	
RESTATEMENT	1.535***	(0.062)	1.670***	(0.077)	1.644***	(0.072)	1.577***	(0.077)	
EXECTURN	0.475***	(0.064)	0.574***	(0.077)	0.518***	(0.069)	0.491***	(0.069)	
BODTURN	0.125*	(0.070)	0.198***	(0.068)	0.121*	(0.066)	0.131*	(0.070)	
BODINDEP	-0.651**	(0.288)	-0.581	(0.421)	-0.571	(0.403)	-0.451	(0.411)	
INDEPBUSY	-0.067	(0.060)	0.009	(0.082)	-0.036	(0.066)	-0.044	(0.068)	
ACSIZE	-0.008	(0.026)	-0.012	(0.033)	-0.000	(0.032)	0.003	(0.035)	
ACFE	-0.511***	(0.160)	-0.489***	(0.175)	-0.362**	(0.160)	-0.515***	(0.177)	
Industry Indicators	Yes		Yes		Yes		Yes		
Year Indicators	No		Yes		Yes		Yes		
Cluster	Firm/Year		Firm		Firm		Firm		
Observations	38,891		38,891		38,891		38,891		
Pseudo Rsquare	0.122		0.089		0.083		0.049		
Wald P-value			0.000		0.000		0.000		
ROC Curve	0.762								

TABLE 3
GC Presence and Material Weaknesses

***, **, * Indicate significant at the p < 0.01, p < 0.05, and p < 0.10 levels, respectively.

This table reports the results from regressions examining the association between GC presence and reporting a material weakness (Column 1), the number of material weakness reasons (Column 2), the number of account-specific material weakness reasons (Column 3), and the number of entity-specific material weakness reasons (Column 4). Column 1 is esimated using a logistic regression, and Columns 2-4 are estimated using a negative binomial regression. All variables are defined in Appendix A.

	(1) <i>M</i>	!W	(2) <i>MWCOUNT</i> (3) <i>A</i>		(3) <i>AM</i>	WCOUNT	(4) EMWCOUN		
	Coeff.	z-statistic	Coeff.	z-statistic	Coeff.	z-statistic	Coeff.	z-statistic	
GC External Experience		<u> </u>							
GCEXTERNAL	-0.008	(0.042)	0.011	(0.050)	-0.003	(0.048)	0.027	(0.049)	
GC Internal Experience									
PRE_GCTENURE	-0.011	(0.012)	-0.002	(0.015)	-0.002	(0.015)	-0.008	(0.013)	
GCTENURE	-0.046***	(0.012)	-0.044***	(0.013)	-0.037***	(0.013)	-0.047***	(0.012)	
GCBOD	-0.209	(0.328)	0.131	(0.459)	-0.010	(0.470)	-0.116	(0.461)	
LNMVE	-0.206***	(0.044)	-0.268***	(0.049)	-0.298***	(0.044)	-0.268***	(0.051)	
LOSS	0.530***	(0.078)	0.661***	(0.121)	0.698***	(0.113)	0.564***	(0.106)	
SEGMENTS	-0.010	(0.031)	-0.019	(0.022)	0.003	(0.020)	-0.011	(0.020)	
FOREIGN	0.235**	(0.110)	0.275**	(0.125)	0.284**	(0.113)	0.193	(0.125)	
MERGER	0.181*	(0.099)	0.217**	(0.109)	0.238**	(0.104)	0.149	(0.102)	
EXTREMEGROWTH	0.005	(0.143)	0.122	(0.111)	0.216*	(0.123)	0.155	(0.123)	
RESTRUCTURE	0.064	(0.083)	0.111	(0.126)	0.125	(0.108)	0.286**	(0.117)	
BIG4	-0.075	(0.128)	0.005	(0.134)	-0.000	(0.145)	-0.185	(0.147)	
AUDITORCHANGE	0.901***	(0.123)	1.086***	(0.131)	1.148***	(0.144)	1.059***	(0.136)	
RESTATEMENT	1.564***	(0.083)	1.709***	(0.102)	1.698***	(0.091)	1.636***	(0.097)	
EXECTURN	0.427***	(0.075)	0.490***	(0.093)	0.431***	(0.083)	0.360***	(0.084)	
BODTURN	0.113	(0.121)	0.183**	(0.090)	0.101	(0.087)	0.084	(0.093)	
BODINDEP	-0.642	(0.537)	-0.261	(0.624)	-0.476	(0.604)	-0.767	(0.650)	
INDEPBUSY	-0.088	(0.086)	-0.023	(0.085)	-0.071	(0.083)	-0.068	(0.087)	
ACSIZE	0.022	(0.038)	0.016	(0.039)	0.019	(0.039)	0.025	(0.042)	
ACFE	-0.414**	(0.194)	-0.381*	(0.204)	-0.210	(0.203)	-0.307	(0.213)	
Industry Indicators	Yes		Yes		Yes		Yes		
Year Indicators	No		Yes		Yes		Yes		
Cluster	Firm/Year		Firm		Firm		Firm		
Observations	24,098		24,098		24,098		24,098		
Pseudo Rsquare	0.1224		0.0932		0.0855		0.0512		
Wald P-value			0.0000		0.0000		0.0000		
ROC Curve	0.7632								

