SPILLOVER COSTS OF SEC COMMENTS ON OTHER FIRM ACTIVITIES

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Submitted to the Graduate Faculty of the

Joseph M. Katz Graduate School of Business in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

University of Pittsburgh

2020

UNIVERSITY OF PITTSBURGH

JOSEPH M. KATZ GRADUATE SCHOOL OF BUSINESS

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SPILLOVER EFFECTS OF SEC COMMENTS ON OTHER FIRM ACTIVITIES

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University of Pittsburgh, 2020

This dissertation investigates the impact of the Securities and Exchange Commission (SEC) filing review process on firms' activities. Prior academic research has documented several benefits of the SEC filing review process, yet anecdotal evidence suggests a previously undocumented effect: SEC comment letters draw on firms' constrained resources, resulting in spillover effects on other firm activities. About 64 percent of all periodic SEC comment letters are unlikely to identify misapplication of accounting standards. Using Naïve Bayesian textual classification, I identify these SEC comment letters, and using a large sample of U.S. firms, I show that firms react to them. Consistent with comment letters having spillover effects on other firm activities, I predict and find that firms are less timely in their earnings announcements, less likely to issue quarterly management guidance, and less likely to issue debt during quarters in which they are responding to an SEC comment letter, even when the comment letter fails to detect misapplication of accounting standards. Cross sectional analyses suggest that this effect is stronger for comment letters that take longer to resolve, for firms with fewer financial reporting resources, and for more unpredictable comment letters. This study provides initial empirical evidence that SEC comment letters impose on CFOs a tradeoff between remediation and other firm activities, even on CFOs that are in compliance with accounting regulation. This result should be of interest to regulators, practitioners, and academics.

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Preface

I sincerely thank my dissertation committee members: John Harry Evans III (co-chair), Chan Li (co-chair), Mei Feng, Joshua Gunn, Vicky Hoffman, and Ranjani Krishnan. I will remember their guidance and support as a highlight of my doctoral studies for years to come.

I appreciate helpful comments from Linda Myers; the PhD students in Mervis Hall, Room 219; and workshop participants at the University of Pittsburgh, the University of Kansas, the 2018 Katz Three Minute Thesis Competition, the 2019 AAA/Deloitte/J. Michael Cook Doctoral Consortium, and the 2019 AAA Mid-Atlantic Region Meeting. I am grateful for the administrative support and the endless chocolate supply from Dennis Galletta, Carrie Woods, Chris Gursky, and Rachael McAleer. I also appreciate the weekly bike rides with the Katz Bikers Club; they were my favorite way to clear my head (rain or shine).

Finally, I thank my family and friends, in the U.S. and Ireland; they reminded me to eat, sleep, move, and laugh when I needed it most. I thank them for trusting me and encouraging me as I moved away from home to pursue this often-stressful journey toward my dream career. I especially thank my husband, Nick; my parents, Jackie and Mike; my sister, Michelle; and my uncle, Johnny, for helping me through the toughest days of the Ph.D. program (and life) – I love you.

1.0 Introduction

In this study, I investigate whether and how firms divert resources away from important activities, such as timely earnings announcements, voluntary disclosure, and debt financing, when they receive Securities and Exchange Commission (SEC) comment letters. The SEC's Division of Corporation Finance reviews the financial statement filings of every publicly listed firm at least once every three years. This filing review process serves as a form of financial reporting oversight, and its purpose is to ensure that firms are in compliance with disclosure and accounting regulations. When the SEC identifies issues that warrant clarification, potential disclosure errors, or potential deficiencies during the review, it issues a comment letter to the firm with a list of questions, and the firm must either update its disclosure and its application of Generally Accepted Accounting Principles (GAAP) or defend the appropriateness of its disclosure and accounting choices. Prior research has documented several benefits of the SEC's comment letter process, including improvements in firms' disclosure quality (Bozanic, Dietrich, and Johnson 2017), firms' information environment (Johnston and Petacchi 2017), and industry peers' risk disclosure quality (Brown, Tian, and Tucker 2018).

Recent findings in the growing SEC comment letter literature identify a large subset of SEC comment letters that do not lead to financial statement amendments or uncover strategically withheld firm information. This subset represents the majority of SEC comment letters (about 75%). While prior research has documented several benefits of comment letters that uncover non-compliance, research on any impact to firms of receiving a comment letter that *does not* uncover non-compliance is scant. Further, focusing on comment letters that do not uncover non-compliance enables researchers to study the firm's behavior while remediating the comment letter separate

from the firm's behavior while addressing their underlying non-compliance issues.[1] To remediate a comment letter, a firm is required to answer all comments in a satisfactory manner, often requiring multiple rounds of correspondence and spanning several weeks. Cassell, Dreher, and Myers (2013) argue that SEC comment letters are costly to firms because internal resources are required for remediation. Anecdotal evidence suggests that practitioners agree with this assertion; several consulting and legal firms advise that firms immediately dedicate internal resources (including personnel) to remediation when they receive a comment letter (e.g., Day and Prusse 2018; Wienmen and Carnall 2016). Further, Johnson (2010) argues that SEC comment letters become CFOs' priority, creating spillover effects for other activities to which the CFO would otherwise devote resources.[2] The argument that even SEC comment letters that do not uncover non-compliance significantly draw on firm and manager resources appears in both academic studies and anecdotal evidence, yet to date there is no empirical evidence to support this claim.[3] In fact, most studies on the benefits of SEC comment letters exclude from their empirical analyses the quarter or year of SEC comment letter remediation (e.g., Johnston and Petacchi 2017), highlighting how little is known about remediation. Just as important, if SEC remediation does

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[1]Anecdotal evidence does not distinguish between the firm resources needed to respond to SEC comment letters that *do not* uncover non-compliance versus SEC comment letters that *do* uncover non-compliance. I expect spillover effects to occur for both. Importantly, I focus on SEC comment letters that do not uncover non-compliance in this study because characteristics of these comment letters allow me to attribute my findings to the process of remediation itself rather than the firm's underlying non-compliance issue.

[2] This anecdotal evidence suggests there are two types of costs to the firm: 1) the internal resources needed to respond to the letter and 2) the spillover effects on other firm activities when internal resources are reallocated away from them. While evidence for either or both types of costs would support the larger claim that SEC comment letters are costly to firms, I focus on spillover effects in this study since characteristics of the SEC's filing review process make spillover effects likely (detailed in the hypothesis development) and data is widely available to test for their existence.

[3] Previous studies have focused on benefits of SEC comment letters that detect non-compliance. Nonetheless, I do not take the position that SEC comment letters are *only* beneficial if they uncover non-compliance. It is possible that SEC comment letters that do not uncover non-compliance serve as a preventative control mechanism and deter firms from non-compliance. This study aims to identify one spillover effect of the subset of SEC comment letters that do not uncover non-compliance. I do not study or calibrate their benefits; future research can examine the net benefit or cost of these comment letters.

have a spillover effect on other activities, it is unknown whether the effect is large enough to impact firm-level activities and whether the activities impacted are important from investors' perspective. [4]

Prior literature provides a rationale for expecting spillover effects of SEC comment letter remediation. A growing stream of literature suggests that since economic agents have limited time, attention, and effort to manage their workload, when their workload increases, performance on some activities declines. Prior research on corporate governance finds that busy board members are worse monitors, and firms with busy executives have lower performance (e.g., Core, Holthausen, and Larcker 1999; Fich and Shivdasani 2006; Hauser 2018). Other studies examine a similar effect on other economic agents, such as financial analysts, auditors, and SEC staff (Aobdia 2018; Ege, Glenn, and Robinson 2020; Hills, Kubic, and Mayew 2020; Truong 2018). In this study, I propose that a firm's CFO and her staff are also subject to finite time, attention, and effort, and if SEC comment letter remediation is a sufficient shock to their workload, firms will exhibit reduced performance in other activities under the CFO's jurisdiction.

There are at least three reasons why an SEC comment letter could act as a shock to the workload of the CFO and her staff, even when the firm is in compliance with accounting regulations. First, I expect CFOs to deem SEC comment letter remediation sufficiently important because there are consequences to firms that mishandle or ignore comments (Cassell, Cunningham, and Lisic 2017). Second, I expect that SEC comment letter remediation can be a large, effort-intensive task. On average, SEC comments take a firm 67 days to resolve (31 days of firm employee time), requiring 3 rounds of correspondence. The SEC often requires firms to justify

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[4] The focus of this study is the large subset of SEC comment letters that *do not* uncover firms' non-compliance with accounting regulation. For expositional purposes, when I refer to "SEC comment letters", I reference this subset of SEC comment letters unless clearly stated otherwise.

their application of complex accounting rules on prior financial statements, and they expect responses to include discussion, analysis, and citation of applicable accounting standards. Third, I expect the arrival of SEC comment letters to be relatively unpredictable. Not all reviews result in comment letters, and there are no reliable guidelines for when firms can expect to receive comments on their most recently filed 10-K or 10-Q. Thus, it is unlikely that firms keep dedicated capacity on hand to handle SEC comment letter remediation. Given these arguments, I hypothesize that CFOs divert resources away from normal firm activities and toward remediation when they receive (and until they resolve) an SEC comment letter. On the other hand, it is possible that the anecdotal evidence shared by CFOs does not represent the average CFO's experience. It may also represent CFOs' exaggerated claims driven by their dislike for the SEC's monitoring role. Further, if SEC comment letters are unimportant, easy to remediate, or predictable, then I do not expect to see changes in firm-level outcomes associated with the presence of an SEC comment letter.

If, as hypothesized, SEC comment letter remediation draws on firm resources, resulting in spillover effects on other firm activities, I predict that firms will be less timely in their earnings announcements, less likely to voluntarily issue quarterly guidance, and less likely to undertake new debt issuance until they remediate the comment letter. I choose these activities based on three criteria. First, these activities are important to investors (Griffin 2003; Harris and Raviv 1991; Welker 1995). Any decline in these activities would negatively impact investors: the very party the comment letter process is intended to protect. Second, these activities are likely within the jurisdiction of a firm's CFO (Graham, Harvey, and Puri 2015). Third, these activities are resource intensive. Given these characteristics, I posit that these firm activities are reasonable candidates for detecting resource tradeoffs during SEC comment letter remediation.

To test my hypothesis, I analyze earnings announcement timeliness, voluntary quarterly forecast issuance, and new debt issuance activities during firm-quarters in which a firm receives an SEC comment letter that is unlikely to uncover non-compliance. I use Audit Analytics to identify SEC comment letters that were sent to firms from 2006 to 2017. Following prior literature, I focus on comment letters that reference 10-K and 10-Q filings. Following Ryans (2019), I use Naïve Bayesian textual classification to identify SEC comment letters that are unlikely to be associated with future restatements or write-downs. This technique uses the text from training documents to identify the words or groups of words that differentiate comment letters that lead to restatements and write downs from those that do not. This process requires at least two years of training data, and therefore my sample of comment letters includes comment letters that were issued from 2008 to 2017. Unlike prior literature (e.g., Bozanic et al. 2017; Johnston and Petacchi 2017), I *exclude* SEC comment letters that are likely to require restatements or write-downs from my sample because I aim to identify whether the spillover effects of responding to SEC comments also falls on firms whose financial statements are in compliance with accounting rules, not just those that are out of compliance.

I obtain earnings announcement dates from Compustat Quarterly, voluntary forecast data from IBES, and debt issuance data from DealScan.[5] I classify a firm-quarter as a treatment quarter if the firm had to respond to a comment letter from the SEC during that quarter. My control sample is all other firm-quarters in the Compustat universe between 2008 and 2017, given that the firm received a comment letter at least once during my sample period. To mitigate omitted variable bias related to time-invariant firm characteristics, I run ordinary least squares (OLS) models with firm,

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[5] Thomson Reuters' DealScan contains bank loan information, including the origination date of private loans. Since private loans are issued with higher frequency than public loans (i.e., bonds), I test my hypotheses using DealScan to take advantage of higher statistical power.

year, and quarter fixed effects; thus, the main source of variation comes from within-firm changes between quarters with and without SEC comment letters.

