

IS THE CHARACTER OF SEC COMMENT LETTERS RELEVANT TO RECIPIENTS?
EMPIRICAL EVIDENCE OF CONSTRAINING ALLOWANCE
FOR DOUBTFUL ACCOUNTS

by

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A DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
in the Department of Accounting
in the Graduate School of
The University of Alabama

TUSCALOOSA, ALABAMA

2017

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ABSTRACT

Prior research has provided mixed results regarding changes in firm behavior in response to comment letters from the Securities and Exchange Commission (SEC) (Johnston and Petacchi 2016; Kubick, Mayberry, Omer, and Lynch 2016; Robinson, Xue, and Yu 2011; Wang 2016). This study documents that comment letters come in two main categories: accounting-focused letters and disclosure-focused letters. I examine whether the character of comment letters (accounting versus disclosure) impacts a firm's response to comment letters questioning the allowance for doubtful accounts (AFDA). I find that firms with abnormal accruals in the AFDA are more likely to receive an accounting-focused comment letter and these firms are also more likely to constrain AFDA-related earnings management behaviors in the period after comment letter resolution. Disclosure-focused comment letters exhibit no such patterns. The results of this study suggest (1) the lack of consistent findings in prior research may be partially attributable to homogenously classifying dissimilar comment letters and (2) the SEC filing review and comment letter process may be an effective tool in monitoring and constraining earnings management behaviors.

DEDICATION

This dissertation is dedicated in honor of all of those who have walked the path with me - I know that I am only and always standing on the shoulders of giants, and in loving memory of Olan Edison McCraw, Jr. who was, indeed, a giant of a man.

LIST OF ABBREVIATIONS AND SYMBOLS

AA	Audit Analytics
AAER	Accounting and Auditing Enforcement Release
AFDA	Allowance for Doubtful Accounts
AQM	Accounting Quality Model
BDE	Bad Debt Expense
CRSP	Center for Research in Securities Prices
DCF	Division of Corporation Finance
EDGAR	Electronic Data Gathering, Analysis, and Retrieval
FASB	Financial Accounting Standards Board
FOIA	Freedom of Information Act
GAAP	Generally Accepted Accounting Principles
IPO	Initial Public Offering
IRS	Internal Revenue Service
PCAOB	Public Company Accounting Oversight Board
PSM	Propensity Score Matching
P-Value	Probability of Test Statistic
SEC	Securities and Exchange Commission
SOX	Sarbanes-Oxley Act of 2002

ACKNOWLEDGMENTS

Mom and Dad – You are champion parents. Thank you for your unwavering support and constant security. Thank you for stopping at absolutely nothing in giving RJ, John, and me the whole wide world. My life is fit for a fairytale because of you. After 28 years, I'm finally off your payroll!

Jackson, Garrett, John Michael, and Henry – The four of you are the absolute loves of my life. You hung my moon, and you are among the very sweetest gifts.

Amanda, Collin, Jasmine, and Kyle – I cannot imagine better comrades-in-arms. You always made the load lighter by bearing the burden with me. You are gifts beyond measure.

Christopher – The sky is the ceiling of your career in this business – you have and will continue to make Alabama so very proud. You've modeled patience and taught me so much about people and how the world works. You are a gift beyond words. Thank you.

Alice – Your friendship has been the sweetest gift. You are wise, thoughtful, generous, and brave. From the moment we met, I knew our old souls were cut from the same mold. I couldn't be more proud of who you are and who you are becoming. You have a thousand gifts to give the world.

Avery – They say that you can't make old friends. We have lived all of our adult lives together. Your friendship is everything to me, and you will be close to my heart forever. More than anyone, you have taught me what gospel is all about. You are a gift beyond all words.

Scott – We agree that the very best people are at Baylor, and you are the very best. Keep flinging your green and gold afar, and perhaps one day, we will have the great honor of being colleagues at Hankamer.

JB – No one is more surprised to see me here than the two of us. I would have never done this without you. My life is completely and totally different because of you. You are a gift beyond all words.

BJ – Above all people, you believe that I can do anything and that gives me every assurance. You are steadfast in your love for me, and you are my constant joy. You are the sweetest gift.

MaCraw – You are the gift I never expected. As Saint Paul said, you have made my joy complete, and you are my joy and my crown.

Rich – You shielded us from all the bad and gave us all the good. You are a gem among gems.

Gary – Your vision and constancy are the glue that hold this doctoral program together. We do not have the capacity to appreciate what you have sacrificed for us because we know nothing else. I can think of no better Papa Bear than you.

Mary – Coming into the doctoral program at exactly the time you were ready for another Ph.D. student will forever be one of the best gifts of my life. I am so proud to have had the opportunity to be among the long line of doctoral students you have lead into the world. I always knew that you were for me and that gave me every assurance. Thank you.

Steve – I struggle to find words to tell you how much your constant calm, perspective, and support have meant to me. You have been more generous with your time, attention, and patience than I could have ever hoped or deserved. You are the best email answerer around,

and you cannot know how that thrills me. Being the first crimson feather in your cap is my great joy. Thank you.

Shane – People’s paths cross in such fascinating ways, and I am grateful that mine intersected yours at precisely the right time. I hope that Baylor is as good to you and your family as she has been to me. I am looking forward to being colleagues in Hankamer one day.

TP – You are just it. You are the most fun. Being the first doctoral student in what I know will be a long line is such joy for me. Thank you.

Amy – I’ve never met anyone who lives the gospel more fully than you do. Thank you for teaching me that ignorance is only bliss for those who have the luxury of being ignorant.

Catherine – In one million years, I would never have expected to find you. You broke bread for me and showed me what it means to be fully known as a much-loved child of the Father. You took my hand, walked with me to the deepest places, and stayed on the edge of the wide-open spaces. More than anything, you modeled how to relax into the grace and the mercy of our one maddeningly and breathtakingly generous God. You are a gift beyond all words. *Veni Sancte Spiritus.*

To the Giver of these and all good gifts – You are the best gift. My eyes have not had enough of seeing and my ears have not had their fill of hearing You for we have only seen a glimpse of Your extravagant, expansive, and boundless love. My whole heart longs for the day when we see with unveiled faces – when we will have no need for the light of a lamp or of the sun because You will be our light. Until that time, come Holy Spirit. Keep coming. Think for me, talk for me, go before me, be beside me, and hem me in from behind.

Deo gratias.

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CHAPTER 1

INTRODUCTION

In this study, I examine whether the regulatory scrutiny of Securities and Exchange Commission (SEC) comment letters influences the earnings management behaviors of firms. Interest, by both academics and the popular media, in the effectiveness of the filing review and comment letter process has grown substantially since it was formalized under Section 408 of the Sarbanes-Oxley Act of 2002 (SOX) and the letters became publicly available in 2004 (Francis 2014). The SEC is required to review the filings of public companies at least once every three years to “monitor and enhance compliance with disclosure and accounting requirements” (SEC 2015b). In particular, the stated goal of the review program is to “uncover serious potential violations of the federal securities laws” (SEC 2006b). These filing reviews often result in the issuance of a comment letter to the reviewed firm. The reviewed firm is then required to respond to the Commission’s comments and questions in a response letter. After reviewing the response, the SEC may have additional questions, and those questions must be answered until the SEC staff believes the matters are satisfactorily resolved. This process can be completed in only a single round of questions and responses or multiple rounds of exchanges may be required.

Though the process is required by law, it remains an open empirical question regarding if/when the process is effective in eliciting the desired change in firm behavior. Lawmakers and the popular press have long questioned the usefulness of the Commission’s work.

Regarding the SEC's failure to identify the Madoff Ponzi scheme, Congressman Gary Ackerman said of the SEC staff in a Congressional hearing, "your value to us is useless. Your value to the American people is worthless, and your contribution...is zero" (Ahrens 2009). A 2014 *Wall Street Journal* article refers to the staffers performing these reviews as "the stock market's punctuation police" after reviewing a number of letters in which the Commission asked firms to add commas, increase the font size in the filing, and use complete sentences (Francis 2014). Empirical evidence even suggests that perhaps the capital markets provide sufficient discipline for inappropriate choices such that the Commission's work is duplicative and thus unnecessary (Carow, Heron, Lie, and Neal, 2009). Beyond redundancy, a study commissioned by the state of New York suggested that over-regulation was detrimental and would lead to a decline in the preeminence of the United States as the global capital markets leader (McKinsey 2007).

Despite these sometimes-scathing assessments, others have submitted that the investor advocacy role of the Commission is critical to market viability. Linda Thomsen, then Director of the Division of Enforcement at the SEC, notes "you cannot raise capital without investors; markets do not function at all, let alone well, without investors; and investors never can be protected fully unless the businesses in which they invest and the markets which they frequent treat them fairly. Thus, it all comes down to investors" (Thomsen 2008). In that vein of investor protection, the *Wall Street Journal* reported on the revenue recognition challenges Groupon, Inc. received from the Commission's review in 2012. As a result of these inquiries, Groupon was forced to alter their revenue recognition policies so as to be compliant with Generally Accepted Accounting Principles (GAAP) and more transparent to investors. In 2015, the Commission's activities resulted in \$4.2 billion in penalties and disgorgements as well as the

return of approximately \$120 million to investors (SEC 2015b). Thus, the SEC's work in this area has consequences for at least some registrants and stakeholders but the efficacy of the process itself still remains unclear.

Extant academic research has studied the effect of SEC comment letters in general (Ertimur and Nondorf 2006; Cassell, Dreher, and Myers 2013; Johnston and Petacchi 2016) and in a topic-specific manner for tax avoidance (Kubick, Lynch, Mayberry, and Omer 2016), fair-value estimates (Bens, Cheng, and Neamtiu 2016), segment reporting (Wang 2016), and executive compensation (Robinson, Xue, and Yu 2011). These studies have produced mixed results about the effectiveness of the process to elicit changes in firm behavior – some suggest that accounting and disclosures are improved in the post-comment letter period (Bens et al. 2016; Kubick et al. 2016; Wang 2016) while others find little evidence of enhanced accounting and/or disclosure quality (Ertimur and Nondorf 2006; Johnston and Petacchi 2016; Robinson et al. 2011). However, no study has yet examined the character of specific comments issued, and I posit clarity can be gained by separating and analyzing comments representing firm-specific accounting issues (accounting-focused) from those that are general industry or population-wide disclosure-focused comments (disclosure-focused).

Confirming practice experience via an in-depth review of numerous comment letters across financial statement topics, many SEC comments are repeated – verbatim – across multiple issuers. Similarly, other comments question only the general language used by the registrant. In other words, in both instances, the SEC staff does not take issue with the accounting but instead suggests that the language used to describe the accounting could be improved. I consider the preceding to be boilerplate comments that do not necessarily identify fundamental problems in the underlying accounting used by the firm, and as such, I classify

these comments as “disclosure-focused” comments. In contrast, other comments question specific numbers and trends derived from the filer’s financial statements. The level of SEC-provided detail in these comments suggests concern with the specifics of the accounting employed, and I classify these as “accounting-focused” comments. I suggest that disclosure versus accounting-focused comments are fundamentally different types of review that filers respond to in fundamentally different ways.

The Commission has long believed that the filing review process is an essential tool that “unearths a surprising number of accounting errors, disclosure deficiencies, and tortured interpretations of GAAP in filings with the Commission” (Bayless 2000). However, simply identifying errors, deficiencies, and tortured interpretations is not useful unless firm behavior is modified in a positive manner. To the extent the character of comment letters is fundamentally different, research treating all comment letters homogenously risks understating the regulatory importance of the comment letter process and potentially overstating the costs of the program.

To investigate, I hand-collect all comments related to the allowance for doubtful accounts (AFDA) from 2004 – 2013. I select AFDA given the ease with which AFDA can facilitate earnings management, an area of clear interest to the SEC (Lewis 2012). I then examine whether earnings management specific to AFDA attracts regulatory scrutiny. I document a positive association between AFDA earnings management and the propensity to receive an accounting-focused, but not disclosure-focused, AFDA-related comment letter. Next, I investigate the relationship between the receipt of an AFDA comment letter and changes in AFDA accrual earnings management in the subsequent period. Using a propensity score matching (PSM) and difference-in-differences design to isolate the effect of the staff’s

AFDA inquiry, I find evidence of a decline in earnings management in the subsequent period AFDA for firms receiving an accounting-focused comment letter. Additionally, I perform a comprehensive series of supplementary analyses to confirm the robustness of the results, and the primary inferences remain unchanged under a number of alternative model specifications.

This study extends literature examining both the filing review and comment letter process as well as accrual earnings management. Specifically, I add to a growing stream of research seeking to understand the determinants (Cassell et al. 2013; Ettredge, Johnstone, Stone, and Wang 2011) and consequences (Bens et al. 2016; Johnston and Petacchi 2016; Kubick et al. 2016; Robinson et al. 2011) of SEC comment letters by providing evidence that the SEC staff are sensitive to potential earnings manipulations. Further, I provide evidence that the type of comment letter issued influences the type of response in firm behavior. Only accounting-specific letters seem to constrain future financial reporting discretion. The finding that the nature of the comment (disclosure-focused versus accounting-focused) elicits different firm-level responses may help reconcile the mixed results of prior studies which provide evidence both for and against the effectiveness of the filing review process in changing firm behavior (Johnston and Petacchi 2016; Kubick et al. 2016; Robinson et al. 2011; Wang 2016).

This study also contributes to the robust line of literature examining accruals-based earnings management. In particular, I document that, conditional on the type of scrutiny provided, regulatory scrutiny can effectively constrain potential earnings management behaviors. Similarly, Jennings, Kedia, and Rajgopal (2011) provide evidence of the effectiveness of SEC regulatory action on earnings management by documenting a significant decline in overall discretionary accruals by individual firms subject to SEC enforcement action and in industries where a member firm was subject to enforcement action. SEC enforcement

actions often fall under Accounting and Auditing Enforcement Releases (AAERs), and these are protracted, expensive, and time-consuming events. My results indicate that earning management behaviors may be effectively constrained through the use of the filing review and comment letter process, a much less involved and less costly proceeding.