ТА	BLE 4	
GC Experience and Material	Weaknesses (GC	= 1 Subsample)

***, **, * Indicate significant at the p < 0.01, p < 0.05, and p < 0.10 levels, respectively.

This table reports the results from regressions examining the association between GC experience measures and reporting a material weakness (Column 1), the number of material weakness reasons (Column 2), the number of account-specific material weakness reasons (Column 3), and the number of entity-specific material weakness reasons (Column 4). Column 1 is esimated using a logistic regression, and Columns 2-4 are estimated using a negative binomial regression. The subsample used for these analyses are those firm-year observations where GC = 1 and GC experience information is available.

All variables are defined in Appendix A.

	(1) <i>M</i>	<i>tw</i>	(2) <i>MV</i>	VCOUNT	(3) AM	WCOUNT	(4) EMWCOUNT		
	Coeff.	z-statistic	Coeff.	z-statistic	Coeff.	z-statistic	Coeff.	z-statistic	
GC External Experience									
GCEXTERNAL	-0.318***	(0.059)	-0.440***	(0.101)	-0.533***	(0.104)	-0.411***	(0.118)	
GC Internal Experience									
PRE_GCTENURE	-0.033	(0.037)	-0.052**	(0.026)	-0.050*	(0.027)	-0.056**	(0.026)	
GCTENURE	-0.074**	(0.035)	-0.078**	(0.038)	-0.106***	(0.040)	-0.112***	(0.037)	
GCBOD	0.098	(0.674)	0.601	(0.734)	0.546	(0.715)	0.685	(0.778)	
LNMVE	-0.155**	(0.064)	-0.162	(0.115)	-0.240**	(0.109)	-0.195*	(0.108)	
LOSS	0.767***	(0.237)	1.234***	(0.249)	1.257***	(0.252)	1.172***	(0.266)	
SEGMENTS	-0.093*	(0.055)	-0.080	(0.052)	-0.060	(0.052)	-0.120*	(0.061)	
FOREIGN	0.217	(0.202)	0.054	(0.289)	-0.246	(0.268)	-0.191	(0.287)	
MERGER	0.046	(0.254)	-0.106	(0.237)	0.128	(0.260)	0.158	(0.284)	
EXTREMEGROWTH	0.218	(0.238)	0.446	(0.282)	0.367	(0.269)	0.164	(0.290)	
RESTRUCTURE	0.025	(0.178)	0.117	(0.236)	0.375	(0.246)	0.448*	(0.270)	
BIG4	-0.109	(0.291)	-0.032	(0.466)	0.268	(0.480)	-0.526	(0.511)	
AUDITORCHANGE	0.776	(0.479)	0.974**	(0.458)	1.317***	(0.490)	1.210**	(0.499)	
RESTATEMENT	1.602***	(0.217)	1.461***	(0.210)	1.898***	(0.236)	1.851***	(0.259)	
EXECTURN	0.735***	(0.155)	0.850***	(0.192)	0.690***	(0.194)	0.634***	(0.202)	
BODTURN	-0.119	(0.303)	-0.211	(0.209)	-0.502**	(0.224)	-0.499**	(0.218)	
BODINDEP	-1.191	(1.080)	0.309	(1.645)	-0.197	(1.718)	-0.121	(1.721)	
INDEPBUSY	-0.094	(0.192)	-0.202	(0.191)	-0.072	(0.196)	0.059	(0.217)	
ACSIZE	0.009	(0.106)	0.144	(0.118)	0.135	(0.109)	0.159	(0.104)	
ACFE	-0.664**	(0.334)	0.231	(0.388)	0.484	(0.414)	0.267	(0.402)	
Industry Indicators	Yes		Yes		Yes		Yes		
Year Indicators	No		Yes		Yes		Yes		
Cluster	Firm/Year		Firm		Firm		Firm		
Observations	3,826		3,826		3,826		3,826		
Pseudo Rsquare	0.1744		0.1647		0.1446		0.1020		
Wald P-value			0.0000		0.0000		0.0000		
ROC Curve	0.8101								

TABLE 5
GC Experience and Material Weaknesses (GCPROMINENT = 1 Subsample)

***, **, * Indicate significant at the p < 0.01, p < 0.05, and p < 0.10 levels, respectively.

This table reports the results from regressions examining the association between GC experience measures and reporting a material weakness (Column 1), the number of material weakness reported (Column 2), the number of account-specific material weakness reasons (Column 3), and the number of entity-specific material weakness reasons (Column 4). Column 1 is esimated using a logistic regression, and Columns 2-4 are estimated using a negative binomial regression. The subsample used for these analyses are those firm-year observations where GCPROMINENT = 1 and GC experience information is available. All variables are defined in Appendix A.