Results suggest that firms are less timely in their earnings announcements, are less likely to issue quarterly forecasts, and are less likely to issue new debt in quarters when they receive a comment letter from the SEC, after controlling for relevant firm-level control variables. This evidence is consistent with SEC comment letters serving as a shock to CFO workload, diverting internal resources away from other important activities until remediation is complete.

I conduct three cross-sectional tests to provide further support to my hypothesis. First, some comment letters require more effort than others, and I expect less effortful comment letter conversations to have a smaller impact on workload. Following prior literature (Cassell et al. 2013), I use the number of quarter-days the firm spent responding to the SEC comment letter as a proxy for the effort required to remediate it. As expected, I find that an SEC comment letter's impact on earnings announcement timeliness, forecast issuance, and debt issuance activities increases with the number of quarter-days that the firm spends responding to the letter.

Second, if an SEC comment letter is a resource and effort-intensive task, then for firms that have ex ante invested more resources in the firm's financial reporting function, I expect the effect of an SEC comment letter on other important activities to be weaker. To investigate this issue, I split the sample into two groups: those with a CFO that also holds the Chief Accounting Officer (CAO) title and those with a CFO that does not. If a firm has a CFO that is also the CAO, this may indicate that the CFO has fewer resources on hand to deal with the additional workload of responding to the SEC's comments. Consistent with this, I find that the main results only hold in the subsample of firms *with* a CFO that is also the CAO.

Third, some SEC comment letters may be more unpredictable than others. I expect that more unpredictable comment letters will have a larger impact on earnings announcement timeliness, forecast issuance, and debt financing activities than predictable comment letters. To investigate this, I separately identify comment letters that have a low predicted likelihood of arriving in a given quarter and those with a high predicted likelihood. I find some evidence that the spillover effects of more unpredictable SEC comments are larger. Specifically, given that a firm receives a comment letter, I find that the impact on earnings announcement timeliness and new debt issuance activity is greater for more unpredictable SEC comment letters than for less unpredictable SEC comment letters.

In additional analyses, I first examine whether firms better manage the spillover effects of SEC comment letter remediation over time. To examine this, I separately identify a firm's first comment letter and all subsequent comment letters. I find some evidence consistent with firms learning over time. Specifically, given that a firm receives a comment letter, I find that the impact on earnings announcement timeliness and voluntary disclosure activity is greater for the first comment letter than subsequent comment letters.

Second, I aim to rule out an alternative explanation. It is possible that the comment letters in my sample have information content; thus, firms may reduce earnings announcement timeliness, forecast issuance, or debt issuance not because remediation requires significant internal resources but because they are reacting to the information. Dechow, Lawrence, and Ryans (2016) document evidence that some comment letters that address revenue recognition contain information. My results hold when I remove all revenue-related comment letters from my sample, providing comfort that information content is not driving my main result.

Third, I conduct two robustness tests. I first examine whether my results on the issuance of management guidance and the issuance of new debt are robust to an alternative model specification. I re-run my main analyses using a logistic regression instead of a linear probability model, and my results hold, alleviating concerns that my results are driven by model specification. I also examine whether my results are robust to an alternative method for classifying the subset of SEC comment letters that *do not* uncover non-compliance. I redefine my sample to include comment letters that do not lead to a restatement, amendment, or write down in the year following remediation. I re-run all analyses using this definition, and my results hold.

This study contributes to existing literature on the consequences of the SEC's filing review process. My study provides initial empirical evidence that SEC comment letter remediation draws on firms' constrained resources. Further, I identify specific activities that firms are more likely to discontinue when they receive a comment letter: timely earnings announcements, voluntary forecast disclosure, and new debt financing. Prior literature has documented negative effects to shareholders when firms choose not to engage in these activities (e.g., Bartov and Konchitchki 2017; Harris and Raviv 1991; Welker 1995). Therefore, while prior literature has documented the benefits of SEC comment letters to shareholders, this study documents a potentially unintended consequence. In other words, SEC comments impose a complicated tradeoff decision on CFOs, even on CFOs that are in compliance with accounting regulations. This finding, in conjunction with prior findings on measurable benefits of the SEC filing review process, should be of interest to regulators measuring its success. Specifically, while SEC comments that do not detect accounting non-compliance may provide an important preventative mechanism, the findings in this study suggest they come at a cost. This finding may be useful as the SEC assesses the resources that it dedicates to detecting versus preventing financial reporting non-compliance.

Second, this study also speaks to a broader question regarding the impact of regulation on firms. Attributes of SEC comment letters make them ideal for studying spillover effects of accounting regulation, yet they are likely less resource-intensive than other accounting-related investigations or regulatory changes. For example, SEC Division of Enforcement investigations take longer to remediate and new regulatory requirements under SOX 404 took firms longer to implement than the average SEC comment letter conversation. The effects documented in this study should be interpreted as initial evidence that the SEC's filing review process imposes tradeoffs on CFOs for constrained firm resources, and effects are likely to be larger under more resource-intensive regulation.

Third, this study makes contributions to the growing literature on resource constraints for economic agents. Whereas prior literature has focused on the workloads of other decision-makers such as board members, auditors, and analysts, I document consequences of shocks to CFO workload. Further, I provide evidence that having a CAO in addition to a CFO could reduce the impact of shocks to the CFO's workload.

2.0 Background on SEC Comment Letters

The SEC's mission is to "protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation" (SEC, 2018). In service of their mission, the Division of Corporation Finance conducts regular reviews of financial statements filed under the Securities and Exchange Acts of 1933 and 1934. Since 2002, the SEC has been required to review each firm's filings at least once every three years, as mandated by Section 408 of the Sarbanes-Oxley Act. In addition to evaluating the clarity and detail in qualitative disclosures, the SEC evaluates firms for compliance with reporting requirements and the reasonableness of the firm's application of Generally Accepted Accounting Principles (GAAP). If the SEC identifies issues that warrant clarification, potential deficiencies, or potential errors during a review, the SEC issues the firm a comment letter with a list of all concerns. The SEC's comments range in severity, some requesting evidence that the firm used managerial discretion appropriately when applying a complex accounting standard and others requesting that a firm restate prior filings to correct material errors. Regardless of severity, the firm must answer the SEC's comments within 10 business days, where the firm can either agree with the SEC's suggested recourse or negotiate for an alternative outcome. Most commonly, firms negotiate for an alternative outcome, and this process often requires multiple rounds of correspondence between the firm and the SEC, spanning several weeks.

Evidence suggests that the SEC is receptive to firms' clarifications – in 75 percent of SEC comment letter conversations, the SEC is ultimately satisfied that the firm correctly applied GAAP and does not require the firm to amend, restate, or revise financial statements. Thus, the receipt of an SEC comment letter does not itself indicate below-average financial reporting quality; this is aligned with the financial statement review process serving an oversight role rather than a

traditional enforcement activity (Ryans 2019). Recent literature has classified a large subset of comment letters that are unlikely to identify issues in financial reporting (Ryans 2019). Since this study is on the remediation of SEC comment letters (and not on enforced financial reporting improvements), I focus on this subset of comment letters.

The following example of a comment letter conversation illustrates some features of the typical comment letter that I examine. The SEC reviewed Arbor Realty Trust, Inc.'s December 31, 2008 10-K (filed March 9, 2009) and its June 30, 2009 10-Q (filed August 7, 2009) and sent an initial comment letter on September 29, 2009. As is common, the SEC's initial comment letter addresses Arbor Realty Trust, Inc.'s Chief Financial Officer. The SEC highlights 22 points for the CFO to address, and states "if you disagree with our comments, we will consider your explanation as to why our comments are not applicable". The conversation required 4 rounds of letters. Appendix A presents an example of the firm's response to one of the SEC's 22 numbered points. In its response, the firm references the accounting standard that it applied and provides details regarding the transaction in question, including a table of data, to support its claim that it correctly applied the standard. On May 24, 2010, the SEC agreed that Arbor Realty Trust, Inc. was in compliance with accounting standards and completed the review.

3.0 Literature Review and Hypothesis Development

3.1 Prior Literature on SEC Comment Letters

Disclosure of SEC comment letters became widely available for the first time in 2004. Since then, research on the filing review process has increased. Prior research on the consequences of SEC comment letters documents benefits to firms' disclosure practices. Johnston and Petacchi (2017) find an overall improvement in a firm's information environment after a comment letter is resolved, with lower bid-ask spreads and higher earnings response coefficients. Bozanic et al. (2017) similarly document improvements in qualitative disclosure attributes after a comment letter is resolved. Benefits from the SEC comment letter are not limited to the firm that receives the comment, Brown et al. (2018) document a peer spillover effect, where firms improve risk disclosure quality after an industry peer firm receives an SEC comment letter on that topic.

Anecdotal evidence supports the claim that SEC comment letters are internally resource-intensive, and that "even if the process goes smoothly, the letters become an instant priority, distracting CFOs from other work and costing a sizable sum to boot" (Johnson 2010). Prior literature similarly argues that the comment letter process is costly to firms. Cassell et al. (2013) model determinants of SEC comment letter remediation costs, proxied by the number days and the number of rounds in the comment letter conversation. They lean on anecdotal evidence to support their argument that longer response times and more rounds should proxy for firms devoting greater internal and external resources to comment letter remediation. The authors note that they are not providing direct evidence of resource constraints. In this study, I directly examine whether SEC

comment letters draw resources away from firms' other important activities to provide evidence on the spillover effects of comment letters.

3.2 Prior Literature on Workload

Prior literature on directors and executives offers a channel through which SEC comment letters can have spillover effects on other firm-level outcomes. Prior literature suggests that directors and executives have finite time, attention, and effort to manage their workload. When their workload increases, performance on some activities declines. For example, a large stream of corporate governance research argues that board members with several board positions (called 'busy outside directors') have higher workloads. Core et al. (1999) find that busy outside directors are associated with significantly higher CEO pay, suggesting that CEOs are able to extract additional compensation from the firm when monitors are busy. Further, overall firm performance declines when outside directors hold more than two directorships (Fich and Shivdasani 2006) and when outside directors experience a shock to their workload via a merger or acquisition at a different firm (Hauser 2018).

Directors' performance is not uniquely impacted by workload shocks; Malmendier and Tate (2018) find that superstar CEOs spend more time writing books and sitting on outside boards, leading to a decline in firm performance at their own firms. Aobdia (2018) finds that auditors' workload increases after their audit engagement receives a Part 1 Finding on their PCAOB inspection, and audit quality on their other audit engagements decreases. Ege et al. (2020) document that the SEC's Division of Corporation Finance workload increases when they unexpectedly receive more transactional filings, and its staff write lower quality periodic comment

letters as a result. Similarly, in a concurrent study, Hills, Kubic, and Mayew (2020) find that SEC staff workload increases when they regulate state sponsors of terrorism (SST) disclosure, and the quality of the staff's financial reporting oversight decreases. Further, another concurrent study examines the impact of workload on analysts; Truong (2018) documents that analysts with a larger workload are associated with higher forecast errors.

In this study, I apply the concept of workload shocks to the CFO and her staff. I expect the arrival of an SEC comment letter to increase the workload of a CFO, and her performance in other activities will decline as a result.[6] Three characteristics of SEC comment letters make it likely that they will increase workload: there are significant consequences to ignoring them, they are resource-intensive to remediate, and their arrival is relatively unpredictable. I elaborate on each characteristic in turn below.

First, I expect CFOs to deem SEC comment letters important tasks because there are documented consequences to shirking. Cassell et al. (2017) show that poorly written comment letter responses are more likely to lead to worse outcomes like restatements. Further, if a firm ignores a comment letter, the Division of Corporation Finance can escalate it to the SEC's Division of Enforcement, increasing the likelihood of restatements and CFO turnover even further (Hennes, Leone, and Miller 2008).