Understanding the effects of the SEC filing review and comment letter process is important because significant financial and temporal costs are incurred by registrants and their auditors during rounds of inquiry and response (Cassell et al. 2013). Given the collective resource expenditures related to the comment letter process, legislators, registrants, auditors, and the public in general will benefit from a better understanding of comment letter efficacy. Indeed, the usefulness and effectiveness of the SEC as a whole has been the subject of both academic and popular inquiry for many years (Ahrens 2009; Bushee and Leuz 2005; Francis 2014; McKinsey 2007; Seligman 2003). The results of my study add relevant evidence to this debate, namely that the review process appears to be effective in constraining earnings management only when the comments are accounting-specific in nature.

CHAPTER 2

BACKGROUND AND RELATED LITERATURE

Overview of the SEC's filing review and comment letter process

The mission of the Securities and Exchange Commission is, broadly, to “protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation” (SEC 2015). Specifically related to the protection of investors, the Commission “works to ensure that (they) have access to high-quality disclosure materials that facilitate informed investment decision-making” (SEC 2015). The filing review and comment letter process is but one of dozens of ways the Commission seeks to fulfill its mission.

The SEC is divided into twenty-two divisions with the Chairman and four Commissioners overseeing all divisions¹. The comment letter process originates in the Division of Corporation Finance (DCF) whose stated goal is to “perform functions to assure that investors have access to materially complete and accurate information, and to deter fraud and misrepresentation in the public offering, trading, voting, and tendering of securities” (SEC 2014). The chief way that the DCF fulfills this goal is by carrying out the directive of Sarbanes-Oxley (SOX) Section 408 to review the filings of issuers reporting under section 13(a) of the Securities Exchange Act of 1934 at least once every three years. DCF has eleven industry branches (Assistant Director Offices), each staffed with 25-35 accountants and

¹ See Appendix A for SEC organizational chart.

lawyers who have specific expertise in accounting and disclosures for a given industry, and approximately 80% of the Division's employees are engaged in filing review in one of these eleven offices (SEC 2013a)². The Deputy Director of DCF and the Director of DCF oversee the filing review and comment letter process, and an Associate Director, supported by a Legal Branch Chief, a Senior Assistant Chief Accountant, and two Accounting Branch Chiefs, oversees each of the eleven offices (SEC 2013a). With program costs exceeding \$150 million in 2015, DCF is the third largest division in the SEC behind the Division of Enforcement and the Division of Compliance Inspections and Examinations (SEC 2015).

In 2015, the DCF reviewed 51% of corporations who filed under the Act, down only marginally from 52% in 2014 (SEC 2015a). These percentages, however, can be misleading because the SEC does not indicate the level of review each issuer received. Three types of reviews are possible: a full cover-to-cover review, a financial statement review, or a targeted issue review (SEC 2013b). In a full cover-to-cover review, the staff examines the entire content of the filing (SEC 2013b). In a financial statement review, the staff examines only the financial statements and related disclosures (including Management's Discussion and Analysis of Financial Condition and Results of Operations) (SEC 2013b). In a targeted issue review, the staff examines one or more specific disclosure items without regard to the remaining content contained within the filing (SEC 2013b). The SEC neither discloses the factors that lead to a particular kind of review nor indicates the type of review provided for a filing; however, SOX

² The eleven specialized industry offices are Healthcare and Insurance; Consumer Products; Information Technologies and Services; Natural Resources; Transportation and Leisure; Manufacturing and Construction; Financial Services; Real Estate and Commodities; Beverages, Apparel, and Mining; Electronics and Machinery; and Telecommunications.

Section 408 paragraph (b) does provide some general information about factors that may lead to a review:

1. issuers that have issued material restatements of financial results;
2. issuers that experience significant volatility in their stock price compared to other issuers;
3. issuers with the largest market capitalization;
4. emerging companies with disparities in price-to-earnings ratios;
5. issuers whose operations significantly affect any material sector of the economy;
6. any other factors that the Commission may consider relevant.

Prior research indicates that proxies for the preceding factors, as well as other factors, are associated with the likelihood of receiving some level of SEC review (Boone, Linthicum, and Poe 2013; Cassell, Dreher, and Myers 2013; Gao, Lawrence, and Smith 2010). While every firm must be selected for review at least once every three years under SOX Section 408, the explicitly stated factors provide broad discretion to the Commission in terms of selecting registrants for review.

After a filing has been selected, a member of the applicable SEC industry group (an examiner) examines the filing, taking into account the specific facts and circumstances of the given registrant (SEC 2013a). Importantly, at this point, the examiner does not have any proprietary or non-public information. All information being reviewed by the Commission has been made available to the general public through the registrant's filing on the SEC website. The review process begins fairly quickly after the filing is submitted, normally within 25 days (SEC 2013b). At the completion of the examination, a second person (a reviewer) also reviews the filing and proposed comment letter so as to achieve consistency in comments issued across registrants (SEC 2013a).

DCF provides comments, as necessary, to request that the company 1) provide additional supplemental information (which may or may not become public information) so that the SEC can have a more thorough understanding of a specific disclosure, 2) revise a portion of the document, 3) provide additional disclosure in the document, or 4) amend future filings to give additional or different information (SEC 2013a). Items 2 and 3 could result in a financial statement restatement, and in 2012, 74 restatements specifically resulted from comments issued by the Commission (Usvyatsky 2013). After a second-level review by a more senior member of the Commission's staff, the comment letter is submitted to the registrant. This type of submission is called an UPLOAD in SEC's Electronic Data Gathering, Analysis, and Retrieval system (EDGAR).

After receipt of the comment letter, the company has ten business days to respond to each comment posed by the Commission. This type of submission is called CORRESP in EDGAR. Depending on the nature of the issue and the firm's response to the comment, the Commission may issue additional or follow-up comments. This process of comment by the SEC and response by the registrant continues until all comments are resolved to the satisfaction of the Commission. At this point, the Commission provides a letter to the firm indicating that the review of the filing is complete. If the registrant is engaged in comment letter resolution at the time of the filing of the annual report (Form 10-K), that information must be disclosed, as a risk factor, in the filing.

If a registrant wishes to contest or otherwise seek reconsideration of a comment, an informal reconsideration process is available. If a company does not understand the meaning, nature, or intent of the comment, it is advised to seek clarification first from the examiner and then, if necessary, from the reviewer assigned to the registrant. If the matter is not resolved to

the satisfaction of the registrant, the firm must consider whether the matter is a “legal and textual disclosure matter” or an “accounting and financial disclosure matter” (SEC 2013b). If the former, the Legal Branch Chief and his/her assistant and associate directors are responsible for reconsideration of the matter (SEC 2013b). If the latter, the Accounting Branch Chiefs and Senior Assistant Chief Accountant are responsible for addressing the request for reconsideration (SEC 2013b). If the matter remains unsatisfactorily resolved after consultation with the aforementioned persons, the registrant may formally escalate the issue to the Commission’s Office of the Chief Accountant (SEC 2013b).

In an effort to increase the transparency of the Commission’s work, the staff began to publicly release comment letters issued to firms as well as the firms’ responses in 2004 (SEC 2004)³. These are made public no sooner than 20 business days after the completion of the review (SEC 2013b)⁴. Generally, the full text of every letter from the SEC to the issuer and from the issuer back to the SEC is made public; however, registrants may provide private information during the course of their correspondence with the SEC. This information may become public in the final release of the comment letter conversation or it may be redacted, at the request of the registrant (SEC 2013a). If the information is redacted, it may be made public only through a Freedom of Information Act (FOIA) request (SEC 2013a) which can be denied at the discretion of the Commission.

³ Johnston and Petacchi (2016) note that third-party content providers were actively engaged in obtaining comment letters through filing Freedom of Information Act (FOIA) requests and then selling the letters to the public. The Commission was displeased with this entrepreneurial activity, and consequently, they decided to make all letters publicly available at no charge.

⁴ See Appendix B for pictorial representation of filing review and comment letter process timeline.

Literature Related to SEC Comment Letters

Extant academic research related to the SEC has recently focused on particular aspects of regulatory effectiveness and notably, on comment letters. Ertimur and Nondorf (2006) were the first to empirically investigate the comment letter process. In an effort to eliminate the unobservable selection bias inherent in most comment letter research, they chose to examine only firms engaged in an initial public offering (IPO). Beyond the selection criteria noted in SOX, Section 408(b), the methodology the SEC uses to select a firm for review are unknown, but for IPO filings, every filing is subject to a full cover-to-cover review. Thus, using IPO filings effectively eliminates this unobservable bias but has the negative effect of limiting the generalizability of the inferences obtained with a sample comprised exclusively of IPO firms. Using a sample of S-1 and S2-B comment letters, they find that firms with higher managerial expertise, proxied with a binary variable for a Chief Financial Officer (CFO) that has previously worked for an SEC registrant, receive fewer comments that address a fewer number of issues. The same results do not obtain for a Chief Executive Officer (CEO) with previous public company work experience. They also fail to find an association between comment letters and an improvement in the firm's information environment⁵.

In contrast to Ertimur and Nondorf (2006), Johnston and Petacchi (2016) document a decline in the adverse selection component of the bid-ask spread and an increase in the earnings response coefficients in the period following the release of the comment letter – both signals of an improved information environment for the firm. This result may differ from that of

⁵ Ertimur and Nondorf (2006) make an important early contribution to the line of literature examining SEC comment letters by creating a 103-unit categorization of coded issues derived from a detailed review of the comment letters in their sample. See Appendix C for categorizations.

Ertimur and Nondorf (2006) because of the difference in type of comment letters examined: Johnston and Petacchi (2016) use comment letters related to annual and quarterly reports (10-Ks and 10-Qs) whereas Ertimur and Nondorf (2006) use those related to reports filed in anticipation of an IPO (S-1s and S-2Bs). In addition to documenting an improvement in the information environment of comment letter firms, Johnston and Pettachi (2016) also perform a content analysis of a sub-sample of letters. They note that seventeen percent of the letters in their sample resulted in an immediate amendment of one or more firm filings – a potentially surprising finding given that these are audited (in the case of the 10-Ks) or reviewed (in the case of the 10-Qs) by the firm’s external auditor before the forms are submitted to the Commission. The content analysis also reveals no evidence supporting the notion that comment letters improve voluntary disclosures in response to comment letters.

In a concurrent study, Bozanic, Dietrich, and Johnson (2015) also look for a relationship between comment letters and a firm’s information environment by examining comment letters on 10-K filings. Bozanic et al. document both improvements in qualitative disclosures subsequent to the receipt of a comment letter on the firm’s annual filing and a decrease in the information asymmetry in both short and long windows following the annual report. However, these results do not obtain for firms requesting confidential treatment by the SEC.

Other studies investigate the determinants of comment letter receipt. Cassell et al. (2013) find that beyond those factors listed in SOX Section 408(b), low profitability, high complexity, and retaining a smaller audit firm are positively associated with not only the likelihood of receiving a comment letter but also the likelihood that the letter will contain a higher number of comments that are costlier to remediate. However, this study considered a

number of other factors that did not appear to be relevant determinants of comment letter receipt including the presence of a prior period material weakness, engagement in significant litigation, or engagement in a restructuring. In supplementary analysis, Cassell et al. use the comment classification scheme provided by Audit Analytics, a third-party data service, to investigate whether the costs of comment letter remediation vary by comment type⁶. They find evidence suggesting that comment topics described as accounting-topics are most costly to remediate versus comment topics described as non-accounting topics.

Using the approach developed by Mergenthaler (2009) who enumerates four rules-based characteristics of accounting standards—bright-line thresholds, scope and treatment exceptions, large volumes of implementation guidance, and a high level of detail, Boone, Linthicum, and Poe (2013) find that the probability of receiving a comment letter is positively associated with the rules-based characteristics of the accounting standard applied and with the extent of estimates required in applying a standard. However, they do not find any evidence supporting the notion that the time required – and thus presumably the remediation costs – to resolve the comments is related to the rules-based characteristics of the standard.

Motivated by evidence from Hoopes, Mascall, and Pittman (2012) that regulatory scrutiny by the Internal Revenue Service (IRS) elicited changes in tax avoidance behavior, Kubick et al. (2016) report that firms which appear to engage in greater tax avoidance are more likely to receive a comment letter related to that behavior. They also document that comment letter firms react to the receipt of a tax avoidance related comment letter by increasing both

⁶ Audit Analytics categorization is as follows: (1) Accounting Rule and Disclosure Issues; (2) Internal Control Disclosure Issues; (3) MD&A; (4) Regulatory Filing Issues, such as specific Reg S-K and Reg S-X disclosure requirements; (5) Risk Factors; or (6) Other, such as compensation, legal matters, non-GAAP, or related parties.

their GAAP and cash effective tax rates (ETRs) in the period subsequent to comment letter resolution. Further, they document a within-industry contagion effect: if a firm in the manufacturing industry, for example, receives a comment letter questioning its use of tax avoidance strategies, other firms in the manufacturing industry show a decline in tax avoidance behaviors in the periods following the issuance of the comment letter.

Like Kubick et al. (2016), Bens et al. (2016) and Wang (2016) examine the consequences of comment letter receipt on specific accounts. Bens et al. (2016) document a decline in the information uncertainty of more opaque (Levels 2 and 3) fair value estimates as well as an increase in the length of fair-value footnotes after the resolution of fair-value related comment letters. Similarly, Wang (2016) finds that after receiving a comment letter related to segment disclosures, firms are more likely to report a higher number of segments in the following period. Further, analyst forecast errors and dispersion are reduced in the post comment letter period for firms that modified their disclosure with a more granular disaggregation of segments.

Literature Related to Accrual Earnings Management

My study also relates to empirical studies in accrual earnings management, especially as these studies relate to the AFDA. Plentiful academic research in accounting, finance, and economics over the past thirty years has provided evidence suggesting that managers of for-profit firms use the discretion available within Generally Accepted Accounting Principles (GAAP) to make strategic reporting decisions to achieve a multitude of goals. A variety of formal definitions of earnings management have been advanced in prior literature. Schipper (1989) defines earnings management as “purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain.” Healy and Wahlen (1999)

later assert that “earnings management occurs when managers use judgment in financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers.” Habib and Hansen (2008) provide a robust overview of potential goals of earnings management including meeting or beating analysts’ forecasts, avoiding earnings losses, avoiding a reversal of earnings trends, achieving goals set forth in executive compensation packages, creating “cookie jar reserves” to be used in future periods, and taking a “big bath” to absorb all probable or potential losses in the current period to improve future period results.

As it relates to mechanisms by which a firm may engage in earnings management, McNichols and Wilson (1988) were among the first to study the allowance for doubtful accounts in the context of earnings management. They provide evidence supporting the notion that firms record income-increasing bad debt expense (BDE) when earnings are extreme in either direction. Subsequently, the Jones (Jones 1991) and modified-Jones (Dechow, Sloan, and Sweeney 1995) models have been widely used in academic research to develop measures of *total* discretionary accruals (rather than accruals by individual account) in the corporate sector (Dechow, Richardson, and Tuna 2003; Frank and Regó 2006; Phillips, Pincus, and Rego 2003; Marquardt and Wiedman 2004).

Expanding on this foundational work, many studies have developed more refined measures of discretionary accruals for specific accounts such as unexpected accounts receivable, unexpected inventory, unexpected accounts payable, unexpected accrued liabilities, and unexpected depreciation expense (Healy and Whalen 1999; Hribar 2000; Phillips et al. 2003; Marquardt and Wiedman 2004; Jackson and Liu 2010; Cassell, Myers, and Seidel 2015). Especially relevant to my study, Marquardt and Wiedman (2004) use the findings

of McNichols and Wilson (1988) to further examine different contexts in which a firm may be motivated to manage earnings, and they find evidence that firms use specific accruals, notably the AFDA, to achieve their reporting goals.

Building on these findings, Jackson and Liu (2010) examine AFDA in the context of conservatism. They demonstrate that AFDA for the general population of firms is conservative and has become increasingly more conservative over time. However, they also demonstrate that conservatism facilitates, rather than reduces, earnings management opportunities by creating reserves that can be drawn upon in the future. In a different context, Teoh, Wong, and Rao (1998) examine earnings management through the AFDA for IPO firms. The results of their study suggest that IPO firms use the AFDA to manage earnings to a greater degree than matched non-IPO firms. Stated differently, IPO firms appear to understate both AFDA and BDE in the periods leading up to an IPO. However, Cecchini, Jackson, and Liu (2012) challenge these findings by providing evidence that IPO firms have conservative, not aggressive, allowances when compared to non-IPO firms. Their results differ from Teoh et al. largely because Cecchini et al. hand-collected data at a more granular level (i.e. write-offs from Schedule II) which allowed more precise insight. Rule 12-09 of Regulation S-X requires that a “Schedule II – Valuation and Qualifying Accounts” be filed in support of any quantitatively or qualitatively material valuation and qualifying accounts included in each balance sheet. Importantly, the schedule is required to display material additions and deductions to the account even if the ending balance in the account is zero or otherwise immaterial. Schedule II may be omitted if the required information is included in either sentence or tabular format in the notes to the financial statements. This information is a key feature in the research design

of Cecchini et al. (2012) because it gives measureable insight into the ex post disclosure of the write-offs of uncollectible accounts.

CHAPTER 3

HYPOTHESIS DEVELOPMENT

Hypothesis 1

One area of long-time concern for the Commission is the pervasiveness of earnings management. In his now well-known speech entitled “The Numbers Game,” then SEC Chairman, Authur Levitt expressed a deep concern about “a widespread, but too little challenged custom: earnings management.” He described it as “an area where the accounting is being perverted; where managers are cutting corners; and where earnings reports reflect the desires of management rather than the underlying financial performance of the company.” Further, he posits that many firms “...stash accruals in cookie jars during the good times and reach into them when needed in the bad times” (Levitt 1998). Nearly 20 years earlier, the Financial Accounting Standards Board (FASB) expressed similar concerns in Statement of Financial Accounting Concepts No. 2 (FASB 1980):

Once the practice of providing information about periodic income as well as balance sheets became common, however, it also became evident that understated assets frequently led to overstated income in later periods.

Field studies of both auditors and managers reveal evidence confirming Levitt’s assertions and the FASB’s concerns; auditors can recount instances where they believe that their client was engaging in earnings management and financial executives confess that they would engage in various earnings management behaviors to meet benchmarks (Nelson, Elliott,

and Tarpley 2002; Graham, Harvey, and Rajgopal 2005). Specifically, Nelson et al. (2002) report that the most frequent auditor-identified attempt at earnings management involved reserves. Graham et al. (2005) find that nearly 30% of the 401 financial executives interviewed in their study indicated that they would draw down reserves previously set aside to meet an earnings target.

Given that investor protection is a chief mission of the Commission, *ex post* identification of inappropriate accounting that is unclear or misleading to stakeholders is important to the SEC staff (Lewis 2012). Accordingly, I expect that a firm with an unexpectedly high or low AFDA would be more likely to receive a comment letter questioning that accrual. However, given that all comment letters do not appear to demonstrate an equivalent level of concern (i.e. accounting-focused versus disclosure-focused), I would expect only those accounting-focused comments to be indicative of questionable accounting and reporting practices. Accordingly, my first hypothesis is stated in the alternative form:

***H1:** Earnings management through the allowance for doubtful accounts is positively associated with the likelihood of receiving an accounting-focused AFDA comment letter.*

Hypothesis 2

Beyond understanding whether the Commission is sensitive to potential red flags for earnings management, I investigate whether the receipt of a comment letter appears to have an effect on the firm's future behavior. Recent academic studies examining the effects of the monitoring and enforcement of securities laws in international settings suggest that such enforcement actions have little value (Djankov, La Porta, Lopez-de-Silanes, and Shleifer 2008; La Porta, Lopez-de-Silanes, and Shleifer 2006). These findings naturally lead to similar questions about the monitoring and enforcement activities of the SEC.

In general, the potential behavior modification effects of the review and comment letter process are subject to the counterargument that even if a firm is observed engaging in questionable earnings management behaviors, the threat of serious external consequences is relatively small. Johnston and Petacchi (2016) document that financial statements and/or footnotes are revised in only approximately 5% of the cases in their sample. Similarly, Cassell et al. (2013) report that financial statement restatements occurred in approximately 5% of their sample. Thus, if managers view a comment letter as a symbolic event rather than a potentially threatening event, I would not expect to find a significant decline in earnings management in the period after the receipt of the comment letter.

In that vein, Robinson et al. (2011) failed to find evidence that firms improve the quality their executive compensation disclosures in response to comment letter scrutiny. Similarly, Johnston and Petacchi (2016) fail to find evidence that firms increase the quantity or alter the type of voluntary disclosure provided following comment letter resolution. Thus, both of these studies were unable to support the notion that SEC comment letters change firm *disclosure* in future periods. Alternatively, as it relates to changes in *accounting* behavior, Kubick et al. (2016) document a decline in tax avoidance for comment letter firms in the period following the comment letter. Similarly, Bens et al. (2016) document a reduction in both information asymmetry and measurement error in the post comment letter period for level 2 and level 3 fair value estimates.⁷

⁷ Kubick et al. 2016 and Bens et al. 2016 are unique in that they examine comment letters in a specific context (tax avoidance and fair value estimates). I adopt but further refine this approach by examining the character of comment letters (accounting versus disclosure) within a specific account (AFDA).

Given the conflicting results about material changes in firm behavior after the receipt of a comment letter, I question whether the comment letter process appears to limit specific accrual earnings management behaviors in the period after the receipt of the comment letter. If comment letters are effective in eliciting measurable changes, I would expect those modifications to occur as a result of letters specifically inquiring about accounting (rather than disclosure). Accordingly, my second hypothesis is stated in the alternative form:

***H2:** Ceteris paribus, the receipt of an accounting-focused comment letter in period t is associated with a decline in the level of discretion in the allowance for doubtful accounts in subsequent periods.*

Hypothesis 3

Social learning theory posits that individuals follow and react to the behavior of other individuals (Bandura 1977). Previous studies have demonstrated that the same tenets apply in firm behavior as well (Davis and Greve 1997; Shepard 1970). Specifically related to earnings management, Jennings, Kedia, and Rajgopal (2011) document a spillover or contagion effect whereby peer firms reduce their income-increasing discretionary accruals in response to SEC investigation and enforcement activities at a firm in the same industry. Subsequently, Kedia, Koh, and Rajgopal (2015) document an earnings management contagion effect in the context of restatement firms. Specifically related to SEC action, Kedia et al. mirrors Jennings et al. in that it examines only formal enforcement actions undertaken by the SEC – an action that is more severe than the receipt of a comment letter. My study differs from Jennings et al. in two important respects. First, they investigate peer firm reaction to enforcement proceedings which are more serious and potentially far more damaging than a comment letter. Because they document a spillover effect in this context does not necessarily indicate that the same effect would be true for a less serious regulatory matter. Second, they examine aggregate accruals

where I examine a specific accrual. In this way, I am able to more precisely model firm behavior, and if I find a spillover effect, this would serve to support the findings of Jennings et al.

In the context of comment letters, Brown, Tian, and Tucker (2013) are the first to investigate the presence of a contagion or spillover effect. They provide evidence that firms which did not receive a comment letter react to the issuance of a comment letter on a particular topic to peer firms. Specifically, they examine the effect of the comment letter process on changes in qualitative risk factor disclosures, not for comment letter recipients, but for their industry peers. My study differs from Brown et al. in that I am examining quantitative changes while their study investigates qualitative changes.

Given the existence of social learning (Bandura 1977) and the results of Jennings et al. (2011) and Brown et al. (2013), I question whether a contagion effect exists for quantitative changes in accrual behavior. Stated formally:

***H3:** The receipt of a specific comment letter by more than two industry peers is associated with a smaller magnitude of discretion in the AFDA in the subsequent period for those peer firms.*

CHAPTER 4

METHODOLOGY

Sample Selection

I use the intersection of the SEC Electronic Data Gathering, Analysis, and Retrieval system (EDGAR), Audit Analytics Comment Letter database (AA)⁸, Compustat Fundamentals Annual file (Compustat), and the Center for Research in Security Prices (CRSP) database to obtain my sample. In 2004, the SEC began to publicly release comment letters and filer responses relating to disclosures filed on or after August 1, 2004 (SEC 2004). As such, I begin my search with comment letters dated 8/1/2004 which is the first date available from AA. I limit my sample to letters dated 12/31/2013 so as to ensure sufficient 10-K data is available for the firm in the year after receipt of the comment letter. Further, I constrain my sample to include only letters where 10-K or 10-K/A filings were examined by the SEC's staff as these are the filings audited (not just reviewed) by the firm's independent auditor. Lastly, I look only at UPLOAD letters because my interest is in identifying the instance where the SEC questions a firm about its allowance for doubtful accounts, not in the registrant's response to the inquiry.

I use the keyword search functionality in AA to locate firms that received a comment letter related to AFDA by searching the text of the letter. I use Boolean operators to locate comments where the phrase "doubtful account*" is within ten words of the partial word "increas*", "decreas*", or "estimat*." The * is used as a wildcard operator meaning that the

⁸ Audit Analytics is a web-based research provider and intelligence service that compiles SEC comment letters.

search will return any variation of the partial word “account*” including “accounts.” I repeated this search process using “bad debt*”, “uncollect*”, and “net receiv*” in place of “doubtful account*.” This search process resulted in 1,240 individual letters. However, because of the manner in which the text search is constructed, a letter could appear as a result in more than one of the 12 separate searches. For example, if a letter contains both “a decrease in allowance for doubtful accounts” and “methods used estimate bad debt expense,” it would appear twice in the total number of letters. I observed and eliminated 811 duplicate letters.

AA categorizes comment letters by type of filing on which the comment was made. However, one comment letter may contain comments on more than one filing (the SEC staff may comment on both a 10-K and a 10-Q in the same letter, for example). Since I am only interested in comments made on 10-K or 10-K/A filings, I eliminate the observation when the relevant allowance for doubtful account comment was made on a filing other than a 10-K or 10-K/A. Eliminating such letters results in 289 observations. Finally, eliminating observations without the necessary CRSP/COMPUSTAT variables results in the final sample of 231 observations. Of these, 137 letters were classified as accounting-focused and the remaining 94 letters were classified as disclosure-focused. To classify the letters, I employed a two-coder system whereby two individuals unaffiliated with the study independently examined the letters and classified them as either disclosure-focused or accounting-focused. I then reconciled the classifications, and when the letters were coded differently, I re-examined the text of the letter and made a determination about how the letter should be properly categorized.⁹

⁹ Discrepancies between the independent coders were noted on 14 out of 231 letters. For example, a discrepancy between the two coders occurred on the 8/10/2010 comment issued to Korn/Ferry International regarding the 10-K for the year ended 4/30/2010 (Appendix D). The letter is properly categorized as an accounting-focused comment.

As previously discussed, I follow Kubick et al. (2016) in selecting non-AFDA comment letter firms as the control firms in this study. I know that these firms were reviewed because of the presence of a comment letter, but the SEC did not find it necessary to comment on the firm's AFDA which presumably means that the Staff was satisfied with the accounting and related disclosures. 6,898 unique companies met the inclusion criteria during the time period which results in a total sample size of 7,129 firms. Table 1 provides detail about sample construction methodology.