Second, I expect that SEC comment letter remediation is, on average, a resource-intensive task. Comment letters take an average of 67 days and 3 rounds of correspondence to remediate. The SEC often requires firms to justify their application of complex accounting rules on prior financial statements. Responses often include discussion, analysis, and citation of applicable

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[6] Given that SEC comment letters are a shock to the CFO's workload, performance in other activities will decline if, on average, firms do not have enough slack in their accounting and finance function to absorb this workload shock.

accounting standards, which is illustrated in the sample comment letter response in Appendix A. Prior research has documented evidence that CFOs attempt to shorten the time span during which they engage in back-and-forth conversation with the SEC by hiring their external auditors to help them with their responses (Ballestero and Schmidt 2019). Specifically in the merger and acquisition setting, Liu, Shu, Towery, and Wang (2020) provide evidence that an SEC comment letter lengthens the amount of time taken to complete a deal.

Third, I expect the timing of the arrival of SEC comment letters to be relatively unpredictable, on average. While Section 408 of the Sarbanes Oxley Act of 2002 requires that the SEC reviews each public company's periodic filings at least once every three years, a company may be reviewed more often. Further, not all reviews result in comment letters. As a result, firms may receive comment letters two years in a row and subsequently more than three years may pass without no comment letter. Even if a firm could reliably predict that it will receive a comment letter in a given year, there are no guidelines for the timing within the year that firms can expect to receive comments on their most recently filed 10-K or 10-Q. Thus, it is unlikely that firms keep dedicated capacity on hand to handle SEC comment letter remediation.

Given the above arguments, I expect SEC comment letters to increase CFOs' workload such that CFOs divert time, effort, and attention away from other normal activities and toward SEC comment letter remediation. On the other hand, it is possible that the anecdotal evidence shared by CFOs does not represent the average CFO's experience; the average CFO may have enough slack in the accounting and finance function to absorb the workload associated with remediation. Further, CFOs who dislike the SEC's monitoring role might exaggerate the costs of the SEC's filing review process in an effort to convince the SEC to reduce its level of monitoring. If it is true that the anecdotal evidence simply represents CFOs' exaggerated claims, and SEC

comment letters are unimportant, easy to remediate, or predictable, then I do not expect to see changes in firm-level outcomes associated with the presence of an SEC comment letter.

To investigate this, I choose to examine three firm-level activities: earnings announcement timeliness, quarterly voluntary disclosure, and debt financing.

3.3 First Proxy for Firm Activity: Earnings Announcement Timeliness

The timeliness of quarterly earnings announcements is an important firm activity from the perspective of investors (Beaver 1968; Givoly & Palmon 1982). Delays in earnings announcements affect the timeliness of accounting information, which has documented adverse consequences such as higher information asymmetry and lower abnormal returns (e.g., Chambers and Penman 1984).

In addition to earnings announcement timeliness being an important firm activity to investors, it is also a reasonable candidate for detecting resource tradeoffs upon the arrival of an SEC comment letter. First, accurate and timely financial reporting is likely within the CFO's jurisdiction. While Sarbanes Oxley requires both the CEO and the CFO to certify the financial information on the firm's financial statements, the quarter financial statement closing process is still likely driven predominantly by CFO effort (Indjejikian & Matějka 2009). Second, the quarter closing process is a resource-intensive task. Anecdotal evidence in a 2020 *CFO Magazine* article states, "…as any public firm CFO knows, the financial close is a necessary part of business, yet among the most arduous of tasks" (Soderberg 2020).

Based on the above arguments, I expect that earnings announcement timeliness is a suitable candidate for investigating the spillover effects of SEC comment letters. I state the following hypothesis in alternative form:

H1a: Earning announcement timeliness decreases when a firm receives an SEC comment letter.

3.4 Second Proxy for Firm Activity: Voluntary Disclosure Activity

For similar reasons, I also investigate whether CFOs divert resources away from voluntary disclosure activities upon the arrival of an SEC comment letter. Voluntary disclosure is an important firm activity from the perspective of investors. For example, Welker (1995) documents reductions in information asymmetry and increased liquidity among firms that consistently forecast. Similarly, Leuz and Verrecchia (2000) find that German firms that commit to higher voluntary disclosure levels see a reduction in bid-ask spreads. In all, a rich stream of literature on voluntary disclosure suggests that, if SEC comment letters pull CFO resources away from voluntary forecast issuance activities, investors will be affected.

In addition to voluntary disclosure being an important firm activity, it is also reasonable to expect that CFOs divert resources away from voluntary disclosure activities upon the arrival of an SEC comment letter for the following reasons. First, voluntary disclosure decisions are within the jurisdiction of the CFO. Recent research has documented evidence that CFOs have influence over a firm's voluntary disclosure policy. Graham et al. (2015) identify CFOs as the chief decision-maker in voluntary disclosure decisions and surveys CFOs to learn more about this activity. Further, Bamber, Jiang, and Wang (2010) empirically test whether CFOs influence firms' quarterly

voluntary disclosure using a manager fixed-effects model and find evidence that the CFO's role is statistically and economically significant.

Second, voluntary disclosure activity is resource intensive. In order to voluntarily disclose information, CFOs must first internally generate forecasts, a difficult and effortful task. Goodman, Neamtiu, Shroff, and White (2014) argue that forecasting requires CFOs to 1) collect reliable, internally-generated data and relevant information on the external environment, and 2) process and synthesize the information collected. Both requirements call for managerial attention. A long stream of literature documents the skill and effort needed to build and maintain a sound internal control system that generates reliable information needed for forecasting (e.g., Feng, Li, and McVay 2009; Hoitash, Hoitash, and Johnstone 2012; Li, Sun, and Ettredge 2010).

Based on the above arguments, I expect that voluntary disclosure activity is a suitable candidate for investigating the spillover effects of SEC comment letters. I state the following hypothesis in alternative form:

H1b: Voluntary disclosure activity decreases when a firm receives an SEC comment letter.

3.5 Third Proxy for Firm Activity: New Debt Financing

For similar reasons, I also investigate whether CFOs divert resources away from debt financing activities upon the arrival of an SEC comment letter. Any changes in debt issuance activity is important to investors. Whether firms choose a different source to fund investment opportunities or choose to delay investment until the SEC comment letter is resolved, if a firm makes capital structure changes because of a CFO with an increased workload rather than a change in firm fundamentals, this can lead to suboptimal investment returns and lower firm performance.

Prior literature has documented several benefits to investors when firms optimally structure their debt, including the ability to take advantage of tax shields, reductions in information asymmetry, and the opportunity to discipline entrenched executives (DeAngelo and Masulis 1980; Harris and Raviv 1991; Stulz 1990). In sum, a rich stream of literature on firm capital structure suggests that, if SEC comment letters pull CFOs' resources away from optimal debt issuance activity, investors will be worse off.

Further, it is reasonable to expect that CFOs divert resources away from debt financing activities upon the arrival of an SEC comment letter. First, corporate financing decisions also fall under the jurisdiction of the CFO. Graham and Harvey (2001) identify CFOs as the chief decision-maker in firms' capital budgeting decisions. Further, Graham et al. (2015) provide survey evidence that capital structure policies are most likely to be delegated from the CEO to the CFO.

Second, a large stream of research documents the complexity behind firms' investment and capital structure decision-making. When faced with a new investment opportunity, firms must analyze the viability of the opportunity and then decide how to finance it, and prior research suggests that these activities require significant effort from executives. Further, Graham and Harvey (2001) document wide variation in complexity among the analyses that CFOs rely on when making investing and financing decisions, suggesting that firms carefully consider the level of effort that is needed to complete the task. Finally, even once the decision to issue debt is made, execution requires the CFO to engage with a lender, gather and share information, negotiate terms, and approve the final deal. Thus, when resources are diverted away from the effort-intensive debt issuance process, I expect firms' debt financing activity will decrease. I state the following hypothesis in alternative form:

H1c: Debt financing activity decreases when the firm receives an SEC comment letter.

4.0 Data, Main Variable Definitions, and Research Design

4.1 Data Sources and Sample Selection

I use Audit Analytics to identify comment letter conversations that initiated between 2006 and 2017.[7] In 2004, the SEC made public all comment letter correspondence between the firm and the SEC. I start with all comment letter conversations where the first letter references a 10-K or 10-Q filing, and I require that all conversations are resolved by December 31, 2018. Unlike with transactional filings (e.g., S-1 for IPOs and S-4 for acquisitions), with 10-K and 10-Q filings, firms are unsure in any given year if the SEC will review them, and even less sure that they will receive a comment letter. Thus, comment letters that arise out of 10-K and 10-Q filings are well suited to test my hypotheses since their arrival is relatively unpredictable to firms.

I further require that comment letters in my sample are unlikely to uncover financial reporting non-compliance. This requirement allows me to examine the spillover effects of SEC comment letter remediation process itself rather than the spillover effects of the likely outcomes of the comment letter. Following Ryans (2019), I use Naïve Bayesian textual classification to identify comment letters that are unlikely to lead to restatements or write-downs. This technique uses the text from training documents to identify the words or groups of words that differentiate

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[7] Following prior literature (e.g., Ballestero and Schmidt 2019; Cassell et al. 2013), I identify comment letters with substantive information by dropping observations in Audit Analytics that refer to cover letters, letters with no new information, duplicate letters, or tandy letters (identified if the variable "iss_whote_tkeys" equals "1109", "903", "1257", or "928", respectively).

comment letters that lead to restatements and write downs from those that do not. It generates an algorithm which can then predict the likelihood that a comment letter in the testing sample signals financial reporting quality concerns. A comment letter is classified as unlikely to uncover non-compliance if the likelihood that it leads to restatement or write down is less than the likelihood that it does not. One benefit of this classification technique is that I classify SEC comment letters using the same information that firms have while in remediation; thus, it is not subject to look-ahead bias. On the other hand, one concern is that there may be SEC comment letters in my sample which are deemed unlikely to uncover non-compliance, yet the firm later has a restatement or write-down. While Ryans (2019) runs validation tests that provide comfort in the legitimacy of this algorithm for classification purposes, I address this limitation and demonstrate that results are robust to an alternative classification technique in an additional analysis.

My training sample begins with 2006 and 2007 comment letters, which are used to classify 2008 comment letters. The training sample is updated for every testing year, where 2006 – 2008 comment letters are trained to test 2009 comment letters, 2006 – 2009 comment letters are trained to test 2010 comment letters, etc. This procedure is repeated through test year 2017.[8] Table 1, Panel A provides details on sample selection for the SEC comment letter conversation sample. The Naïve Bayesian textual classification procedure classifies 10,055 periodic comment letter conversations issued between 2008 and 2017. Of those, 3,647 were likely to lead to future restatements or write downs. I remove these comment letters from the sample. There remain 6,408 comment letter conversations, representing 3,728 unique firms.

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[8] I use a maximum of five trailing years to train for any given test year.

I merge Audit Analytics comment letter data with Compustat to get a panel dataset with all firm quarters from 2008-2017, resulting in 171,225 firm-quarter observations where each firm received at least one comment letter during my sample period. This restriction mitigates concerns that firms which receive comment letters are fundamentally different from firms that do not receive comment letters in unobservable ways. For tests of H1a, I gather data from Compustat Quarterly for quarterly earnings announcement dates, Compustat for financial statement variables, CRSP for stock return variables, Audit Analytics for restatement and material weaknesses variables, and Thompson Reuters for institutional ownership variables. For tests of H1b, I also gather data from IBES for voluntary disclosure variables. For tests of H1c, I also gather data from DealScan for debt financing variables. I use DealScan for my tests of H1c because it captures private debt issuances for firms, which are more prevalent than public debt issuances (i.e., public bonds).