Table 1	
Sample Construction	
<u>Sample</u>	<u>Number of Letters</u>
net receiv* w/10 estimate*	157
net receiv* w/10 increase*	338
net receiv* w/10 decrease*	91
uncollect* w/10 estimate*	26
uncollect* w/10 increase*	12
uncollect* w/10 decrease*	2
doubtful account* w/10 estimate*	244
doubtful account* w/10 increase*	160
doubtful account* w/10 decrease*	72
bad debt* w/10 estimate*	49
bad debt* w/10 increase*	67
bad debt* w/10 decrease*	22
Subtract: Duplicate letters	(811)
Subtract: Comment on other than 10-K or 10-K/A filing	(140)
Subtract: Comments on firms without necessary COMPUSTAT/CRSP variables	(58)
Test sample	231
Add: Companies that received comment letters but not related to AFDA during the sample period, 2004-2013, with required financial data available	6898
Final sample	7129

Test of Hypothesis 1

To examine the relationship between accrual earnings management through the AFDA and the issuance of an AFDA-related comment letter, I follow prior research in estimating a multinomial logistic regression (Cassell et al. 2013; Johnston and Petacchi 2016; Kubick et al. 2016; Zhang 2012). Multinomial logistic regression is a generalization of logistic regression which permits a categorical dependent variable with more than two discrete outcomes. In this case, I have three categories: accounting-focused comment letters, disclosure-focused comment letters, and non-AFDA comment letters. Following Agresti (2002), the separate fitting estimates of multiple independent binary logistic models are less efficient and have larger standard errors than a single multinomial model. Thus, multinomial estimates are preferable when available:

$$\begin{aligned} AFDACommentLetter_{it} = & \beta_0 + \beta_1 absDiscAFDA_{it} + \beta_2 HighVolatility_{it} + \\ & \beta_3 lnMarketCap_{it} + \beta_4 Restate_{it} + \beta_5 Loss_{it} + \beta_6 BankruptcyRank_{it} + \beta_7 M\&A_{it} + \\ & \beta_8 ExtFinancing_{it} + \beta_9 Big4_{it} + \beta_{10} Second-Tier_{it} + \beta_{11} CompanyAge_{it} + \beta_{12} SalesGrowth_{it} \\ & + \beta_{13} MatWeakness_{it} + \beta_j YearFE + \beta_j IndustryFE + \varepsilon_{it} \end{aligned} \quad (\text{Model 1})$$

$AFDACommentLetter_{it}$ is set equal to 1 for a disclosure-focused comment letter firm; 2 for an accounting-focused comment letter firm; and 0 for a non-AFDA comment letter firm. In the multinomial setting, the dependent variable is an unordered, categorical variable, and the selection of only one alternative is permitted (i.e., a comment cannot simultaneously be both a disclosure-focused comment letter firm and an accounting-focused comment letter firm).

Following Kubick et al. 2016 and Wang 2016, I select non-AFDA comment letter firms as the control group because these firms received a review and did not receive a comment on the AFDA accounting which I infer to mean that the SEC did not detect a problem with the firm's AFDA accounting. The selection of this comparison groups mitigates selection bias (Wang 2016). In this model, year t is defined as the fiscal year of the 10-K or 10-K/A on which the comment letter was issued. For example, for a 12/31/2012 10-K that was filed on 3/15/2013 and on which a comment letter was issued on 4/1/2013, year t would be 2012. $absDiscAFDA_{it}$, the absolute value of a measure of discretion in the allowance for doubtful accounts for firm i in year t , is the main independent variable of interest. Following Cassell, Myers, and Seidel (2015), I define discretion in the allowance in the following manner:

$$DiscAFDA_{it} = [AFDA_{it} - (AFDA_{it-1} * (GROSSAR_{it} / GROSSAR_{it-1}) * (DSO_{it} / DSO_{it-1}))] / Total\ Assets_{it-1} \quad (\text{Equation 1})$$

Where $DiscAFDA$ is the discretion in the allowance for doubtful accounts; $AFDA$ is the allowance for doubtful accounts; $GROSSAR$ is the gross accounts receivable; DSO is days sales outstanding, calculated as gross accounts receivable divided by daily sales (sales/365); and i and t are firm and year subscripts, respectively. This model builds on a simple growth model from Marquardt and Wiedman (2004) by including a measure of days sales outstanding to capture changes in collectability over time. A positive (negative) value for $DiscAFDA$ indicates an income-decreasing (increasing) earnings management scenario. Because the variable can take positive or negative values, I use the absolute value of $DiscAFDA$ in Model (1) to facilitate interpretation of β_1 in Model (1).

I considered two alternative specifications to measure discretion in the AFDA set forth by Jackson and Liu (2010):

$$CON_1_{it} = ALLOW_{it} / WO_{it+1} \quad (\text{Equation 2})$$

$$CON_2_{it} = ALLOW_{it} - WO_{it+1} / SALE_{it} \quad (\text{Equation 3})$$

where *ALLOW* is the allowance for doubtful accounts (positively signed in all analyses); *WO* is write-offs of doubtful accounts (positively signed in all analyses); *SALE* is net sales; and *i* and *t* are firm and year subscripts, respectively. *CON_1* defines the allowance for doubtful accounts as a multiple of leading write-offs of receivables. Said differently, *CON_1* captures the number of years of write-offs (at the currently level) the firm could sustain before exhausting the reserve. Alternatively, *CON_2* includes the same multiple but expresses conservatism as a percentage of net sales in year *t*. An important feature of these variables is that they both match the current period allowance with leading write-offs which matches management's estimate of doubtful accounts with the future realization of that estimate¹⁰. However, I chose to perform my analysis using the measure of discretion set forth in Cassell et al. (2015) and defined in Equation (2) above because the information for write-offs must be hand-collected from the Schedule II for every observation, including all possible match firms. Given that the model proposed by Cassell et al. (2015) is robust and well-tested in the literature

¹⁰ While *CON_1_{it}* and *CON_2_{it}* are mechanically related, Jackson and Liu (2010) use both specifications because the interpretation of *CON_1_{it}* is straightforward, and *CON_2_{it}* is similar to McNichols and Wilson (1988) which facilitates cross-study comparisons.

and the base model is identical to Marquardt and Wiedman (2004), I believe it is appropriate in this setting.

The remaining variables in Model 1 are derived from Cassell et al. (2013) who report a series of determinants for the receipt of a comment letter. I preserve statistical power adapting their model to include only the items that they found to be significantly related to the receipt of a comment letter. I include a binary variable for issuers with material restatements of financial results (*Restate*) and those registrants with significant volatility in their stock price compared to other issuers (*HighVolatility*). I include a continuous variable for market capitalization to control for firm size (*lnMarketCap*). I control for auditor characteristics by including categorical variables for firms with a Big 4 auditor (*Big4*) or second-tier auditor (*Second-Tier*). Further, I control for firm characteristics by including a binary variable for loss firm (*Loss*) and firms that engaged in a merger or acquisition during the period (*M&A*). I also include the level of external financing (*ExtFinancing*) to proxy for the effect of an external monitoring mechanism as well as bankruptcy rank (*BankruptcyRank*) to control for bankruptcy risk. Moreover, I include company age (*CompanyAge*), average sales growth (*SalesGrowth*), and presence of a material weakness (*MatWeakness*) to further control for firm characteristics. Finally, I include industry and year fixed effects.

If the magnitude of the absolute value of the discretion in the allowance account is significantly predictive of the receipt of an accounting-focused comment letter, I expect the maximum likelihood estimate on β_1 to be positive and significant for the comparison between accounting-focused comment letter firms and non-AFDA comment letter firms. If the magnitude of the absolute value of the discretion in the allowance account is not significantly predictive of the receipt of a disclosure-focused comment letter, I expect the maximum

likelihood estimate on β_1 to be insignificant for the comparison between disclosure-focused comment letter firms and non-AFDA comment letter firms.

Test of Hypothesis 2

To investigate whether the presence of a comment letter regarding the AFDA is related to a change in *DiscAFDA* in the post comment letter period, I follow Kubick et al. (2016) by starting with a propensity score matching technique (PSM). I use regression (1) to model the determinants of an accounting-focused AFDA related comment letter. Next, I match an accounting-focused AFDA comment letter firm to a non-AFDA comment letter firm. I require exact matching on year, industry, and sign (positive or negative) of discretion in the comment letter period. Then, I employ nearest neighbor matching without replacement on the remaining covariates. Importantly, I use the level of discretion in the comment letter year (*DiscAFDA*) in the PSM model to ensure that both firms in the matched pair had similar levels of discretion. Mechanical reversion to the mean can be a concern in earnings management studies so I include the level of discretion in period t to mitigate this concern. Then, I estimate the following difference-in-differences regression to test Hypothesis 2:

$$\begin{aligned}
 absDiscAFDA_{it+1} = & \beta_0 + \beta_1AFDA_{CLi} + \beta_2POST_{it+1} + \beta_3AFDA_{CLi} *POST_{it+1} + \\
 & \beta_4Big4_{it+1} + \beta_5MtoB_{t+1} + \beta_6OpCycle_{it+1} + \beta_7ROA_{it+1} + \beta_8MktShare_{t+1} + \beta_9NOA_{t+1} + \\
 & \beta_{10}Earn_{it+1} + \beta_jYearFE + \varepsilon_{it} \qquad \qquad \qquad (Model 2)
 \end{aligned}$$

The goal of this model is to provide insight into whether the receipt of a comment letter is related to a smaller magnitude of discretion in the allowance in the subsequent period ($t+1$). *AFDA_{CLi}* is set equal to 1 when the firm receives an AFDA-related accounting-focused

comment letter and 0 when the firm receives a non-AFDA-specific comment letter. By requiring both the treatment and control firms to have a comment letter, I hold constant the impact of general regulatory scrutiny. In this way, I am able to isolate the effect of AFDA-specific scrutiny on firm behavior. *POST* is an indicator variable equal to 1 for the year after the comment letter year ($t+1$) and 0 otherwise. The interaction term $AFDA_{i,t} * POST_{t+1}$ is the variable of interest in this model as it represents the effect of receiving an accounting-focused AFDA comment letter on the level of discretion in the post comment letter period. If the level of discretion declines in the post comment letter period for accounting-focused AFDA comment letter firms, I expect the coefficient (β_3) on this interaction term to be negative and significant.

The dependent variable in this model is the absolute value of the discretion in AFDA (*absDiscAFDA*). Importantly, I use the absolute value of *DiscAFDA* in this model to capture the effects on both income-increasing and income-decreasing scenarios. An income-increasing firm in the comment letter period (negative value of *DiscAFDA*) could change in the subsequent period in a variety of ways. A more negative value in the post comment letter period would indicate more income-increasing activities, a less negative but still below 0 value in the post comment letter period would indicate less income-increasing activity, and a positive value in the post comment letter period would indicate a change from income-increasing to income-decreasing activities. *DiscAFDA* in equation (1) is constructed in such a way that a value on either side of 0 is indicative of less suspected earnings management than a positive or negative value that is further from 0. Thus, to capture the change in discretion for both income-increase and income-decreasing firms in a single model, I use the absolute value of the discretion (Demirkan, Radhakrishnan, and Urcan 2012; Shust 2015).

Several important econometric assumptions underlie the use of the PSM technique in this model (Wooldridge 2010). First, the model rests in partial equilibrium and has no general equilibrium effects which means that the observations in the control group are neither directly nor indirectly affected by the treatment. Second, in an observational study like mine, the outcomes are assumed to be conditionally independent. Third, for each treatment firm, there exists some overlap where at least one matched control firm with a similar level of discretion in AFDA in the subsequent period. Lastly, the covariate panel is balanced which ensures that the treatment is independent of the control variables in the model

The control variables in this model were selected to proxy for various incentives or impediments to earnings management. To proxy for auditor scrutiny, I follow Zang (2012) by including a binary variable set equal to 1 when the registrant is audited by a Big 4 firm and 0 otherwise (*Big4*). Dechow (1994) suggests the length of the operating cycle (*OpCycle*) is a valid proxy for the extent to which earnings can be manipulated in the future. Barton and Simko (2002) demonstrate that net operating assets at the beginning of the period appropriately proxies for the extent to which earnings have been previously manipulated. To control for firm performance, I include return on assets (*ROA*), the firm's potential growth rate (*MtoB*), industry-based market share (*MktShare*), the level of pre-managed earnings (*Earn*), and year fixed effects (*Year FE*) (Zang 2012).

Test of Hypothesis 3

To test Hypothesis 3, I follow Kubick et al. (2016) by modifying the PSM technique and matching all accounting-focused AFDA comment letter observations to non-comment letter firms (as opposed to non-accounting-focused comment letter firms in testing H2). I require an exact year match, and I further require that each treatment firm be a member of an industry

group where two or more firms in the industry group received an accounting-focused AFDA comment letter in period t . I classify industry groups by 2-digit SIC code. Matching within industry allows me to isolate the effect of an industry-specific contagion effect. Matching on the other control variables in Model (1), including the level of discretion in the AFDA, permits me to identify peer firms with a similar likelihood to receive a comment letter.

Next, I use this matched sample to estimate the difference-in-differences regression in Model (2). If peer firms react to industry-level AFDA-related scrutiny by decreasing their level of discretion, I expect the coefficient on *POST* (β_3) to be negative and significant. Further, if peer firms react less strongly to regulatory scrutiny than comment letter firms, I expect the coefficient on the interaction term to be negative and significant. However, if the reaction of peer firms is equivalent to comment letter firms, I expect the coefficient on the interaction term to be insignificant.

CHAPTER 5

EMPIRICAL RESULTS

I report descriptive statistics for the population of AFDA comment letter firms used in this study in Table 2.