Table 1, Panel B summarizes sample construction for the firm-quarter sample. I merge Audit Analytics with Compustat to begin with all 171,225 firm-quarter observations where each firm received at least one comment letter from the SEC between 2008 and 2017. Sample selection for tests of H1a, H1b, and H1c are presented. I discuss the sample selection procedure for H1a alone for brevity. I drop 63,507 firm-quarters missing financial statement variables from Compustat, 7,941 firm-quarters missing stock price variables from CRSP, 30,175 firm-quarters missing earnings announcement dates from Compustat, and 4,830 firm-quarters missing earnings surprise variables from IBES. The final sample for H1a contains 64,772 firm-quarter observations, representing 2,262 unique firms. For tests of H1b (H1c), similar procedures yield a final sample 48,803 (51,606) firm-quarter observations, representing 1,802 (1,898) unique firms.

--------------- Table 1 ---------------

4.2 Main Variable Definitions

In all hypothesis tests, my main variable of interest is *CLQuarter*, an indicator variable that equals 1 if the firm was working on an SEC comment letter during the fiscal quarter. Specifically, from my sample of comment letters, I identify the comment letters written by firms (i.e., where the file type is "CORRESP"). I then identify the beginning and end date for each letter. For each fiscal quarter during which a firm is required to respond to an SEC comment letter, I set the variable *CLQuarter* equal to 1. If a firm does not respond to an SEC comment letter during a fiscal quarter, then I set the variable *CLQuarter* equal to 0.[9]

In H1a, I examine whether earnings announcement timeliness decreases in quarters where the firm is answering an SEC comment letter (i.e., where *CLQuarter* = 1). Here, my dependent variable is *EALag*, which measures the number of days between the quarter end date and the date that the firm announced its quarterly earnings. Quarterly earnings announcement timeliness decreases as *EALag* gets larger.

In H1b, I examine whether voluntary disclosure activity decreases in quarters where the firm is answering an SEC comment letter (i.e., where *CLQuarter* = 1). Here, my dependent variable is *QtrGuidance*, an indicator variable that equals 1 if the firm voluntarily issued any quarterly guidance in the fiscal quarter and equals zero if the firm did not voluntarily issue quarterly guidance.[10]

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[9] Quarters during which firms respond to a comment letter that is classified as likely to lead to a restatement or write-down are excluded from the firm-quarter dataset.

[10] I do not limit forecast activity to current quarter earnings guidance. My hypothesis examines the change in resources available for the voluntary disclosure activity. Decreases in the likelihood of any forecast issuance (including sales forecasts and forecasts for the subsequent quarter) would support my hypothesis and therefore are not excluded from my tests.

In H1c, I examine whether debt financing activity decreases in quarters where the firm is answering an SEC comment letter (i.e., where *CLQuarter* =1). For these tests, the dependent variable is *DebtIssue,* an indicator variable that equals 1 if DealScan shows that the firm issued debt during the fiscal quarter and equals zero if the firm issued no private debt.

4.3 Research Design

I run ordinary least squares (OLS) regressions with fixed effects to test my hypothesis that SEC comment letters divert resources away from other firm activities. For all three firm activities (earnings announcement timeliness, voluntary disclosure issuance, and debt issuance), I estimate the following fixed effects regression:

$$FirmActivity_{iq} = \alpha_0 + \beta_1 CLQuarter_{iq} + \beta_2 Controls_{iq} + FirmFE +$$

$$Year\ FE + QuarterFE + \varepsilon_{it} \tag{1}$$

I replace *FirmActivity* with *EALag* to test the hypothesis that SEC comment letters draw resources away from earnings announcement activities (H1a). *CLQuarter* is the main independent variable of interest, defined above. If firms announce earnings later in quarters when they are also responding to an SEC comment letter, then β_1 will be positive. Control variables in the model are intended to control for factors that could affect the firm's earnings annoucnement timeliness and the firm's likelihood of receiving an SEC comment letter. I follow Cassel et al. (2013) and control for firm characteristics that could affect the likelihood of a firm receiving an SEC comment letter, which include firm size (*lnassets*), stock beta (*lagbeta*), company age (*lnfirmage*), auditor quality (*big4*), accounting performance (*abschgroa*), proxies for financial challenges (*losses*, *specialitems*, *rd*, *zscore*), proxies for firm complexity (*foreign*, *restructuring*), proxies for organizational change

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(*assetgrowth*, *salegrowth*, *leverage*, *acquisition*), whether the firm restated financial statements within the prior two years (*restate*), and prior year external financing (*extfinancing*). Due to high correlation among some proxies for financial challenges, firm complexity, and organizational change, I follow Feng et al. (2009) and conduct a principal component analysis to reduce each set of proxies to one factor. The above listed variables have also been shown to influence a firm's earnings announcement timeliness. In addition to these control variables, I control for the quality of the firm's internal controls (*mw*) (Ettredge, Li, and Sun 2006), whether the firm is an accelerated or large accelerated filer (*laf*), and earnings surprise (*surprise*) (Chen & Mohan 1994).

I replace *FirmActivity* with *QtrGuidance* to test the hypothesis that SEC comment letters draw resources away from voluntary disclosure activities (H1b). Since *QtrGuidance* is an indicator variable, the model is a linear probability model where I model the probability that a firm issues guidance in a given quarter. If firms are less likely to issue forecasts in quarters when they are also responding to an SEC comment letter, then β_1 will be negative. Similar to the test for H1a, I control for firm characteristics that could affect the likelihood of a firm receiving an SEC comment letter. In addition, I follow prior literature (e.g., Ajinkya 2005; Feng et al. 2009) and control for variables that have been shown to determine firms' decision to voluntarily disclose guidance. Specifically, I control for earnings volatility (*earnvol*), dispersion among analyst forecasts (*disp_analysts*), the number of analysts following the firm (*ln_analysts*), and institutional ownership (*instown*).

I replace *FirmActivity* with *DebtIssue* to test the hypothesis that SEC comment letters draw resources away from debt financing activities (H1c). Again, since *DebtIssue* is an indicator variable, the model is a linear probability model where I model the probability that a firm issues new debt in a given quarter. If firms are less likely to issue new debt in quarters when they are also responding to an SEC comment letter, then β_1 will be negative. Similar to the tests for H1a and

H1b, I control for firm characteristics that could affect the likelihood of a firm receiving an SEC comment letter. In addition, I follow prior literature (e.g., Xin, Sudipto, and Gilles 2006) and control for variables that may determine a firm's decision to issue debt, the number of analysts following the firm (*ln_analysts*), and institutional ownership (*instown*), the volatility of stock return (*retvol*), market-to-book ratio (*mtb*), share turnover (*shareto*), dividend ratio (*divratio*), and Standard & Poor's credit rating (*sprating*).

In all models, I include quarter fixed effects to control for within-year patterns in the firm activity and SEC comment letter receipt. I also include year fixed effects to control for macro-level events that may affect the firm activity being tested and firm fixed effects to alleviate concerns that omitted, unobservable time-invariant firm characteristics could explain any findings. As a result, the main source of variation is within-firm switches between quarters with and without comment letters.

5.0 Main Results

5.1 Descriptive Statistics

Table 2, Panel A presents descriptive statistics for the SEC comment letter conversations in my sample. All continuous variables are winsorized at the 1st and 99th percentiles. On average, SEC comment letters take about 67 days and 3 rounds of correspondence to resolve, consistent with anecdotal evidence and prior literature which suggests that comment letters take significant time to remediate. Further, it appears that SEC comment letters are the responsibility of top executives, since the CFO is personally addressed in 60 percent of comment letter conversations, and the CEO or CFO is personally addressed in 89 percent of comment letter conversations.

Table 2, Panel B presents descriptive statistics for the firm-quarters in the final sample. All continuous variables are winsorized at the 1st and 99th percentiles. Between 2008 and 2017, firms must respond to an SEC comment letter in about three percent of all firm-quarters. Further, similar to findings in prior literature, the median firm in my sample announces earnings 34 days after the quarter-end, firms issue quarterly guidance in 35 percent of all firm-quarters, and firms issue debt in about ten percent of all firm-quarters.

Table 2, Panel C presents the average earnings announcement lag, likelihood of quarterly guidance issuance, and likelihood of new debt financing activity during quarters in which the firm is responding to an SEC comment letter (i.e., where *CLQuarter* = 1), compared to the control period during which the firm does not responding to an SEC comment letter (i.e., where *CLQuarter* = 0). On average, firms take longer to announce earnings (3.455 versus 3.417), are less likely to issue quarterly guidance (0.249 versus 0.292), and are less likely to issue new debt (0.066 versus

0.085) when responding to a comment letter than compared to the control period. All differences are statistically significant (p value < 0.01), providing initial evidence that firms react to SEC comment letters as predicted.

--------------- Table 2 ---------------

Table 3 presents correlations among the three dependent variables (*EALag, QtrGuidance,* and *DebtIssue*), the key independent variable of interest (*CLQuarter*), and determinants of the receipt of a comment letter. Consistent with prior research on SEC comment letters, *CLQuarter* is positively correlated with firm external financing activity (*extfinancing*), financial challenge (*finchall*), and change in accounting performance (*abschgroa*) and negatively correlated with auditor quality (*big4*). These significant correlations reinforce the importance of my controlling for determinants of a firm receiving an SEC comment letter so that *CLQuarter* captures the additional workload for firms while responding to an SEC comment letter rather than time-variant firm characteristics that predict the SEC's review patterns.

--------------- Table 3 ---------------

5.2 Regression Results of H1a

Table 4 presents regression results for all tests of H1. Column 1 presents the results of a fixed effects model, where earnings announcement lag (*EALag*) is the depending variable (model (1)). The results show that *CLQuarter* is positively associated with *EALag*, with a coefficient of 0.012 (two-tailed p=0.002). Stated differently, *CLQuarter* is associated with a *decrease* in earnings announcement timeliness. This is consistent with firms taking longer to close their quarterly books

during quarters when they are also responding to an SEC comment letter, compared to quarters when they are not responding to an SEC comment letter.

As for control variables, as expected, firms' earnings announcement lag is negatively associated with auditor quality (*big4*) and positively associated with organizational change (*orgchange*), organizational complexity (*complexity*), financial challenges (*finchall*), poor financial reporting quality (*restate*), and poor internal control quality (*mw*).

5.3 Regression Results of H1b

Table 4, Column 2 presents the results for my test of H1b. I run a linear probability model where quarterly voluntary disclosure (*QtrGuidance*) is the dependent variable (model (1)). The results show that *CLQuarter* is negative and statistically significant, with a coefficient of -0.018 (two-tailed p=0.04), suggesting a *decrease* in the likelihood of voluntary forecast issuance during comment letter quarters. This is consistent with firms diverting resources away from voluntary forecast issuance activities in order to address the comment letter, even when the SEC comment letter does not identify any material accounting issues.

As for control variables, as expected, firms' likelihood of issuing quarterly guidance is positively associated with analyst following (*ln_analysts*) and negatively associated with analyst forecast dispersion (*disp_analysts*). Further, quarterly management guidance is more prevalent among firms as they get larger (*lnassets*) and perform better (*abschgroa*).

5.4 Regression Results of H1c

Table 4, Column 3 presents results for tests of H1c. I run a linear probability model, where new debt issuance (*DebtIssue*) is the dependent variable (model (1)). The results show that *CLQuarter* is negative and statistically significant, with a coefficient of -0.011 (two-tailed p = 0.04), suggesting a *decrease* in the likelihood of new debt issuance during comment letter quarters. This is consistent with firms diverting resources away from quarterly debt financing activities in order to address the comment letter, even when the SEC comment letter does not identify any material accounting issues.

For control variables, as expected, debt financing is more prevalent among larger firms (*lnassets*) with higher credit rankings (*sprating*) and less prevalent among firms with volatile stock market returns (*retvol*). Further, firms are more likely to issue debt in quarters with better performance (*abschgroa*).

--------------- Table 4 ---------------

Overall, the results suggest that, on average, firms divert resources away from other firm activities when they receive an SEC comment letter, as evidenced by decreases in earnings announcement timeliness, a decreased likelihood of voluntary disclosure, and a decreased likelihood of new debt financing during quarters when firms are required to respond to an SEC comment letter. In terms of economic magnitude, firms announce their earnings seven percent closer to their 10-Q filing date, firms are six percent less likely to issue forecasts, and firms are ten percent less likely to issue debt in quarters when they receive a comment letter than in quarters with no comment letter. Notably, only comment letters that are unlikely to uncover non-compliance are included in these analyses. Thus, results are consistent with the comment letter itself drawing on firm resources, and not the outcomes of the comment letter. This result suggests

that spillover effects of responding to SEC comments also fall on firms whose financial statements

are in compliance with accounting rules, not just those that are out of compliance.