Table 2						
Descriptive Statistics						
Panel A: All AFDA CL Firms						
Variable	<i>N</i>	Mean	Std Dev	Q1	Median	Q3
<i>absDiscAFDA_t</i>	231	0.012	0.018	0.001	0.005	0.017
<i>HighVolatility_t</i>	231	0.212	0.410	0.000	0.000	0.000
<i>lnMarketCap_t</i>	231	5.761	1.886	4.450	5.780	7.190
<i>Restate_t</i>	231	0.095	0.294	0.000	0.000	0.000
<i>Loss_t</i>	231	0.484	0.501	0.000	0.000	1.000
<i>BankruptcyRank_t</i>	231	4.221	3.083	1.000	4.000	7.000
<i>M&A_t</i>	231	0.212	0.410	0.000	0.000	0.000
<i>ExtFinancing_t</i>	231	0.005	0.118	-0.018	0.000	0.008
<i>Big4_t</i>	231	0.677	0.469	0.000	1.000	1.000
<i>SecondTier_t</i>	231	0.130	0.337	0.000	0.000	0.000
<i>CompanyAge_t</i>	231	17.076	16.625	6.423	13.093	22.018
<i>SalesGrowth_t</i>	231	16.566	27.630	2.665	10.573	20.630
<i>MatWeakness_t</i>	231	0.125	0.332	0.000	0.000	0.000
<i>OpCycle_t</i>	231	174.123	407.108	59.790	96.570	154.400
<i>ROA_t</i>	231	-0.005	0.153	-0.025	0.030	0.078
<i>MktShare_t</i>	231	0.001	0.003	0.000	0.000	0.000
<i>MtoB_t</i>	231	3.162	8.401	1.076	1.774	3.118
<i>NOA_{t-1}</i>	231	0.903	1.291	0.289	0.550	0.980
<i>Earn_t</i>	231	299.487	2154.318	1.468	51.973	111.981
Panel B: All Non-AFDA Comment Letter Firms						
Variable	<i>N</i>	Mean	Std Dev	Q1	Median	Q3
<i>absDiscAFDA_t</i>	6898	0.003	0.006	0.000	0.001	0.002
<i>HighVolatility_t</i>	6898	0.279	0.448	0.000	0.000	1.000
<i>lnMarketCap_t</i>	6898	6.681	2.004	5.300	6.680	8.090
<i>Restate_t</i>	6898	0.108	0.310	0.000	0.000	0.000
<i>Loss_t</i>	6898	0.434	0.496	0.000	0.000	1.000
<i>BankruptcyRank_t</i>	6898	4.119	2.803	2.000	4.000	6.000
<i>M&A_t</i>	6898	0.316	0.465	0.000	0.000	1.000
<i>ExtFinancing_t</i>	6898	-0.001	0.187	-0.032	0.000	0.004
<i>Big4_t</i>	6898	0.774	0.418	1.000	1.000	1.000
<i>SecondTier_t</i>	6898	0.120	0.325	0.000	0.000	0.000
<i>CompanyAge_t</i>	6898	20.947	17.535	8.219	16.438	27.397
<i>SalesGrowth_t</i>	6898	12.909	25.646	0.602	8.122	18.815
<i>MatWeakness_t</i>	6898	0.122	0.328	0.000	0.000	0.000
<i>OpCycle_t</i>	6898	121.682	87.027	64.300	103.617	153.000
<i>ROA_t</i>	6898	0.005	0.169	-0.010	0.041	0.081
<i>MktShare_t</i>	6898	0.001	0.002	0.000	0.000	0.000
<i>MtoB_t</i>	6898	2.872	4.370	1.282	2.089	3.518
<i>NOA_{t-1}</i>	6898	0.888	1.134	0.308	0.572	1.013
<i>Earn_t</i>	6898	356.735	1864.302	6.319	65.175	122.409

Table 3 presents the results of the multinomial logistic regression in model (1) where the dependent variable ($AFDACommentLetter_{it}$) is set equal to 1 for a disclosure-focused comment letter firm; 2 for an accounting-focused comment letter firm; and 0 for a non-AFDA comment letter firm. $absDiscAFDA_{it}$, the absolute value of the measure of discretion in the allowance for doubtful accounts for firm i in year t as presented in Model (2), is the main independent variable of interest. As predicted in H1, the maximum likelihood estimate for the comparison between an accounting-focused comment letter firm and a non-AFDA comment letter firm is positive and significant (1.239, p -value = 0.038). Thus, if the value of $absDiscAFDA_{it}$ increases by one unit, the odds of receiving an accounting-focused comment letter over a non-AFDA comment letter would be expected to increase by a factor of 3.45. Conversely, the maximum likelihood estimate for the comparison between a disclosure-focused comment letter firm and a non-AFDA comment letter firm is insignificant (0.756, p -value = 0.458).

Following Long (1997) and Freese and Long (2006), I report the McFadden's R-squared statistics for these two multinomial logistic regressions. McFadden's R-squared is a pseudo R-squared statistic which is similar to the non-pseudo R-squared statistic that is generally reported in ordinary least squares (OLS) regressions as a measure of goodness-of-fit. McFadden (1979) advises that the values for the McFadden statistic tend to be considerably lower than the non-pseudo R-squared statistic normally reported for OLS models. He suggests that a values between 0.2 – 0.4 represents an excellent fit. Thus, given that the models reported in Table 3, Panels A and B have a McFadden's statistic of 0.167 and 0.154, respectively, I consider these models to be reasonably well-fitted.

Taken together, these results suggest that the magnitude of the absolute value of the discretion in AFDA is significantly predictive of the receipt of an accounting-focused

comment letter. However, I do not find evidence that the magnitude of the absolute value of the discretion in AFDA is not significantly predictive of the receipt of a disclosure-focused comment letter. Thus, H1 is supported.

The Effect of Discretion in the Allowance for Doubtful Accounts on the Receipt of an Allowance for Doubtful Accounts-Related Comment Letter						
Variable	(1)			(2)		
	Accounting-focused AFDA Comment Letter			Disclosure-focused AFDA Comment Letter		
	Estimate	<i>p</i> -value		Estimate	<i>p</i> -value	
<i>absDiscAFDA_t</i>	1.239	0.038	**	0.756	0.458	
<i>HighVolatility_t</i>	0.613	0.009	***	1.052	0.001	***
<i>lnMarketCap_t</i>	0.181	0.004	***	0.248	0.001	***
<i>Restate_t</i>	0.316	0.238		0.509	0.275	
<i>Loss_t</i>	0.196	0.367		-0.199	0.479	
<i>BankruptcyRank_t</i>	0.068	0.017	**	0.049	0.025	**
<i>M&A_t</i>	0.336	0.051	*	0.669	0.027	**
<i>ExtFinancing_t</i>	-0.021	0.159		-0.209	0.188	
<i>Big4_t</i>	-0.324	0.064	*	-0.330	0.095	*
<i>SecondTier_t</i>	-0.347	0.079	*	-0.201	0.098	*
<i>CompanyAge_t</i>	0.062	0.015	**	0.001	0.045	**
<i>SalesGrowth_t</i>	0.650	0.093	*	0.596	0.126	
<i>MatWeakness_t</i>	0.574	0.131		0.521	0.092	
McFadden's R-Square	0.167			0.154		
<i>N</i>	7129			6992		

Table 4 reports the results of the difference-in-differences tests of constraint of discretion in AFDA subsequent to resolution of the accounting-focused AFDA comment letter.¹¹ Panel A presents the covariate balance, in both means and medians, of the variables from model (1) used in constructing the matched pairs of accounting-focused AFDA comment letter firms and non-AFDA comment letter firms. Of the 137 accounting-focused comment letter firms examined in Model (1), an acceptable match could not be obtained for 16 firms

¹¹ In untabulated analysis, the results of performing the same post-comment letter resolution analysis for disclosure-focused AFDA comment letters are insignificant.

(11.68%) using a caliper of 0.1. This results in 121 matched pairs. The attrition rate is higher than that of Johnston and Petacchi (2016) (1.69%) but lower than the rate of 42.08% reported by Kubick et al. (2016). Matching on $absDiscAFDA_{it}$ helps alleviate the concern that any result is driven by mean reversion. Given that the means and medians are statistically similar on all matching variables, the matched pairs appear to be balanced. Further, untabulated analysis demonstrates that the number of treatment firms and match firms are equivalent by year and industry classification which indicates that the strict year and industry matching criteria are satisfied. Thus, these results suggest that the propensity score matching procedure was effective in selecting non-AFDA comment letter control firms that are similar to the accounting-focused AFDA comment letter treatment firms. Consequently, the subsequent results are unlikely to be due to mean reversion, and theoretically, the only difference between the matched pairs is the receipt (or failure to receive) an AFDA comment letter.

Table 4, Panel B reports the results of the difference-in-differences regression specified in Model (3). The dependent variable in this model is the absolute value of the discretion in AFDA ($absDiscAFDA_t$), and the independent variable of interest is the interaction term ($AccountingCL_i * POST_{it}$). This term represents the effect of receiving an accounting-focused AFDA comment letter on the level of discretion in the post comment letter period. As predicted in H2, the interaction term is negative and significant (-0.073, p -value = 0.039). This result indicates that the magnitude of discretion in the AFDA declined in the period after comment letter resolution, relative to a comparable firm, by approximately 7.3 percent. Thus, H2 is supported.

Table 4								
The Effect of the Receipt of an Accounting-Focused Allowance for Doubtful Accounts-Related Comment Letter on Subsequent Discretion in the Allowance for Doubtful Accounts								
Panel A: Covariate balance for accounting-focused AFDA comment letter firms with matched non-AFDA comment letter firms								
Variable	Accounting-focused AFDA Comment Letter			Non-AFDA Comment Letter			Differences	
	<i>N</i>	Mean	Median	<i>N</i>	Mean	Median	Mean	Median
<i>absDiscAFDA_t</i>	121	0.013	0.004	121	0.009	0.003	0.004 *	0.002 *
<i>HighVolatility_t</i>	121	0.274	0.000	121	0.302	0.000	-0.028	0.000
<i>lnMktCap_t</i>	121	5.771	5.993	121	5.975	6.059	-0.205	-0.065
<i>Restate_t</i>	121	0.160	0.000	121	0.094	0.000	0.066	0.000
<i>Loss_t</i>	121	0.528	0.000	121	0.472	0.000	0.057	0.000
<i>BankruptcyRank_t</i>	121	3.934	4.000	121	4.387	4.000	-0.453	0.000
<i>M&A_t</i>	121	0.264	0.000	121	0.208	0.000	0.057	0.000
<i>ExtFinancing_t</i>	121	0.000	0.000	121	-0.006	0.000	0.005	0.000
<i>Big4_t</i>	121	0.632	1.000	121	0.660	1.000	-0.028	0.000
<i>SecondTier_t</i>	121	0.142	0.000	121	0.170	0.000	-0.028	0.000
<i>CompanyAge_t</i>	121	15.751	11.471	121	17.029	13.222	-1.278	-1.751
<i>SalesGrowth_t</i>	121	18.199	11.614	121	14.874	10.769	3.325	0.845
<i>MatWeakness_t</i>	121	0.132	0.000	121	0.132	0.000	0.000	0.000

Table 4 (Continued)		
Panel B: Difference-in-Differences Regression		
Variable	<i>absDiscAFDA_t</i>	
	Estimate	<i>p</i> -value
<i>Intercept</i>	0.058	0.011 **
<i>AFDACL_i</i>	0.066	0.007 ***
<i>POST_{it+1}</i>	-0.060	0.017 **
<i>AFDACL_i*POST_{it+1}</i>	-0.073	0.039 **
<i>Big4_{t+1}</i>	-0.013	0.005 ***
<i>MtoB_{t+1}</i>	0.001	0.578
<i>OpCycle_{t+1}</i>	0.000	0.006 ***
<i>ROA_{t+1}</i>	0.123	0.006 ***
<i>MktShare_{t+1}</i>	-0.382	0.473
<i>NOA_t</i>	0.016	0.001 ***
<i>Earn_{t+1}</i>	-0.001	0.025 **
Year Indicators	Yes	
R ²	0.1371	
<i>N</i>	484	

Table 5 reports the results of the difference-in-differences tests of constraint of discretion in AFDA for firms not receiving a comment letter subsequent to resolution of an

accounting-focused AFDA comment letter by a peer comment letter firm. Following Kubick et al. (2016), the control firms for this test are firms without a comment letter but in an industry where two or more members of the group received accounting-focused AFDA comment letters. Table 5, Panel A reports the results of re-estimating the logistic regression in Model (1) that produces the matched sample to use in the testing of H3.

Table 5, Panel B presents the covariate balance, in both means and medians, of the variables from model (1) used in constructing the matched pairs of accounting-focused AFDA comment letter firms and non-comment letter peer firms. Of the 137 accounting-focused comment letter firms examined in Model (1), an acceptable match could not be obtained for 41 firms (29.92%) using a caliper of 0.1. This results in 96 matched pairs. The attrition rate is lower than the rate of 73.70% reported by Kubick et al. (2016). Again, as in H2, matching on $absDiscAFDA_{it}$ helps alleviate the concern that any result is driven by mean reversion. Panel B demonstrates that the means and medians are statistically similar on all matching variables, and therefore, the matched pairs appear to be balanced. Further, untabulated analysis confirms that the number of treatment firms and match firms are equivalent by year and industry classification which indicates that the strict year and industry matching criteria are satisfied. Thus, these results suggest that the propensity score matching procedure was effective in selecting non-comment letter control firms that are similar to the accounting-focused AFDA comment letter treatment firms. Consequently, the subsequent results are unlikely to be due to mean reversion or differences in the underlying fundamentals of the firms, and theoretically, the only difference between the matched pairs is the receipt (or failure to receive) an SEC comment letter.

Table 5, Panel C reports the results of the difference-in-differences regression specified in Model (3). Because the coefficient on the $POST_{it}$ term is insignificant (0.035, p -value = .319), it appears that peer firms (i.e., contagion targets) do not alter their accrual behaviors in the period subsequent to the issuance of accounting-focused AFDA comment letters in their industry. Thus, I do not find evidence of a contagion effect, and therefore, H3 is not supported.