6.0 Cross-sectional Analyses

In the hypothesis development, I posit that SEC comment letters could increase the workload of the CFO and her staff because they are important, they are a large, effortful task, and their arrival is relatively unpredictable. I conduct three cross-sectional analyses to exploit variation in these characteristics and provide additional support for my hypothesis.

6.1 Variation in Effort Intensity

Prior research has shown that there is variation in effort-intensity of comment letter remediation, wherein some comment letters take more time and resources to remediate than others. I expect less effortful comment letters to have a smaller impact on CFO workload less than more effortful letters. Following prior literature (Cassell et al., 2013), I use the number of quarter-days the firm spent responding to the SEC comment letter as a proxy for its effort-intensity.[11] I investigate whether firms are more likely to divert resources away from earnings announcement, voluntary forecast disclosure, and debt financing activities when comment letters are more effortful (i.e., take more days to resolve). I run model (1), replacing *CLQuarter* with *CLDays* as the main variable of interest. Table 5 presents the results of this analysis. Columns 1 presents results when *EALag* is the dependent variable. As expected, *CLDays* is positively associated with earnings announcement lag, consistent with more effortful comment letters decreasing earnings

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[11] This measure excludes days that the SEC spent responding to a firm's comment letter, since I do not expect firms' CFOs to experience shocks to workload while they wait for the SEC's response.

announcement timeliness. Columns 2 and 3 present results when *QtrGuidance* and *DebtIssue* are the dependent variables, respectively. As expected, *CLDays* is negatively associated with the likelihood of both voluntary forecast issuance and new debt issuance, consistent with more effortful letters decreasing the likelihood that firms engage in these activities.

--------------- Table 5 ---------------

6.2 Variation in Accounting Resources

When firms' CFOs have excess capacity to absorb the workload of an SEC comment letter, then I do not expect CFOs to divert effort away from normal firm activities. To investigate this, I proxy for excess capacity by identifying whether a firm has a Chief Accounting Officer (CAO) in addition to a CFO. If a firm's CFO is also the CAO, this indicates that the firm invests relatively less in its accounting and finance function, and the CFO might have fewer resources on hand to deal with the additional burden of responding to the SEC's comments. I split the sample into two groups: those where the CFO also holds the title of CAO and where the CFO does not. Firms are required to disclose the name of their Chief Financial Officer and their Chief Accounting Officer on their 10-K Signature page, and I collect these titles using the BoardEx database.[12] In about 40 percent of the firms-years in my sample, the CFO and CAO are the same person. I run model (1) on the subsample where the CFO holds both titles (*CFOCAO*=1) and where the CFO does not (*CFOCAO*=0). Table 6 presents the results. Columns 1 and 2 present results when *EALag* is the

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[12] More specifically, firms are required to disclose the name of the individual that is the head of the financial reporting function. The exact title of this person changes depending on the firm. While Chief Accounting Officer is the most common title, titles such as "Principal Accounting Officer" or "Controller" also exist. If the CFO is also entitled "Principal Accounting Officer" or "Controller" then that CFO is coded as also being the CAO.

dependent variable, Column 3 and 4 present results when *QtrGuidance* is the dependent variable, and Columns 5 and 6 present results when *DebtIssue* is the dependent variable. As expected, *CLQuarter* is significantly associated with decreased earnings announcement timeliness, decreased likelihood of forecast issuance, and decreased likelihood of debt issuance only in the subsample of firms *without* a CAO in addition to a CFO (Columns 2, 4, and 6). I find no evidence that firms divert resources away from other firm activities while responding to an SEC comment letter if they have a CAO in addition to a CFO (Columns 1, 3, and 5).

--------------- Table 6 ---------------

6.3 Variation in Predictability of Comment Letter Arrival

If firms are relatively more surprised at the arrival of an SEC comment letter, I expect the comment letter to be a larger shock to the workload of the CFO and her team. To investigate this, I proxy for relative unpredictability by modelling the likelihood that a firm will receive an SEC comment letter in a given quarter following the Cassell et al. (2013) determinants model. Given that a firm received a comment letter, I expect more unpredictable SEC comment letters to increase workload the most.

To test this, I generate a variable *UnpredictableCL*, which equals 1 if the comment letter arrived in a quarter during which the predicted likelihood of receiving a comment letter is lower than the median value and equals 0 if the predicted likelihood is above the median value. I run OLS regressions to explore whether, given a firm receives a comment letter, earnings announcement timeliness, voluntary disclosure activity, or debt financing activity are differentially

affected by a more unpredictable comment letter. *UnpredictableCL* is the independent variable of interest in these regressions.

Table 7 presents the results. Column 1 presents results where earnings announcement lag (*EALag*) is the dependent variable. As expected, the coefficient on *UnpredictableCL* is positive and statistically significant, though marginal, with a coefficient of 0.025 (two-tailed p value = 0.065). This result is consistent with firms delaying earnings announcements more during unpredictable comment letters. Column 2 presents the results where quarterly management guidance (*QtrGuidance*) is the dependent variable. The coefficient on *UnpredictableCL* is negative, but not statistically significant. Thus, I find no evidence that more unpredictable comment letters differentially impact firms' likelihood of issuing management guidance. Column 3 presents the results where debt financing is the dependent variable. As expected, the coefficient on *UnpredictableCL* is negative and statistically significant, with a coefficient of -0.036 (two-tailed p value = 0.037). This result is consistent with firms' increased likelihood of diverting resources away from new debt financing activity when they receive a more unpredictable comment letter than when they receive a less unpredictable comment letter. In all, these results are consistent with less predictable comment letters increasing CFO workload more than less predictable comment letters.

--------------- Table 7 ---------------

Overall, the results of these cross-sectional analyses provide evidence consistent with SEC comment letters diverting resources away from other firm activities, and the extent of the effect depends on the severity of the comment letter, the excess resources available to the firm's CFO, and to some extent the relative unpredictability of an SEC comment letter.

7.0 Additional Analyses

7.1 Mitigating Spillover Effects Over Time

To gain more insights into the spillover effects of SEC comment letters on other firm activities, I conduct an additional analysis to examine whether firms are able to mitigate the effects over time. I identify whether the SEC comment letter is the first that the firm received. Given that a firm received a comment letter, its first comment letter conversation may increase workload the most. CFOs may find efficiencies in the SEC remediation process and better manage the workload shock associated with it over time.

To test this, I create a variable called *FirstCL*, an indicator variable that equals 1 if the SEC comment letter belongs to the firm's first comment letter conversation since 2004 and equals zero if the comment letter belongs to any subsequent comment letter conversation. I run OLS regressions to explore whether, given a firm receives a comment letter, earnings announcement timeliness, voluntary disclosure activity, or debt financing activity are differentially affected by the firm's first comment letter. *FirstCL* is the independent variable of interest in these regressions.

Table 8 presents the results. Column 1 presents results where earnings announcement lag (*EALag*) is the dependent variable. The coefficient on *FirstCL* is positive and statistically significant, with a coefficient of 0.020 (two-tailed p value = 0.051). This result is consistent with firms delaying earnings announcements more during their first comment letter conversation than during subsequent comment letters. Column 2 presents the results where quarterly management guidance (*QtrGuidance*) is the dependent variable. The coefficient on *FirstCL* is negative and statistically significant, with a coefficient of -0.054 (two-tailed p value = 0.006). This result is

consistent with firms' increased likelihood of diverting resources away from voluntary disclosure activity when they receive the first comment letter than when they receive subsequent comment letters. Column 3 presents the results where debt financing is the dependent variable. The coefficient on *FirstCL* is negative, but not statistically significant. Thus, I find no evidence that a firm's first comment letter differentially impacts firms' likelihood of issuing new debt financing. In all, these results are consistent with a firm's first comment letter increasing CFO workload more than subsequent comment letters. This is consistent with the idea that firms make adjustments over time to decrease some spillover effects of SEC comment letters.

--------------- Table 8 ---------------

7.2 Alternative Explanation

In additional analyses, I first aim to rule out an alternative explanation. I use Naïve Bayesian textual classification to identify the subset of comment letters that are unlikely to uncover non-compliance using the same information available to managers at the time of comment letter remediation (i.e., comment letter text). One possible concern is that managers are unsure whether or not comment letters are unlikely to identify non-compliance, and therefore the arrival of the comment letter generates uncertainty. In other words, it is possible that the comment letters in my sample have information content. Thus, the arrival of the comment letter updates managers' information regarding their firms' financial reporting quality. Then, firms may reduce earnings announcement timeliness, voluntary forecast activity, or debt issuance because they are reacting to the updated information, not because they are responding to a reallocation of firm resources. Prior literature has found little evidence of information content in comment letters, especially the

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comment letters in my sample (i.e., comment letters that are unlikely to identify non-compliance). One exception is documented in Dechow, Lawrence, and Ryans (2016); some comment letters in which the SEC questions revenue recognition practices trigger insider trading when the firm receives the comment letter and trigger a stock market reaction when the comment letter is publicly disclosed, suggesting that these comment letters contain information. I remove from my sample any comment letters that mention revenue recognition issues. I re-run my main analyses (model (1)) using this subsample of comment letters. Results are presented in Table 9. Across all three firm activities (earning announcement timeliness, voluntary disclosure issuance, and new debt issuance), the main results hold. Specifically, for *EALag*, the coefficient on *CLQuarter* is 0.009 (two-tailed p value < 0.01), for *QtrGuidance* the coefficient on *CLQuarter* is -0.011 (two-tailed p value < 0.05), and for *DebtIssue* the coefficient on *CLQuarter* is -0.010 (two-tailed p value < 0.05). In all, the results of this analysis provide comfort that information content is not driving my main result.

--------------- Table 9 ---------------

7.3 Robustness Tests

7.3.1 Alternative Model Specification

In this section, I test whether my main results for guidance issuance and new debt issuance hold under an alternative model specification. Given that these two proxies for firm-level activities are binary variables, it is possible that a logistic regression is an appropriate model. I present linear probability models in my main results for ease of interpretation. To alleviate concerns that my

results are driven by model specification, I re-run the analyses where either *QtrGuidance* or *DebtIssue* is the dependent variable (i.e., where the dependent variable is binary). I run the following logistic regression:

$$Pr\ (FirmActivity)_{iq} = \alpha_0 + \beta_1 CLQuarter_{iq} + \beta_2 Controls_{iq} + IndustryFE +$$

$$Quarter\ FE + YearFE + \varepsilon_{it} \qquad (2)$$

The same set of controls that were used in Model (1) (discussed above) are used in Model (2). Results (untabulated) are consistent with my main analyses. Specifically, when *QtrGuidance* is the dependent variable, *CLQuarter* is negative and statistically significant, with a coefficient of -0.235 (two-tailed p value = 0.007). When *DebtIssue* is the dependent variable, *CLQuarter* is negative and statistically significant, with a coefficient of -0.170 (two-tailed p value = 0.058). This provides comfort that my main results are not driven by model choice[13].