Table 5						
The Contagion Effect of AFDA-Related Comment Letters on Subsequent Discretion in AFDA in Industries with High AFDA Scrutiny						
Panel A: First-stage logistic regression						
Variable	(1)			(2)		
	Accounting-focused AFDA Comment Letter			Disclosure-focused AFDA Comment Letter		
	Estimate	p -value		Estimate	p -value	
<i>absDiscAFDA_t</i>	1.358	0.054	*	0.941	0.372	
<i>HighVolatility_t</i>	0.481	0.023	**	1.132	0.054	**
<i>lnMarketCap_t</i>	0.219	0.003	***	0.295	0.001	***
<i>Restate_t</i>	0.312	0.200		0.496	0.177	
<i>Loss_t</i>	0.039	0.127		-0.149	0.531	
<i>BankruptcyRank_t</i>	0.026	0.011	**	0.052	0.026	**
<i>M&A_t</i>	0.238	0.072	*	0.543	0.127	
<i>ExtFinancing_t</i>	-0.141	0.096	*	-0.131	0.232	
<i>Big4_t</i>	-0.419	0.032	**	-0.332	0.065	*
<i>SecondTier_t</i>	-0.363	0.061	*	-0.182	0.091	*
<i>CompanyAge_t</i>	0.075	0.017	**	0.000	0.022	**
<i>SalesGrowth_t</i>	0.730	0.097	*	0.652	0.137	
<i>MatWeakness_t</i>	0.482	0.127		0.449	0.086	*
McFadden's R-Square	0.182			0.169		
<i>N</i>	1,568			1474		

Table 5 (continued)

Panel B: Covariate balance for accounting-focused AFDA comment letter firms with matched non-comment letter firms

Variable	Accounting-focused AFDA Comment Letter			Non-Comment Letter			Differences	
	<i>N</i>	Mean	Median	<i>N</i>	Mean	Median	Mean	Median
<i>absDiscAFDA_t</i>	96	0.013	0.004	96	0.012	0.003	0.001	0.001
<i>HighVolatility_t</i>	96	0.274	0.000	96	0.221	0.000	0.052	0.000
<i>lnMktCap_t</i>	96	5.771	5.993	96	5.120	6.448	0.651	-0.454
<i>Restate_t</i>	96	0.160	0.000	96	0.091	0.000	0.069	0.000
<i>Loss_t</i>	96	0.528	0.000	96	0.317	0.000	0.212	0.000
<i>BankruptcyRank_t</i>	96	3.934	4.000	96	4.101	4.000	-0.167	0.000
<i>M&A_t</i>	96	0.264	0.000	96	0.140	0.000	0.124	0.000
<i>ExtFinancing_t</i>	96	0.000	0.000	96	0.002	0.002	-0.002	-0.002
<i>Big4_t</i>	96	0.632	1.000	96	0.791	1.000	-0.159	0.000
<i>SecondTier_t</i>	96	0.142	0.000	96	0.092	0.000	0.050	0.000
<i>CompanyAge_t</i>	96	15.751	11.471	96	15.729	14.096	0.023	-2.625
<i>SalesGrowth_t</i>	96	18.199	11.614	96	15.391	8.941	2.808	2.673
<i>MatWeakness_t</i>	96	0.132	0.000	96	0.106	0.000	0.026	0.000

Table 5 (Continued)

Panel C: Difference-in-Differences Regression

Variable	<i>absDiscAFDA_t</i>	
	Estimate	<i>p</i> - value
<i>Intercept</i>	0.064	0.021 **
<i>AFDA CL_i</i>	0.063	0.006 ***
<i>POST_{it}</i>	0.035	0.139
<i>AFDA CL_i * POST_{it}</i>	-0.073	0.042 **
<i>Big4_t</i>	-0.013	0.006 ***
<i>MtoB_t</i>	0.001	0.552
<i>OpCycle_t</i>	0.000	0.002 ***
<i>ROA_t</i>	0.141	0.005 ***
<i>MktShare_t</i>	-0.368	0.356
<i>NOA_{t-1}</i>	0.013	0.003 ***
<i>Earn_t</i>	-0.001	0.028 **
Year Indicators	Yes	
R ²	0.1121	
<i>N</i>	384	

Supplemental Analysis

Primary results appear robust to a number of alternative specifications. Given that propensity score matching can be subject to the criticism of producing biased estimates (King and Nielsen 2016), I re-estimate the matching model under a number of different criteria. Dehejia and Wahba (2002) demonstrate that matching with replacement yields significantly better matches over matching without replacement where a limited number of control observations have propensity scores similar to treatment observations. After re-estimating the matching model with replacement, the covariate balances presented in Table 4, Panel A remain largely unchanged. Further, the coefficient on the interaction term ($AFDACL_i * POST_{it+1}$) in Table 4, Panel B remains negative and significant (-0.071, p -value = 0.041; untabulated).

Stuart and Rubin (2008) suggest that one-to-many matching is possible only when there are many control units with covariate values identical to the treatment units. However, this method frequently produces biased estimates as high quality matches are less and less likely to occur with each additional member required in the 'many' match. Given my relatively small sample size, I re-estimate the matching model using 1-to-2 matching. The covariate balances presented in Table 4, Panel A change marginally. The differences between the means of $\ln MktCap_t$ and $SalesGrowth_t$ become significant at the 5% level and the mean of the $Loss_t$ variable becomes significant at the 10% level. Of most interest, the coefficient on the interaction term ($AFDACL_i * POST_{it+1}$) in Table 4, Panel B remains negative and significant (-0.079, p -value = 0.020; untabulated).

Rubin and Thomas (2000) suggest combining propensity score matching with Mahalanobis matching on key continuous predictor variables can produce a higher quality covariate balance than propensity score matching alone. Because I am most interested in

obtaining matched pairs that are similar in the magnitude of $absDiscAFDA_t$, I calculate the Mahalanobis distance on $absDiscAFDA_t$ and use it, in addition to the propensity scores calculated previously, to obtain matched pairs. The covariate balances presented in Table 4, Panel A remains largely unchanged. Further, in untabulated analysis, the coefficient on the interaction term ($AFDA_{CL_i} * POST_{it+1}$) in Table 4, Panel B remains negative and significant (-0.069, p -value = 0.035).

Because disclosure-based comment letters, in contrast to accounting-based comment letters, appear motivated by the SEC's assertion that the language used to describe the accounting, not the underlying accounting itself, should be improved, I do not have a theoretical basis for asserting that firms receiving disclosure-focused letters will react by subsequently changing their underlying accounting. Nevertheless, in order to investigate an unexpected AFDA accounting change in response to an AFDA disclosure-focused letter, I re-estimate the PSM in Model (1) and the difference-in-differences regression in Model (3) using disclosure-focused AFDA comment letter firms matched to non-AFDA comment letter firms. The results of this test are reported in Table 6. Panel A presents the covariate balance, in both means and medians, of the variables from Model (1) used in constructing the matched pairs. Of the 94 disclosure-focused AFDA comment letters examined in Model (1), an acceptable match could not be obtained for 13 firms (13.83%), an attrition rate similar to the matching model reported in Table 4. This results in 81 matched pairs. Untabulated analysis demonstrates that the number of treatment firms and match firms are equivalent by year and industry classification which indicates that the strict year and industry matching criteria are satisfied. As before, these results suggest that the propensity score matching procedure was effective in selecting non-AFDA comment letter control firms that are similar to the disclosure-focused

AFDA comment letter treatment firms. Table 6, Panel B reports the results of the difference-in-differences regression specified in Model (3). The interaction term is insignificant ($-0.030, p\text{-value} = 0.231$), suggesting that recipients of disclosure-focused AFDA comment letter do not alter their discretionary accruals in the period subsequent to letter receipt.

Table 6								
The Effect of the Receipt of a Disclosure-Focused Allowance for Doubtful Accounts-Related Comment Letter on Subsequent Discretion in the Allowance for Doubtful Accounts								
Panel A: Covariate balance for disclosure-focused AFDA comment letter firms with matched non-AFDA comment letter firms								
Variable	Accounting-focused AFDA Comment Letter			Non-AFDA Comment Letter			Differences	
	<i>N</i>	Mean	Median	<i>N</i>	Mean	Median	Mean	Median
<i>absDiscAFDA_t</i>	81	0.009	0.004	81	0.006	0.003	0.003 *	0.001
<i>HighVolatility_t</i>	81	0.196	0.000	81	0.184	0.000	0.012	0.000
<i>lnMktCap_t</i>	81	5.897	5.592	81	6.420	6.328	-0.523	-0.735
<i>Restate_t</i>	81	0.098	0.000	81	0.087	0.000	0.011	0.000
<i>Loss_t</i>	81	0.391	0.000	81	0.295	0.000	0.096	0.000
<i>BankruptcyRank_t</i>	81	4.319	4.000	81	4.101	4.000	0.217	0.000
<i>M&A_t</i>	81	0.188	0.000	81	0.130	0.000	0.058	0.000
<i>ExtFinancing_t</i>	81	0.003	0.001	81	0.003	0.002	0.000	-0.001
<i>Big4_t</i>	81	0.703	1.000	81	0.841	1.000	-0.138	0.000
<i>SecondTier_t</i>	81	0.101	0.000	81	0.087	0.000	0.014	0.000
<i>CompanyAge_t</i>	81	18.841	16.515	81	18.608	14.929	0.233	1.586
<i>SalesGrowth_t</i>	81	13.027	7.621	81	13.476	8.618	-0.449	-0.998
<i>MatWeakness_t</i>	81	0.087	0.000	81	0.101	0.000	-0.014	0.000

Table 6 (Continued)

Panel B: Difference-in-Differences Regression

Variable	<i>absDiscAFDA_t</i>	
	Estimate	<i>p</i> - value
<i>Intercept</i>	0.078	<.0001 ***
<i>AFDACL_i</i>	0.028	0.046 **
<i>POST_{it}</i>	-0.043	0.002 ***
<i>AFDACL_i*POST_{it}</i>	-0.030	0.231
<i>Big4_t</i>	-0.033	0.009 ***
<i>MtoB_t</i>	0.000	0.779
<i>OpCycle_t</i>	0.000	0.001 ***
<i>ROA_t</i>	0.142	0.009 ***
<i>MktShare_t</i>	-0.175	0.314
<i>NOA_{t-1}</i>	-0.027	0.001 ***
<i>Earn_t</i>	-0.002	0.042 **
Year Indicators	Yes	
R ²	0.1972	
N	324	

CHAPTER 6

CONCLUSIONS

In this study, I examine whether the regulatory scrutiny of Securities and Exchange Commission (SEC) comment letters influences the earnings management behaviors of firms. Specifically, I investigate whether the character of the comment letter (accounting-focused versus disclosure-focused) is relevant in determining changes in firm behavior. In the context of accrual earnings management through the AFDA, I find firms appearing to engage in accrual manipulation are more likely to receive an accounting-focused comment letter. Further, I find that firms receiving an accounting-focused letter significantly constrain discretion in the AFDA in the period subsequent to comment letter resolution.

Given the large expenditures of resources for the filing review and comment letter process, the SEC, Congress, registrants, auditors, and the public in general will benefit from understanding more about its effectiveness. Based on discussions with members of the SEC staff, understanding the effects of the comment letter process on firm behavior is of direct interest to the Commissioners. Further, this study answers a call by Kubick et al. (2016) to investigate how the type of comment letter affects firm behavior. The distinction between accounting-focused and disclosure-focused comments could help resolve conflicting evidence presented in prior research. The results of my study indicate that subsequent changes in firm are associated with the type of comment received. Thus, for studies showing a change in firm behavior as a result of an SEC comment letter (Bens et al. 2016; Kubick et

al. 2016; Wang 2016), the result may be driven by the portion of accounting-focused rather than disclosure-focused letters. Consequently, the effect of comment letters on firm behavior may be stronger than reported for the subset of letters classified as accounting-focused. Alternatively, studies failing to find a change in firm behavior in the post comment letter period may find a clearer result by separately analyzing accounting-focused comments from disclosure-focused comments.

Limitations of my study include that the process of collecting of comment letters involved multiple key word searches that may not have returned all of the relevant letters, and as such, the sample may not be complete. Further, inferences drawn from my results may not be generalizable to all methods of accrual earnings management as I have only investigated the allowance for doubtful accounts which is a common and simple accounting estimate to manipulate. Additionally, I cannot know the degree to which the model of discretion in the AFDA that I have selected in this study mirrors what, if any, model used by the Commission to detect potential earnings management in the filing selection and review process. An unusually high or low level of discretion, which I interpret as a signal for potential earnings management, could instead result from changes in the ordinary course of business for a firm.

Also, I use non-AFDA comment letter firms as the control set in testing H2. These are firms that received a comment letter from the SEC during the given time period, but the letter did not include any comments on the AFDA or BDE. I presume that the SEC did not find reason to comment on AFDA. However, the control firms might not have an AFDA comment only because they were selected for targeted issue review instead of a cover-to-cover review. In this case, I could not be assured that the AFDA of the control firm was

acceptable to the SEC. However, I maintain comfort over the fact that these firms received more than only a targeted issue review because in reviewing a random sample of the comment letters of the matched firms, I noted multiple comments on multiple issues.

Methodologically, I was required to make a number of choices with alternatives I did not choose. Randomized control trials (RCT) are the best, most statistically sophisticated, and most unbiased way of assessing the effect of a treatment on an outcome (Austin 2011). However, data availability and the manner in which comment letters are written does not permit the use of an RCT. Thus, methods appropriate for analyzing a nonrandomized observational study must be employed. King, Nielsen, Coberley, Pope, and Wells (2011) assert that PSM generally approximates random matching (matching absent any imposed external criteria), and they further assert that random matching, though random, is not benign. In other words, matching can reduce inferences relative to not matching at all. However, in a concurrent study, Austin (2011) suggests that PSM is an appropriate way to account for underlying fundamental differences in two or more groups used in an observational study. Thus, scholarly disagreement exists about whether matching in general and propensity score matching in particular – and the various methods available for propensity score matching – are the most appropriate analytical techniques in an observational study like this one.

Opportunities for additional research in the area of SEC comment letters abound. In December 2012, Craig Lewis, then Chief Economist and Director of the Division of Risk, Strategy, and Financial Innovation at the SEC gave the first public speech introducing a new risk modeling tool developed by the SEC called the Accounting Quality Model (AQM). Motivated by the successful development and implementation of an analytical model

designed to identify and flag hedge fund advisors who may be engaged in inappropriate behavior, Lewis directed the Office of Quantitative Research to build a model that would “provide a set of quantitative analytics that could be used across the SEC to assess the degree to which registrants’ financial statements appear anomalous.” This model subsequently became known as “RoboCop.”

While public details about the mechanics of the model are scarce, Lewis laid out a few important details in his speech. First, the goal is to identify registrants with financial statements that “stick out from the (industry and/or peer) pack.” He admits, however, some obvious shortfalls and challenges in doing so, and he uses earnings management as the context in which to discuss this feature. In particular, he notes that the discretionary accruals models (Jones’ and modified-Jones’ models) set forth in the finance and accounting academic literature are noisy and do not do a good job discriminating between within-GAAP aggressive reporting and outside-GAAP fraudulent reporting. A clear problem arising from these noisy measures is the notion of false positives whereby a registrant is erroneously tagged as an outlier and the SEC staff expends additional resources to investigate a firm that does not actually warrant further inquiry. This would be costly to both the SEC and the registrant.

Second, he describes how the SEC staff began to build the foundations of the model:

Specifically, we take filings information across all registrants and estimate total accruals as a function of a large set of factors that are proxies for discretionary and non-discretionary components. Further, we decompose the discretionary component into factors that fall into one of two groups: factors that *indicate* earnings management or factors that *induce* earnings management.

The distinction between *indicate* and *induce* is an important one. Indicators are those factors that are directly related to earnings management at the level of the individual firm. Inducers are those factors that are associated with incentives to manage earnings.

Since the implementation of the AQM in Jul 2013, we know that the outputs have grown to over 100 custom metrics which can be used by Divisions across the Commission (SEC 2015). However, we do not know the specific nature of the additional metrics nor do we know the timing at which those metrics became available. Thus, we cannot know the full complement of RoboCop-provided information on filings submitted since July 2013 nor do we know whether every filing submitted to the Commission after 7/1/2013 was subject to RoboCop. However, as a longer time-series of data becomes available, investigating the effects of RoboCop becomes a more reasonable endeavor.

Another interesting and as yet unexplored area of inquiry is understanding what drives the selection of a firm outside the ordinary three-year sequence. We know that the Commission reviewed 51% of registrants in 2015 which is significantly larger than the required 33% (if all firms were on a strict three-year rotation). Predicting when a comment letter will be received simply because the firm has reached its point in a three-year rotation is accomplished easily, but we know that many firms receive comments letters more or less often than once every three years. For example, Amazon has received at least one comment letter every year from 2006 – 2014 whereas Matthews International received a letter 4 times from 2006-2014 (2005, 2007, 2009, and 2013). Matthews appeared to be on a two-year cycle from 2005 – 2009; however, they did not receive a letter in 2011. Were they reviewed with no comment or not reviewed at all? The Commission does not issue a letter to a firm

indicating that a review occurred but no comments were necessary. Does some earnings management metric(s) act as a trigger for off-cycle review?

Further, given that I document evidence suggesting that accounting-focused comments result in positive changes in firm behavior, has the SEC increased (decreased) the proportion of accounting-focused (disclosure-focused) comments? If not across firms, has the proportion of accounting-focused comments increased over time in a particular industry? Did the information provided by RoboCop (presumably post-July 2013 reviews) increase the proportion of accounting-focused letters?

Additionally, all Big N firms publish a comment letter review document at least annually. Comment letters issued in the prior year are reviewed to identify trends both generally and more specifically by industry group. “Boilerplate” comments are often included as issues about which audit teams and registrants should be aware. How are boilerplate comments developed, and do they result in any meaningful improvements to filings? For example, has the filing review process resulted in convergence in practice for unclear accounting over time? Does the comment letter process appear to, at times, have functioned as an informal rulemaking activity for the Commission similar to SEC Speech GAAP documented in Cheng, Gao, Lawrence, and Smith (2014).

Moreover, the use of textual analysis and content analysis in the field of computational linguistics has begun to appear in academic research in accounting, finance, economics, and psychology. Duriau, Reger, and Pfarrer (2007) describe content analysis as “a class of research methods at the intersection of the qualitative and quantitative traditions. It is promising for rigorous exploration of many important but difficult-to-study issues of interest to organizational researchers in areas as diverse as business policy and strategy,

managerial and organizational cognition, organizational behavior, human resources, social-issues management, technology and innovation management, international management, and organizational theory.” Because SEC comment letters and firm responses are almost entirely textual and unstructured data, textual and content analysis seems appropriate in these instances.

In the context of finance and accounting research, Leone, Rock, and Willenborg (2007) find evidence suggesting that an increase in the granularity of accounting disclosures is associated with a lower incidence of IPO underpricing. Hanely and Hoberg (2010) demonstrate that the textual disclosures with unique information are those that drive the reduction in IPO underpricing. Agarwal, Gupta, and Israelsen (2016) find that IPO firms change textual disclosures and reduce accounting disclosures in the period after the JOBS Act, and like Hanley and Hoberg (2010), they demonstrate that the textual disclosures alone affect underpricing. I anticipate using the disclosed risk factor descriptions¹² developed in Agarwal, Gupta, and Israelsen (2016) to study the content of SEC comment letters and responses in the future.

¹² See Appendix E for additional details.

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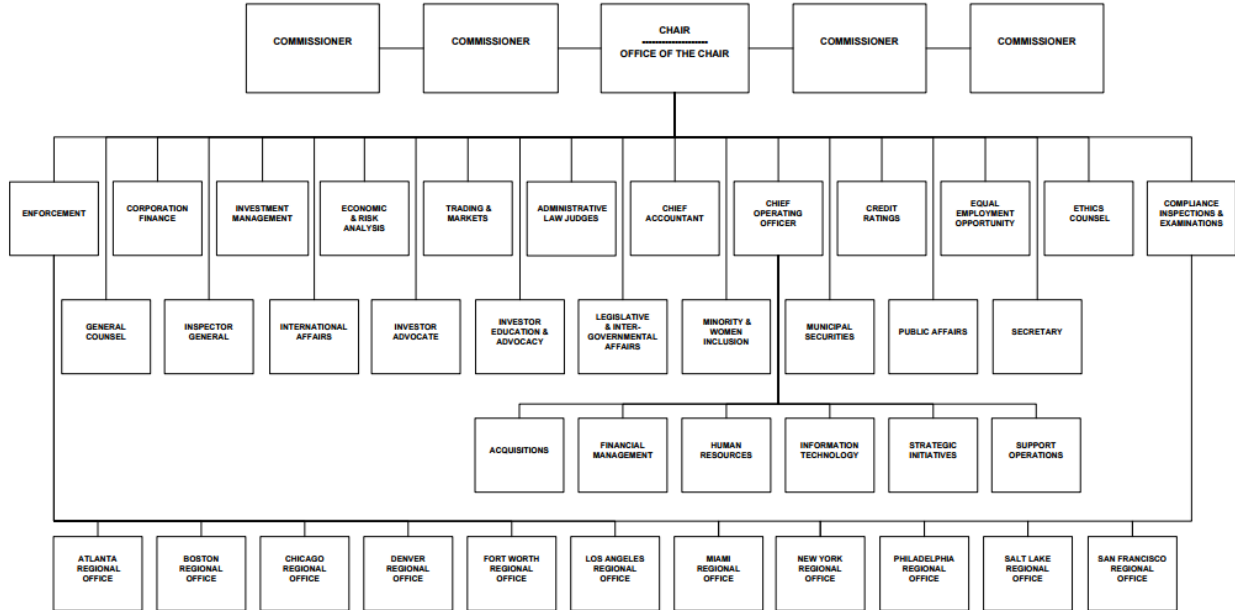
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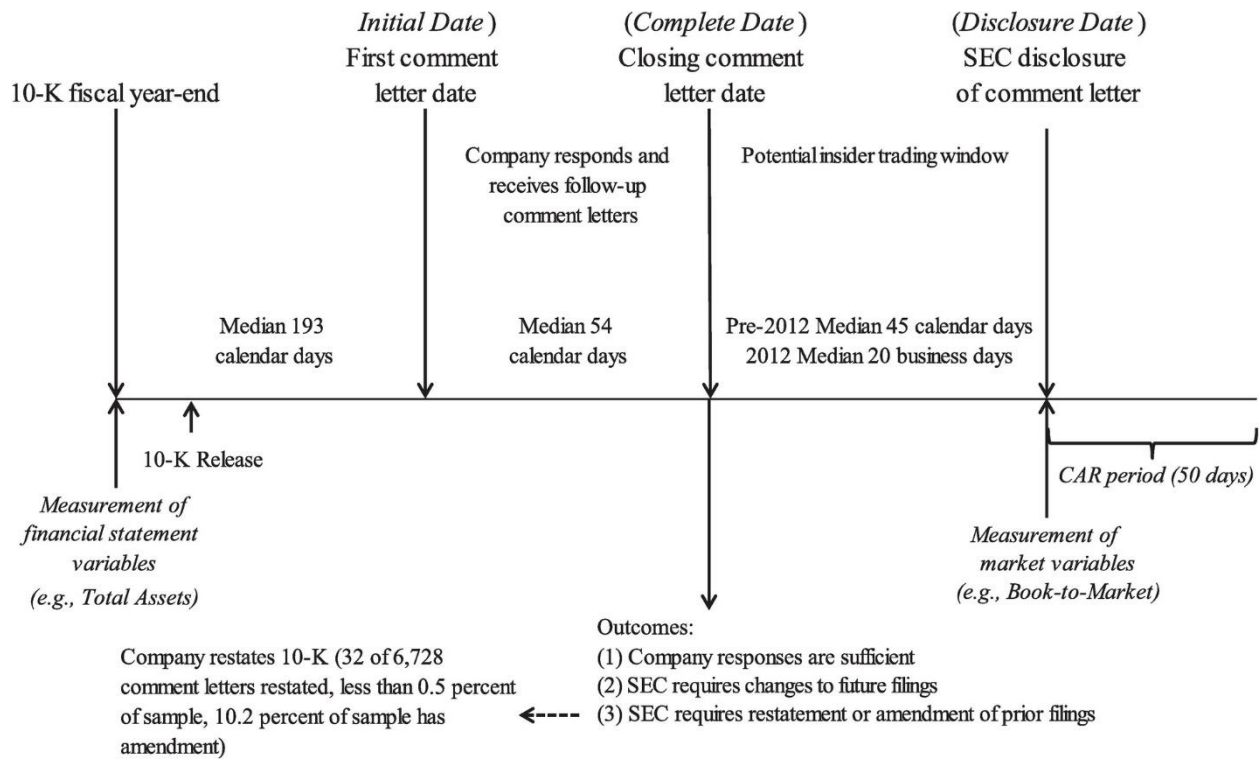
APPENDIX A

Organizational Chart for the Securities and Exchange Commission



APPENDIX B

General SEC Filing Review and Comment Letter Process Timeline (Dechow, Lawrence, and Ryans 2016)



APPENDIX C

Categories of Coded Issues from Comment Letters Ertimur and Nondorf (2006)

A firm scores a “1” under a particular coded issue if it was mentioned in a comment letter for the firm, and a “0” if there was no mention of the issue in the comment letter. Thus, a firm could receive a maximum score of 103 if every single issue was mentioned in the comment letter.

These 103 coded issues, in turn, were assigned on an ad hoc basis into 6 categories, based on the nature of the coded issues. The 6 categories are described below along with the coded issues that are included in each category.

I. Accounting Issues (Maximum Firm Score = 15 Coded Issues)

These items represent issues or questions that the SEC posed relating to how specific accounting items were represented in the financial statements and disclosures.

1. Accounting Cite: A request for a specific citation from accounting literature as a basis for the treatment that the firm used to account for a particular transaction;
2. Accounting Change: A request for further information regarding a change in accounting principle or change in accounting estimate that was either inadequately disclosed or not disclosed at all;
3. Audit Issue: A request for additional information regarding the firm’s relationship with its audit firm, including issues with auditor changes, issues with matters disclosed (or that

should have been disclosed) in the audit report, and issues with the auditor's consent letter for the offering;

4. Clarify Accounting Policy: A general request to clarify or provide more information about the firm's accounting treatment regarding a particular transaction or series of transactions.

This request is more about how a firm applies a given standard, not what accounting standard was used (see Accounting Cite)

5. Critical Accounting Policies and Estimates: Questions or issues about the firm's critical accounting policy disclosures (or lack of disclosures) and disclosures about the firm's bases for accounting estimates;

6. Financial Statement Formatting: Comments about the general formatting of the financial statements and tables in the footnote disclosures;

7. Financial Statement Restatement: Questions about a restatement of the financial statements presented in the offering document;

8. Internal Controls: Questions about the firm's internal control systems and the testing, if any, of controls;

9. Materiality Issues: Comments or questions about the firm's obligation to disclose material information in the filing, including the reiteration of the definition of materiality;

10. New Accounting Pronouncements: Comments regarding a firm's disclosures of the effects of newly issued accounting pronouncements, particularly the firm's consideration of any material impact that the pronouncements may have on the firm's financial results;

11. Not Following GAAP: An indication by the reviewer that the firm does not appear to be following the tenets of GAAP in recording a particular type of transaction or series of transactions;

12. Pro Forma Disclosures: Questions or critiques about either the firm's pro forma disclosures (effects of changes in the firm's capital structure based on the offering or effects of a merger transaction) and non-GAAP financial disclosures (EBITDA or another non-GAAP measure);

13. Quality of Earnings or Cash Flows: Explicit comments or questions regarding the quality of the firm's earnings or cash flows as the firm has presented their results, usually accompanied by comments to balance the tone of the disclosure or make risks/negative results a more prominent part of the disclosure;

14. Reportable Conditions: Request for additional information and disclosure related to a reportable condition or other irregularity that was identified by management related to the firm's internal controls;

15. Update Financial Statements: A reminder comment of the firm's obligation to update its financial statements during the filing process when the audited financial statements go "stale" (e.g., firms must include an audited balance sheet within 135 days of the date of filing the registration statement.);

II. Accounting/Financial Reporting/Disclosure Topics (Maximum Firm Score = 30 Coded Issues) These items represent questions or issues posed by the SEC related to the accounting, financial reporting, or disclosure of specific transactions or classes of transactions.