7.3.2 Alternative Definition of Comment Letters Unlikely to Identify Non-Compliance

In this section, I test whether my main results hold when I identify comment letters that do not uncover non-compliance using actual *ex post* firm outcomes rather than *ex ante* predictions from the Naïve Bayesian textual classification. One potential downside of the Naïve Bayesian textual classification is that the final sample may include SEC comment letters that are unlikely to detect non-compliance, but the firm still has a restatement or a write-down in the following year. To ensure that these comment letters are not driving my results, I include a comment letter in the sample if the comment letter *does not* require the company to amend or restate prior filings, revise

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[13] I also re-run all cross-sectional analyses that use *QtrGuidance* or *DebtIssue* as a dependent variable. I run model (3), replacing the key independent variable of interest and the subsample depending on the cross-sectional analysis. Inferences are quantitatively and qualitatively similar to inferences drawn from linear probability models in all cases.

future filings, or write down accounts in the year following remediation. I re-run my main analyses (model (1)) using this subsample of comment letters. Results are presented in Table 10. Across all three firm activities (earning announcement timeliness, voluntary disclosure issuance, and new debt issuance), the main results hold. Specifically, for *EALag*, the coefficient on *CLQuarter* is 0.012 (two-tailed p value < 0.01), for *QtrGuidance* the coefficient on *CLQuarter* is -0.009 (two-tailed p value < 0.05), and for *DebtIssue* the coefficient on *CLQuarter* is -0.018 (two-tailed p value < 0.01). In all, the results of this analysis provide comfort that the definition of SEC comment letter is not driving my main result.

--------------- Table 10 ---------------

8.0 Conclusion

In this paper, I document evidence consistent with a spillover effect of SEC comment letters; firms temporarily decrease earnings announcement timeliness, the likelihood of voluntary forecast issuance, and the likelihood of new debt issuance until their comment letters are resolved. Since I exclude SEC comment letters that are likely to signal accounting non-compliance, this result suggests that the spillover effects of responding to SEC comments also falls on firms whose financial statements are *in compliance* with accounting rules, not just those that are out of compliance.

I complement my main finding with cross sectional analyses to provide further support to my hypothesis. I find that the documented main effect is stronger when firms receive more severe comment letters, when firms do not have both a CFO and a CAO, and when the arrival of firms' comment letters is less predictable. Overall, my results are consistent with anecdotal evidence shared by practitioners such as CFOs, who claim that comment letters are resource intensive and become the instant priority of the firm once they arrive, drawing resources away from other important activities.

The results in this paper should be of interest to practitioners and academics alike. Since comment letters require firms to make adjustments to their financial reporting only 25 percent of the time, the findings in this paper document one potentially unintentional spillover effect of the other 75 percent of comment letters. This does not mean that these comment letters are without benefit; for example, they may serve as a control mechanism to prevent non-compliance from occurring. This study documents a spillover effect of this subset of comment letters, and future research can calibrate whether the costs outweigh benefits.

Further, this paper documents spillover effects that occur when a firm faces a shock to its workload. While prior literature on workload shocks has focused on the CEO, the board of directors, and other economic agents, this study focuses on the firm's accounting and finance function. I provide evidence that having a CAO in addition to the CFO could reduce the impact of the shocks to the CFO's function. Future research can identify additional consequences of having a separate CAO position or identify additional shocks that trigger resource tradeoff decisions within a company's accounting and finance function.

The following is an excerpt from Arbor Realty Trust, Inc.'s response to an SEC comment letter. It is dated April 8, 2010. Text in bold is the SEC's comment. Text in italics is the company's response. The full letter can be accessed via the SEC's EDGAR system at the following link: https://www.sec.gov/Archives/edgar/data/1253986/000095012310008889/filename1.htm.

Form10-Q for the period ended June 30, 2009 filed August 7, 2009
Notes to Consolidated Financial Statements
Note 6 – Investment in Equity Affiliates
Lightstone Value Plus REIT L.P. / Prime Outlets, page 20

We note your response to prior comments five and 21. You state that the POM transaction involved the exchange of your investments in POM for interests in Lightstone Value Plus REIT L.P. as well as a debt arrangement. You also state that the business purpose of the transaction was primarily to obtain significant cash flow based on your liquidity needs particularly in light of the difficult market conditions. In your response to prior comment 21, you state that you did not defer any gain related to the exchange. Please tell us your basis for recognizing the entire gain amount immediately. Tell us how you considered the debt arrangement when determining the timing of the gain recognition since the debt is secured by the interest in Lightstone Value Plus REIT L.P. that you received in the exchange.

Company Response:
The Company evaluated the exchange of its zero basis profits interest in Prime Outlets Member LLC ("POM") in accordance with ASC 845-10 Nonmonetary Transactions. Per 845-10-30, accounting for nonmonetary transactions should be based on the fair values of the assets exchanged. This is the same basis as that used for monetary transactions. When transactions are recorded at fair value, a gain or loss is recognized if the book value of the asset surrendered differs from its fair value (or the fair value of the asset acquired if it is more clearly evident). The fair value of the asset received should be used to measure the cost if it is more clearly evident than the fair value of the asset surrendered. Based upon a comparison of the terms and associated cash flows of the assets exchanged, the Company determined that the fair value of the common and preferred units of Lightstone Value Plus REIT, L.P. (LVP REIT LP) were more readably determinable than the value of the profits interest in POM. The determination of the fair value of the common and preferred units of LVP REIT LP is discussed in further detail below.

The Company also noted that ASC 845-10 only allows for the nonmonetary exchange to be measured based on the recorded amount of the nonmonetary asset relinquished, and not on the fair values of the exchanged assets, if any of the following conditions apply:

    a) *The fair value of neither the asset(s) received nor the asset(s) relinquished is determinable within reasonable limits.*

        i.   *The Company was able to determine the value of the units in LVP REIT LLP within reasonable limits.*

        ii. *Please refer to discussion below for such determination.*

    b) *The transaction is an exchange of a product or property held for sale in the ordinary course of business for a product or property to be sold in the same line of business to facilitate sales to customers other than the parties to the exchange.*

        i.   *The transaction did not include a product for property held for sale in the ordinary course of business.*

    c) *The transaction lacks commercial substance*

        i.   *The Company's future cash flows are expected to significantly change as the common and preferred units received in LVP REIT LP differs significantly from the future cash flows of the POM interest.*

Accordingly, the Company concluded that the exchange met the criteria of ASC 845-10 for recording the exchange at fair value at the consummation of the exchange. See below for discussion of how the Company determined its fair value in the common and preferred units in LVP REIT LP.

Upon the closing of the transfer, the Company received the following units in LVP REIT LP:

	Units	Value per Units		Total Value	
Common Units	284,200	$	10.00	$	2,842,000
Preferred Units	53,100	$	1,000.00	$	53,100,000
Total				$	55,942,000

The preferred operating partnership units yield 4.6316% and the common units are entitled to dividends as declared by LVP REIT Inc. The common units were valued at $10 per unit similar to common shares offered by LVP REIT Inc. in its prospectus supplement. The common units can be converted at any time by the Company for shares in LVP REIT Inc. The preferred units were valued at $1,000 per unit. This value is supported by the following:

• *The preferred units may be redeemed at the option of LVP REIT LP at a redemption price per preferred unit equal to the sum of the liquidation preference (see below, equals the fair value of the preferred units at the consummation of the exchange) plus an amount equal to*

all distributions (whether or not earned or declared) accrued and unpaid thereon to the date of redemption, and the redemption price shall be payable in cash.

- *LVP REIT LP has an incentive to redeem the preferred units in June 2013, as following that date, the annual distribution rate applicable to the preferred units shall increase from 4.6316% to 15% percent and the Company would be granted certain consent rights with respect to certain actions of LVP REIT LP.*

- *Unless such preferred units have previously been redeemed, at the option of the holder thereof, any preferred units may be converted, in whole or in part, at any time after June 2013, into such number of common units obtained by dividing the aggregate preferred unit liquidation preference of such preferred units by the estimated fair market value of one common share in LVP REIT Inc.*

- *In the event of any liquidation, the holders of the preferred units shall be entitled to receive $1,000.00 per preferred unit plus an amount equal to all distributions (whether or not earned or declared) accrued and unpaid thereon to the date of final distribution to such holders.*

The Company concluded that no deferral of the gain was appropriate. As LVP REIT LP has the usual risks and rewards associated with such asset and the Company has no continuing involvement in the transferred asset, the Company concluded that the POM interest had been transferred to LVP REIT LP. Further, the Company could not be required or otherwise compelled to reacquire the POM interest.

Following this conclusion, the Company considered whether the debt arrangement had any impact on whether recording the gain at consummation of the exchange was appropriate. ASC 845-10 does not directly address situations when the asset transferred is encumbered by debt and whether gain deferral would be applicable in such situations. This consideration included an evaluation of the terms of the loan and the features of the LVP REIT LP units received by the Company.

At the time the Company agreed to transfer its interest in the POM profits interest to LVP REIT LP, the Company also entered into a loan agreement with LVP REIT Inc. that was secured by its POM interests. This agreement also required that when the Company completed the exchange of its POM interests for the LVP REIT LP units, the LVP REIT LP units would then replace the POM interest as security for the loan.

The loan proceeds provided to us were available for general corporate purposes and the loan contains no financial or other covenants or restrictions whatsoever on our operations or our Company. The loan is non-recourse to the Company and is effectively only secured by the Company's units in LVP REIT LP. The loan is due to mature on July 1, 2016 and is prepayable by the Company if LVP REIT LP redeems the Company's units in LVP REIT LP. LVP REIT LP has

the right to redeem the preferred units (see above for further discussion of the features of the preferred units) held by the Company starting on June 13, 2013. As noted above, if LVP REIT LP does not redeem the preferred units held by the Company by that date, the distribution rate on such units increases to 15% per annum and the Company would be granted certain consent rights with respect to certain actions of LVP REIT LP. It was the Company's conclusion that such terms make it highly likely that LVP REIT LP will redeem the preferred units on or after June 13, 2013. These proceeds will then be used by the Company to prepay the loan.

In summary, based on the discussion above, we have concluded that the amount of the gain should be based upon the fair value of the LVP REIT LP units received by us and was appropriately recorded in its entirety upon the consummation of the exchange in the first quarter of 2009.

Appendix B Variable Definitions

Variable Name	Definition [Source]
Panel A: Key Dependent and Independent Variables	
EALag	Natural log of the number of days between the fiscal quarter end and the date the firm announced quarterly earnings [Compustat]
QtrGuidance	An indicator variable that equals 1 if the firm issued any quarterly guidance in the fiscal quarter and equals zero if the firm issued no quarterly guidance, 0 otherwise [IBES]
DebtIssue	An indicator variable that equals 1 if DealScan shows that the firm issued debt during the fiscal quarter and equals zero if the firm issued no private debt, 0 otherwise [DealScan]
CLQuarter	An indicator variable that equals 1 if the firm had an unresolved SEC comment letter during the fiscal quarter, 0 otherwise [Audit Analytics]
CLDays	Natural log of the number of days during the quarter that the firm was responding to an SEC comment letter. This measure excludes days between the firm's response and the SEC's subsequent comment letter within the conversation. [Audit Analytics]
FirstCL	An indicator variable that equals 1 if, during the firm-quarter, the firm responded to an SEC comment letter that belongs to the firm's first periodic comment letter conversation. Variable equals 0 if, during the firm-quarter, the firm responded to an SEC comment letter that belongs to any subsequence comment letter conversation. [Audit Analytics]
Panel B: Determinants of Receiving a Comment Letter	
lnassets	Natural logarithm of the firm's total assets [Compustat]
lagbeta	The firm's beta coefficient using daily returns in year t-1 [CRSP]
lnfirmage	Natural logarithm of the number of years since the firm's first appearance in the Compustat or CRSP dataset, whichever is first
big4	An indicator variable that equals 1 if the firm was audited by a Big 4 auditor in year t, 0 otherwise [Compustat]
abschgroa	Absolute value of the firm's change in ROA from year t-1 to year t (earnings before extraordinary items divided by total assets) [Compustat]
finchall	The first principal component of four proxies for firm financial challenges: 1) losses, 2) special items, 3) research and development expense, and 4) Z-Score. [Compustat]
complexity	The first principal component of two proxies for firm complexity: 1) foreign, and 2) restructuring [Compustat]
orgchange	The first principal component of four proxies for org. change: 1) asset growth, 2) revenue growth, 3) leverage, and 4) acquisition [Compustat]
restate	An indicator variable that equals 1 if the firm had a misstatement in year t that leads to a restatement in the future, 0 otherwise [Audit Analytics]
extfinancing	Following Hoitash, Hoitash, & Kurt (2016), an indicator variable that equals 1 if the firm's external financing ratio was above 0.05 in year t-1, 0 otherwise [Compustat]

Variable Name	Definition [Source]
Panel C: Determinants of 10-Q Filing Lag (in addition to determinants previously defined in Panel B)	
mw	An indicator variable that equals 1 if the firm had an internal control material weakness in quarter q, 0 otherwise [Audit Analytics]
acclacc	An indicator variable that equals 1 if the firm is an accelerated or large accelerate filer, 0 otherwise
surprise	Actual quarter EPS less the mean analyst expectation immediately before quarter end [IBES]
Panel D: Determinants of the Decision to Forecast (in addition to determinants previously defined in Panels A – B)	
earnvol	Standard deviation of earnings (scaled by assets) during the previous 28 quarters, with a minimum of 3 quarters required. [Compustat]
disp_analysts	Standard deviation of analysts' forecasts during firm-quarter q [IBES]
ln_afollowing	Natural log of the number of unique analysts that followed the firm in the year before quarter q [IBES]
instown	Herfindahl index calculated as the sum of squared institutional ownership [ISS]
Panel E: Determinants of the Decision to Issue Debt (in addition to determinants previously defined in Panels A – C)	
retvol	Standard deviation of stock return during quarter t using monthly returns [CRSP]
mtb	Market-to-book ratio [Compustat]
shareto	Median value of monthly shared traded during quarter q, divided by shares outstanding over a quarter [Compustat]
divratio	Ratio of dividends to total assets [Compustat]
sprating	An indicator variable that equals 1 if the firm has a Standard and Poor's debt rating, 0 otherwise [Compustat]

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Table 1 Sample Selection Criteria for Main Hypothesis Tests

Panel A: Construction of SEC Comment Letters Conversations Dataset

	Comment Letter Conversations
SEC Comment letter conversations that refer to forms 10-K or 10-Q in years 2008 – 2017	10,055
Less: Letters classified as "likely to identify non-compliance" using Naïve Bayesian textual classification	(3,647)
SEC Comment letter conversations that are unlikely to identify non-compliance	**6,408**
Unique Firms in SEC Comment letters conversations dataset	**3,728**

Panel B: Construction of Firm-Quarter Panel Dataset

	Observations Tests of H1a	Observations Tests of H1b	Observations Tests of H1c
Merge SEC Comment letters with Compustat to get all firm quarters from 2008 - 2017	171,225	171,225	171,225
Drop: Firm-quarters missing control variables from Compustat	(63,507)	(63,514)	(64,240)
Drop: Firm-quarters missing control variables form CRSP	(7,941)	(7,934)	(13,586)
Drop: Firm-quarters missing earnings announcement variables from Compustat	(30,175)		
Drop: Firm-quarters missing control variables from IBES	(4,830)	(22,098)	(12,450)
Drop: Firm-quarters missing control variables from ISS		(28,876)	(29,343)
Final Firm-Quarter, Panel Dataset*	**64,772**	**48,803**	**51,606**
Unique Firms in Final Firm-Quarter, Panel Dataset	**2,262**	**1,802**	**1,898**

*Sample sizes deviate from these numbers in final regressions because singleton observations are dropped in fixed effects models

Table 2 Descriptive Statistics

Panel A: Descriptive Statistics for SEC Comment Letter Conversations in Audit Analytics

Variable	N	mean	median	std	min	max
Days to Resolve	6,408	66.87	47	62.20	6	371
Rounds to Resolve	6,408	2.60	2	0.876	2	6
CFO Addressed	6,408	0.600	1	0.490	0	1
CFO / CEO Addressed	6,408	0.893	1	0.309	0	1
First SEC Conversation	6,408	0.301	0	0.459	0	1

Panel B: Descriptive Statistics for Firm-Quarters in the Sample

Variable	N	mean	median	std	min	max
Dependent Variables						
EALag	64,772	34.07	32	13.186	11	59
QtrGuidance	48,803	0.351	0	0.477	0	1
DebtIssue	51,606	0.103	0	0.304	0	1
Independent Variable of Interest						
CLQuarter	64,772	0.031	0	0.380	0	1
Control Variables						
Lnassets	64772	7.217	7.110	1.765	1.933	12.21
lagbeta	64772	1.357	1.301	0.559	-0.240	3.191
lnfirmage	64772	3.033	2.996	0.708	1.099	4.357
big4	64772	0.865	1	0.341	0	1
abschgroa	64772	0.0138	0.006	0.028	0.000	0.380
finchall	64772	-0.217	-0.455	1.029	-3.168	5.628
complexity	64772	0.180	-0.060	1.155	-0.993	2.358
orgchange	64772	0.099	0.060	0.746	-3.096	11.25
restate	64772	0.088	0	0.284	0	1
extfinancing	64772	0.242	0	0.338	0	1
mw	64772	0.056	0	0.229	0	1
surprise	64772	0.007	0.010	0.237	-2.233	1.110
earnvol	48,803	0.031	0.017	0.052	0.001	0.827
disp_analysts	48,803	0.041	0.020	0.061	0	1.200
ln_afollowing	48,803	1.949	1.946	0.778	0	3.912
instown	48,803	0.717	0.746	0.211	0.000	1.097
retvol	51,606	0.025	0.021	0.015	0.007	0.118
mtb	51,606	2.134	1.640	1.559	0.444	18.50
shareto	51,606	0.620	0.475	0.520	0.001	3.433
divratio	51,606	0.001	0	0.002	0	0.031
sprating	51,606	0.417	0	0.493	0	1

Panel C: Difference in Means between Comment Letter Quarters and Non-Comment Letter Quarters

Variable	CLQuarter=0	CLQuarter=1	Difference	P-value
LnEAlag	3.417	3.455	0.038	0.000
QtrGuidance	0.292	0.249	-0.044	0.000
DebtIssue	0.085	0.066	-0.019	0.003

Table 3 Correlation Matrix

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1)	CLQuarter	**1.000**													
(2)	EALag	**0.040**	**1.000**												
(3)	QtrGuidance	**-0.018**	**-0.130**	**1.000**											
(4)	DebtIssue	**-0.014**	**-0.014**	**-0.013**	**1.000**										
(5)	lnassets	**-0.014**	**-0.217**	**-0.018**	**0.166**	**1.000**									
(6)	lagbeta	**0.009**	**0.063**	**0.032**	**-0.051**	**-0.226**	**1.000**								
(7)	lnfirmage	**-0.037**	**-0.134**	**-0.107**	**0.076**	**0.444**	**-0.193**	**1.000**							
(8)	big4	**-0.026**	**-0.134**	**0.031**	**0.061**	**0.332**	**-0.057**	**0.087**	**1.000**						
(9)	abschgroa	**0.016**	**0.098**	**-0.043**	**-0.031**	**-0.205**	**0.087**	**-0.089**	**-0.064**	**1.000**					
(10)	finchall	**0.027**	**0.173**	**0.029**	**-0.093**	**-0.488**	**0.316**	**-0.300**	**-0.118**	**0.153**	**1.000**				
(11)	complexity	**-0.015**	**-0.059**	**0.129**	**0.016**	**0.173**	**0.042**	**0.094**	**0.099**	**-0.079**	**0.116**	**1.000**			
(12)	orgchange	**0.019**	**0.012**	**0.105**	**-0.020**	**-0.099**	**0.033**	**-0.240**	**-0.067**	**-0.045**	-0.003	**-0.073**	**1.000**		
(13)	restate	**0.006**	**0.082**	**0.023**	**-0.010**	**-0.091**	**0.051**	**-0.096**	**-0.027**	**0.022**	**0.086**	-0.006	**0.020**	**1.000**	
(14)	extfinancing	**0.030**	**0.144**	**-0.063**	**-0.022**	**-0.162**	**0.192**	**-0.217**	**-0.083**	**0.112**	**0.240**	**-0.123**	**0.259**	**0.023**	**1.000**

Table 3 presents Pearson correlations for the main independent variable of interest, three dependent variables used to test H1, and determinants of whether a firm receives an SEC comment letter in a given firm-quarter. Variables in bold are significant at the $p<0.05$ level. All variables are winsorized at the 1st and 99th percentiles. Refer to Appendix B for variable definitions.

Table 4 Main Results

Dependent Variable	(1) EALag	(2) QtrGuidance	(3) DebtIssue
CLQuarter	**0.012*****	**-0.018****	**-0.011****
	(3.059)	**(-2.014)**	**(-2.046)**
lnassets	-0.016***	0.031**	0.025***
	(-3.487)	(2.389)	(7.710)
lagbeta	-0.003	-0.011	-0.017***
	(-1.136)	(-1.493)	(-6.782)
lnfirmage	-0.021	0.047	-0.000
	(-1.483)	(1.177)	(-0.012)
big4	-0.015*	0.008	-0.005
	(-1.837)	(0.342)	(-0.936)
abschgroa	0.056	0.243***	0.132***
	(1.629)	(3.627)	(3.143)
finchall	0.010***	-0.007	0.003*
	(4.974)	(-1.335)	(1.935)
complexity	0.009***	-0.009	-0.002
	(3.891)	(-1.638)	(-1.104)
orgchange	0.006***	0.007	-0.001
	(2.737)	(1.207)	(-0.753)
restate	0.042***	0.009	-0.000
	(6.589)	(0.515)	(-0.082)
extfinancing	0.005	-0.004	-0.014
	(1.003)	(-0.326)	(-0.584)
mw	0.066***		
	(9.266)		
acclacc	-0.014***		
	(-2.902)		
surprise	-0.033***		
	(-7.585)		
earnvol		-0.120	
		(-1.508)	
disp_analysts		-0.357***	
		(-7.481)	
ln_analysts		0.018**	-0.005**
		(2.042)	(-2.185)
instown		0.058*	0.004
		(1.879)	0.360
retvol			-0.191**
			(-2.178)
mtb			-0.002**
			(-2.142)
shareto			0.007***
			(2.725)
divratio			-0.719*
			(-1.837)
sprating			0.045***
			(9.475)
Firm Fixed Effects	Y	Y	Y
Year Fixed Effects	Y	Y	Y
Quarter Fixed Effects	Y	Y	Y
N	64,757	48,787	51,593
Adjusted R-sq	0.690	0.589	0.090

Table 4 presents the results of the main tests for my hypothesis. Standard errors are robust to heteroskedasticity and clustered at the firm level. *, **, and *** mark coefficients that are significant at two-tailed p<0.10, p<0.05, and p<0.01, respectively. Refer to Appendix B for variable definitions

Table 5 Comment Letter Effort Intensity Cross Sectional Analysis

	(1)	(2)	(3)
Dependent Variable	EALag	QtrGuidance	DebtIssue
CLDays	**0.005***	**-0.008**	**-0.005***
	(3.003)	**(-2.105)**	**(-1.922)**
lnassets	-0.016***	0.031**	0.025***
	(-3.486)	(2.389)	(7.709)
lagbeta	-0.003	-0.011	-0.017***
	(-1.133)	(-1.494)	(-6.783)
lnfirmage	-0.021	0.047	-0.000
	(-1.481)	(1.177)	(-0.013)
big4	-0.015*	0.008	-0.005
	(-1.835)	(0.342)	(-0.938)
abschgroa	0.056	0.243***	0.132***
	(1.631)	(3.628)	(3.141)
finchall	0.010***	-0.007	0.003*
	(4.977)	(-1.338)	(1.931)
complexity	0.009***	-0.009	-0.002
	(3.889)	(-1.636)	(-1.103)
orgchange	0.006***	0.007	-0.001
	(2.740)	(1.207)	(-0.754)
restate	0.042***	0.009	-0.000
	(6.591)	(0.515)	(-0.083)
extfinancing	0.004	-0.004	-0.014
	(1.002)	(-0.326)	(-0.586)
mw	0.066***		
	(9.265)		
acclacc	-0.014***		
	(-2.903)		
surprise	-0.033***		
	(-7.582)		
earnvol		-0.120	
		(-1.507)	
disp_analysts		-0.357***	
		(-7.481)	
ln_analysts		0.018**	-0.005**
		(2.042)	(-2.184)
instown		0.058*	0.004
		(1.877)	(0.012)
retvol			-0.002**
			(-2.143)
mtb			0.007***
			(2.726)
shareto			-0.720*
			(-1.840)
divratio			0.045***
			(9.477)
sprating			-0.191**
			(-2.176)
Firm Fixed Effects	Y	Y	Y
Year Fixed Effects	Y	Y	Y
Quarter Fixed Effects	Y	Y	Y
N	67,757	48,787	51,593
Adjusted R-sq	0.701	0.604	0.093

Table 5 presents the results of Model (1), except *CLDays* is the main variable of interest. Standard errors are robust to heteroskedasticity and clustered at the firm level. *, **, and *** mark coefficients that are significant at two-tailed p<0.10, p<0.05, and p<0.01, respectively. Refer to Appendix B for variable definitions.

Table 6 CFO Excess Resources Cross Sectional Analysis

	(1)	(2)	(3)	(4)	(5)	(6)
Cross Section	CFOCAO = 0	CFOCAO = 1	CFOCAO = 0	CFOCAO = 1	CFOCAO = 0	CFOCAO = 1
Dependent Variable	EALag	EALag	QtrGuidance	QtrGuidance	DebtIssue	DebtIssue
CLQuarter	**0.007**	**0.017*****	**-0.008**	**-0.014****	**-0.009**	**-0.017****
	(0.130)	**(5.08)**	**(0.950)**	**(-2.140)**	**(-1.49)**	**(-2.32)**
Controls	Y	Y	Y	Y	Y	Y
Firm Fixed Effects	Y	Y	Y	Y	Y	Y
Year Fixed Effects	Y	Y	Y	Y	Y	Y
Quarter Fixed Effects	Y	Y	Y	Y	Y	Y
N	41,791	22,644	30,267	18,427	31,814	19,623
Adj. R-sq	0.736	0.682	0.577	0.639	0.094	0.102

Table 6 presents the results of regressions of *EALag*, *QtrGuidance,* and *DebtIssue* on *CLQuarter* on subsamples of firms where the CFO does and does not also hold the title of CAO. All regressions include the same control variables used in the main analysis. All regressions include firm, year, and quarter fixed effects. Standard errors are robust to heteroskedasticity and clustered at the firm level. *, **, and *** mark coefficients that are significant at two-tailed $p<0.10$, $p<0.05$, and $p<0.01$, respectively. Refer to Appendix B for variable names and definitions.

Table 7 Unpredictability Cross Sectional Analysis

Dependent Variable	(1) EALag	(2) QtrGuidance	(3) DebtIssue
UnpredictableCL	**0.025***	**-0.015**	**-0.036****
	(1.85)	**-0.56**	**(-2.12)**
lnassets	-0.236***	-0.14	0.020***
	(-4.19)	-1.23	(3.15)
lagbeta	0.018*	0.053**	-0.008
	(1.75)	2.22	(-0.73)
lnfirmage	-0.034***	0.001	0.001
	(-3.74)	0.04	(0.06)
big4	-0.040**	0.037	-0.016
	(-2.06)	0.94	(-1.05)
abschgroa	0.156	-0.226	0.185
	(0.880)	-0.55	(0.78)
finchall	0.015**	0.014	0.002
	(2.45)	1.10	(0.36)
complexity	0.003	0.019	0.002
	(0.47)	1.60	(0.38)
orgchange	0.004	0.041***	-0.003
	(0.67)	3.57	(-0.77)
restate	0.044**	0.114**	-0.038**
	(2.19)	1.97	(-2.51)
extfinancing	0.034**	-0.082**	0.012
	(2.08)	-2.18	(0.63)
mw	0.089***		
	(2.99)		
acclacc	-0.079***		
	(-5.12)		
surprise	-0.032*		
	(-1.90)		
earnvol		-0.396*	
		-1.87	
disp_analysts		-0.569***	
		-3.64	
ln_analysts		0.117***	0.000
		5.80	(0.05)
instown		-0.013	0.059**
		-0.24	(2.51)
retvol			0.322
			(0.88)
mtb			-0.004*
			(-1.71)
shareto			-0.001
			(-0.13)
divratio			0.420
			(0.18)
sprating			0.26*
			(1.67)
Industry Fixed Effects	Y	Y	Y
Year Fixed Effects	Y	Y	Y
Quarter Fixed Effects	Y	Y	Y
N	3,409	2,765	2,891
Adjusted R-sq	0.531	0.230	0.067

Table 7 presents the results of regressions of *FirmActivity* on *UnpredictableCL*. Standard errors are robust to heteroskedasticity and clustered at the firm level. *, **, and *** mark coefficients that are significant at two-tailed p<0.10, p<0.05, and p<0.01, respectively. Refer to Appendix B for variable definitions.

Table 8 Learning Over Time Additional Analysis

Dependent Variable	(1) EALag	(2) QtrGuidance	(3) DebtIssue
FirstCL	**0.020***	**-0.054***	**-0.005**
	(1.952)	**(-2.770)**	**(-0.503)**
lnassets	-0.015***	-0.015	0.019***
	(-3.239)	(-1.559)	(4.402)
lagbeta	0.009	0.022	-0.001
	(1.100)	(1.244)	(-0.113)
lnfirmage	-0.038***	-0.021	-0.005
	(-4.765)	(-1.221)	(-0.708)
big4	-0.031*	0.032	0.002
	(-1.817)	(1.029)	(0.251)
abschgroa	0.097	0.074	0.316**
	(0.750)	(0.312)	(2.072)
finchall	0.024***	0.008	-0.002
	(4.793)	(0.723)	(-0.375)
complexity	0.004	0.018*	0.002
	(0.921)	(1.946)	(0.440)
orgchange	-0.003	0.036***	-0.001
	(-0.505)	(3.583)	(-0.280)
restate	0.072***	0.043	-0.012
	(4.573)	(1.385)	(-0.909)
extfinancing	0.016	-0.064***	-0.001
	(1.345)	(-2.715)	(-0.055)
mw	0.095***		
	(4.880)		
acclacc	-0.059***		
	(-4.503)		
surprise	-0.027**		
	(-2.310)		
earnvol		-0.349***	
		(-2.871)	
disp_analysts		-0.894***	
		(-5.871)	
ln_analysts		0.103***	-0.010
		(7.006)	(-1.587)
instown		0.067	0.042**
		(1.459)	(2.498)
retvol			-0.121
			(-0.449)
mtb			-0.004**
			(-2.493)
shareto			0.006
			(0.710)
divratio			0.341
			(0.251)
sprating			0.031***
			(3.098)
Industry Fixed Effects	Y	Y	Y
Year Fixed Effects	Y	Y	Y
Quarter Fixed Effects	Y	Y	Y
N	7,117	7,300	7,639
Adjusted R-sq	0.216	0.211	0.046

Table 8 presents the results of regressions of *FirmActivity* on *FirstCL*. Standard errors are robust to heteroskedasticity and clustered at the firm level. *, **, and *** mark coefficients that are significant at two-tailed p<0.10, p<0.05, and p<0.01, respectively. Refer to Appendix B for variable definitions

Table 9 Excluding Comment Letters with Information Content

Dependent Variable	(1) EALag	(2) QtrGuidance	(3) DebtIssue
CLQuarter	**0.009***	**-0.011**	**-0.010**
	(1.994)	**(-2.558)**	**(-2.046)**
lnassets	-0.016***	0.030**	0.025***
	(-3.325)	(2.250)	(7.645)
lagbeta	-0.004	-0.011	-0.017***
	(-1.264)	(-1.443)	(-6.722)
lnfirmage	-0.022	0.049	-0.001
	(-1.500)	(1.238)	(-0.144)
big4	-0.016**	0.006	-0.006
	(-1.963)	(0.241)	(-1.118)
abschgroa	0.054	0.241***	0.131***
	(1.540)	(3.468)	(3.024)
finchall	0.011***	-0.006	0.003
	(5.038)	(-1.134)	(1.618)
complexity	0.009***	-0.009*	-0.001
	(3.814)	(-1.763)	(-0.727)
orgchange	0.006***	0.007	-0.001
	(2.873)	(1.291)	(-0.760)
restate	0.041***	0.012	-0.002
	(6.361)	(0.681)	(-0.372)
extfinancing	0.005	-0.005	-0.013
	(1.089)	(-0.467)	(-0.524)
mw	0.065***		
	(9.121)		
acclacc	-0.015***		
	(-2.993)		
surprise	-0.033***		
	(-7.621)		
earnvol		-0.127	
		(-1.568)	
disp_analysts		-0.350***	
		(-7.338)	
ln_analysts		0.017**	-0.005**
		(1.973)	(-2.020)
instown		0.054*	
		(1.757)	
retvol			-0.193**
			(-2.135)
mtb			-0.002**
			(-2.004)
shareto			0.007***
			(2.654)
divratio			-0.720*
			(-1.784)
sprating			0.045***
			(9.150)
Firm Fixed Effects	Y	Y	Y
Year Fixed Effects	Y	Y	Y
Quarter Fixed Effects	Y	Y	Y
N	62,416	46,968	49,685
Adjusted R-sq	0.689	0.588	0.090

Table 9 presents regressions of *FirmActivity* on *ClQuarter* and relevant control variables. Comment letters that have information content are removed. Standard errors are robust to heteroskedasticity and clustered at the firm level. *, **, and *** mark coefficients that are significant at two-tailed p<0.10, p<0.05, and p<0.01, respectively.

Table 10 Ex post Classification of Comment Letters

Dependent Variable	(1) EALag	(2) QtrGuidance	(3) DebtIssue
CLQuarter_expost	**0.012***	**-0.009**	**-0.018***
	(4.176)	**(2.168)**	**(-3.304)**
lnassets	-0.015***	0.033**	0.027***
	(-3.129)	(2.467)	(5.799)
lagbeta	-0.004	-0.011	-0.015***
	(-1.359)	(-1.435)	(-4.682)
lnfirmage	-0.021	0.048	-0.005
	(-1.464)	(1.196)	(-0.411)
big4	-0.016*	0.008	-0.011
	(-1.884)	(0.333)	(-1.194)
abschgroa	0.054	0.242***	0.159***
	(1.601)	(3.557)	(3.140)
finchall	0.010***	-0.007	0.001
	(4.992)	(-1.291)	(0.499)
complexity	0.009***	-0.009	-0.002
	(3.912)	(-1.595)	(-0.891)
orgchange	0.006***	0.007	-0.003
	(2.791)	(1.251)	(-1.359)
restate	0.042***	0.011	-0.003
	(6.518)	(0.618)	(-0.514)
extfinancing	0.005	-0.003	0.011
	(1.001)	(-0.307)	(0.318)
mw	0.064***		
	(8.700)		
acclacc	-0.018***		
	(-3.578)		
surprise	-0.030***		
	(-6.949)		
earnvol		-0.128	
		(-1.568)	
disp_analysts		-0.342***	
		(-7.341)	
ln_analysts		0.015*	-0.005
		(1.765)	(-1.513)
instown		0.047	0.003
		(1.563)	(0.246)
retvol			-0.116
			(-0.966)
mtb			-0.001
			(-0.995)
shareto			0.006*
			(1.726)
divratio			-1.738***
			(-2.814)
sprating			0.037***
			(4.352)
Firm Fixed Effects	Y	Y	Y
Year Fixed Effects	Y	Y	Y
Quarter Fixed Effects	Y	Y	Y
N	64,466	48,714	51,456
Adjusted R-sq	0.693	0.588	0.092

Table 10 presents an additional analysis, where *CLQuarter* is replaced with *CLQuarter_expost*. Standard errors are robust to heteroskedasticity and clustered at the firm level. *, **, and *** mark coefficients that are significant at two-tailed p<0.10, p<0.05, and p<0.01, respectively. Refer to Appendix B for variable definitions.