16. Acquisitions: Questions or comments about the accounting treatment and disclosures of business combination transactions, including purchase price allocations;

17. Capital Expenditures: Questions or issues about the firm's investment in property, plant and equipment, particularly its accounting treatment related to capitalization of these items;

18. Claims, Commitments and Contingencies: Issues or comments raised about the firm's accounting for and disclosure of its obligations and long-term commitments, including legal matters;
19. Contra Asset Accounts: A request for information about contra asset-type accounts, such as the allowance for doubtful accounts or loan losses for loan receivables;
20. Depreciation/Amortization: Questions or issues related to the firm's depreciation and amortization policies;
21. Derivatives: Questions related to the accounting treatment for the firm's derivative and hedging programs, including the application of hedge accounting models and hedge effectiveness assessments;
22. Environmental Reserves: Questions or comments related to the firm's environmental remediation obligations;
23. Earnings per Share: Questions related to the computation of earnings per share disclosures;
24. Employee Stock Options and Fair Value: Questions or comments related to the application of SFAS 123(R), Share-Based Payments, particularly regarding the valuation methods used, including assumptions such as expected volatility and expected term;
25. Expenses and Cost Allocations: Requests for information about expense items and cost allocations;
26. Goodwill and Impairment: Questions or comments related to the firm's goodwill balance and impairment testing, including the definition of reporting units and valuation issues;

27. Intangibles: Questions or comments regarding the firm's accounting treatment for intangible assets, including how they were valued and/or whether they should have an indefinite life;
28. Intercompany Accounts: Requests for information about a firm's accounting and disclosures for intercompany transactions;
29. Inventories: Questions or comments about a firm's inventory and related accounting policies;
30. Investments: Questions or comments about a firm's investment balances, including the accounting treatment based on ownership percentages and fair value determinations;
31. Leases: Questions or comments about the accounting for leasing transactions, including terms of leases, the treatment of rental escalations, and the treatment of leasehold improvements;
32. Minority Interests: Questions or comments regarding the accounting for minority interests;
33. Off-Balance Sheet Arrangements: Questions or comments relating to the understanding of off-balance sheet arrangements, including special purpose entities, and their material effects;
34. Other Fair Value Assessments: Questions or comments regarding valuation assessments for all balance sheet items, excluding acquisition-related and stock option-related fair value determinations;
35. Pensions and Other Employee Benefits: Questions or issues about the assumptions and estimates, including the assumed discount rate, and funding obligations related to a firm's benefit obligations;

36. Preferred Stock: Questions or comments regarding the firm's preferred stock, in particular, any conversion-related issues and/or implications as a result of the IPO;
37. Related Party Transactions: Requests for additional clarification or details surrounding the accounting for the firm's transactions with related parties, including management, board members, and other insiders;
38. Reserve Accounts: Questions or comments regarding the accounting and disclosure for reserve liabilities such as warranties and other accrued liabilities;
39. Restructuring Reserves: Questions or comments specifically related to restructuring reserve liabilities, including severance costs;
40. Revenue Recognition: Questions or comments related to a firm's method of accounting for revenues and material considerations in evaluating the quality and uncertainties surrounding their revenue generating activity;
41. Segment Reporting: Questions about the identification of operating segments, aggregation of operating segments, and information about geographic areas in which the firm operates;
42. Shareholders' Equity: Questions regarding the accounting treatment of items included as part of shareholders' equity, including other comprehensive income and retained earnings (accumulated deficits);
43. Statement of Cash Flow Classification: Questions or comments about the classification and presentation of the statement of cash flows; emphasis is made on ensuring an accurate presentation of the firm's actual cash receipts and cash payments based on activity (operating, investing, or financing);

44. Subsequent Events: Requests for additional information and/or disclosure related to event occurring after the date the financial statement were prepared as of;

45. Tax Accounting: Questions or comments regarding the firm's income tax disclosures, particularly items disclosed in their income tax footnotes such as the allowance on deferred tax assets;

III. Business Issues (Maximum Firm Score = 18 Coded Issues)

These items represent questions or comments about the firm's operating, financing, or investing matters disclosed in the offering document.

46. Backlog: Questions about the firm's disclosures of its order backlog;

47. Competitive Environment: Comments or questions about the firm's competitive environment and its strategies in addressing competitive forces;

48. Components of Revenue: Requests for information about disclosure and reporting about the firm's various sources of revenue, including the separation of product and service revenues;

49. Customer Profiles: Requests for information about the firm's key customers, including any customer concentration;

50. Debt Covenants: Questions or issues surrounding the company's contractual covenants related to its outstanding debt, including disclosure about the firm's compliance with these covenants;

51. Dividends: Requests for more information regarding the firm's dividend policy, including recent past dividend declarations and/or payouts and support for statements regarding the firm's intention to pay future dividends;

52. Going Concern: Questions or comments regarding the firm's ability to continue as a going concern;
53. Intellectual Property: Questions or comments about the firm's disclosure of the terms of their intellectual property and any claims against their intellectual property;
54. Key Performance Indicators: Requests for additional information about disclosures of the key performance metrics in a firm's industry;
55. Liquidity: Questions or comments regarding the firm's liquidity disclosures, including how the statement of cash flows translates into operating cash inflows and outflows, and sensitivity analysis related to future cash flow needs;
56. Material Contracts: Comments regarding material contracts and their terms that are disclosed or should be disclosed and included as exhibits in the firm's registration document;
57. Management Discussion and Analysis: Questions or comments about the type of information disclosed or that should have been disclosed as part of the filing;
58. Proceeds: Questions or comments regarding the use of the offering proceeds obtained from the IPO;
59. Properties and Facilities: Questions or comments surrounding the description of the locations in which the firm operates;
60. Risk Factors: Questions or comments regarding the identification and disclosure of the firm's material risk factors, including the potential impact of the factors on the firm's operations and cash flows;
61. Research and Development Projects: Comments regarding the identification and disclosure of the firm's material R&D projects;

62. Terms of Debt/Credit Arrangements: Questions or comments about the disclosures of the material terms of the firm's debt and credit arrangements;

63. Trends: A request to provide additional information regarding the material trends underlying the firm's reported operations and cash flows, as well as any forward-looking information about the effects of trends on future operations and cash flows;

IV. Tone and Level of Disclosure Issues (Maximum Firm Score = 19 Coded Issues)

These items represent requests for additional information or questions about the manner in which the firm presented its disclosures and the level of disclosure that the firm presented in its initial S-1 or SB-2 filing.

64. Balanced Discussion: A request for management to balance the overly-positive tone of their disclosures with more discussion of the risks and downside of their business and operating environment;

65. Clarify Subject: General requests to provide more specific information regarding a disclosure issue;

66. Confidentiality Request: Represents the SEC's acknowledgment of the firm's request for confidential treatment of various components of the firm's responses to the SEC comment letters;

67. Confusing Format: A notation by the SEC that a particular disclosure or presentation is in a difficult-to-follow format. It is often accompanied by a suggestion from the SEC for improved presentation;

68. Disaggregation: A request to provide a finer level of detail related to disclosures or questions about line-item classification;

69. Forward-looking Information: Comments or questions about the firm's disclosure of forward-looking information;
70. General Formatting: Comments or questions regarding the overall, non-financial statement formatting of the offering document;
71. Inaccuracies: An observation that there are inaccuracies in the filing document, including misstatements of fact or numbers that do not reconcile within the document;
72. Incomplete: An annotation that the registration document is incomplete in some manner and must be completed before the registration becomes effective;
73. Inconsistencies: A comment regarding disclosures that conflict with each other;
74. Independent Support: A request for independent, third-party support for statements included in the filing document; often, these requests relate to disclosures about fair value disclosures or the firm's market position;
75. Make Prominent: A request to alter the format of the filing to highlight or improve the visibility of a particular disclosure;
76. Plain English: Requests to modify the language used in the disclosures to eliminate obfuscating language, industry-specific terminology, or excessive use of acronyms;
77. Quantify Amounts: Request to quantify amounts in disclosures where an issue is discussed in qualitative terms;
78. Repetitive Disclosures: A comment that management has unnecessarily repeated information or disclosures throughout sections of the filing without providing additional substance;
79. Specific to Firm: A request to make the firm's disclosures less generic and boilerplate, and to add content that applies the disclosures to the particular circumstances of the firm;

80. Supplemental Information: Requests for supplemental information that would support assertions in the firm's disclosures; this information may or may not be further incorporated in the disclosures, but may just be information that the SEC wanted to review (e.g., reviewing a drug effectiveness study that supports certain disclosures made by the firm in its filing);

81. Supporting Calculations: A request to provide detailed support for the calculations that result in the numbers or figures disclosed in the offering document;

82. Too Detailed: Comments that certain portions of the filing documents, such as the summary sections, contained too much detail and information that would be more appropriately included in later sections of the filing;

V. Corporate Governance Matters (Maximum Firm Score = 10 Coded Issues)

These items summarize questions or comments about the firm's corporate governance mechanisms as disclosed in the offering document.

83. Anti-Takeover Provisions: A request for additional information or disclosure related to any antitakeover provisions that are included in the firm's by-laws;

84. Board of Directors: Questions or comments about the firm's board of directors, including issues about board composition, independence, and the board's compensation;

85. General Corporate Governance: Questions or comments about a company's overall corporate governance structure, including issues with the audit committees;

86. Executive/Employee-Related Matters: Requests for additional information about employee-related matters, including labor issues and employment contracts;

87. Management Performance Metrics: Questions or comments about metrics that a firm (typically through its board of directors) uses to assess management performance, in order to determine annual bonuses, for example;

88. Organizational Structure: Comments to provide clarification about the firm's organizational structure, both before and after the offering;

89. Other Compensation: Questions or issues regarding the reporting and disclosure of non-stock-based forms of executive compensation;

90. Principal Stockholders: Comments regarding the disclosures of significant shareholders, especially, disclosures regarding the interrelationships between the shareholders and the firm's operations;

91. Signatures: Request to identify the individuals, particularly the chief accounting executive, who will be responsible for signing the firm's financial statement certifications under Section 302 of the Sarbanes-Oxley Act;

92. Stock-based Compensation: Questions or comments regarding the terms of the stock-based compensation plans for the firm's executives and employees;

VI. Offering-related Issues (Maximum Firm Score = 11 Coded Issues)

These items represent questions or issues raised by the SEC regarding matters associated with the initial public offering per se. These items relate to procedural issues or regulatory compliance issues.

93. Changes in Shares Outstanding: Comments requesting more information or disclosure about the effects of changes in shares outstanding related to the IPO;

94. Consent Letters: Comments about the format and inclusion of consent letters as part of the filing document;
95. Conversion: Questions or comments regarding the effects of the firm's conversion from a noncorporate form of business that occurred prior to or in conjunction with the IPO;
96. Exhibits: Typically, a request to submit necessary exhibits to the registration statements;
97. Fees and Expenses: Comments related to the disclosure of fees and expenses related to the offering;
98. Offering Price: Comments related to the offering price, or proposed range of the offering price;
99. Percent Offered: Request for additional information regarding the percent of firm shares being offered, especially as related to pre-offering selling shareholders;
100. Shares Outstanding: Questions or comments regarding the number of shares that the firm has outstanding, including the effects of the IPO;
101. Tax Status: Questions or comments related to disclosures of the income tax implications for existing shareholders at the time of the offering;
102. Underwriting Matters: Requests for additional information and disclosure related to the firm's underwriting procedures and the firm's agreement with its underwriting firm;
103. Why Filing: A request to disclose additional information about why the firm is undergoing an initial public offering;

APPENDIX D

Sample Allowance for Doubtful Accounts Comment Letters

A sample of comments coded as either accounting-focused or disclosure-focused are reproduced below.

Accounting-focused comments

SEC comment letter issued 8/10/2010 to Korn/Ferry International regarding 10-K for the year ended 4/30/2010

First Comment from the Staff:

“We note your disclosure that the decrease in the provision for bad debts was due to a higher than normal provision in 2009, but a review of your allowance for doubtful accounts as a percentage of Receivables due from clients over the prior five years indicates allowances of 16.6%, 9.6%, 9.1%, 10.1% and 10.6% for 2009, 2008, 2007, 2006 and 2005, respectively, compared to 5.6% for the current year. Please tell us why you believe your current allowance is sufficient, and why it warrants a 43% decrease from the average allowance of the 4 years prior to 2009.”

Response by the Firm to the First Comment from the Staff:

The Company’s practice is to review its allowance for doubtful accounts on a quarterly basis. The review includes an assessment of the historical loss experience, collectability of specific accounts, creating and adjusting reserves, as appropriate, expectations of future collections based upon trends, and the type of work for which services

are rendered. The estimated allowance for a specific account can be as much as the entire balance for the account. Changes in the allowance are recorded through a charge to general and administrative expenses.

As the Company noted in Management's Discussion and Analysis of Financial Condition and Results of Operations in its Form 10-K for fiscal 2010, the significant decrease in its provision for bad debts resulted from a higher than normal provision in fiscal 2009 (due to difficult economic conditions that existed in fiscal 2009) and an improvement of economic conditions in fiscal 2010. The decrease in the allowance for doubtful accounts in the balance sheet for the year ended April 30, 2010 was partially driven by this decrease in the provision for bad debts resulting from the improvement in the economic conditions, but another factor driving the decrease in the allowance for doubtful accounts in fiscal 2010 was the approximately \$5 million charge-off of fully reserved accounts receivable. This charge-off resulted in a reduction in the Company's allowance for doubtful accounts in fiscal 2010 by a corresponding \$5 million. The charge-off of these fully reserved accounts receivable had no impact on the statement of operations or accounts receivable net of the allowance for doubtful accounts. We also note that the allowance for doubtful accounts to accounts receivable in 2009 at 16.9% was abnormally high primarily due to the significant drop in accounts receivable in 2009, again due to the difficult economic conditions, and the fact the allowance still contained amounts for the fully reserved accounts. If the Company had not charged-off the fully reserved accounts in fiscal 2010, the allowance for doubtful accounts would have been 10.4% of accounts receivable for the year ended April 30, 2010, which is in line with the historical trends cited in the Staff's comment. Based on the Company's 2010

quarterly reviews of its allowance for doubtful accounts, the Company believes its allowance for doubtful accounts was sufficient at each reporting period.

Second Comment from the Staff:

We have reviewed your response, and we note that you have attributed the decrease in your allowance as a percentage of receivables to improving economic conditions and the write-off of fully reserved accounts receivable. As we understand the decrease in accounts receivable and difficult economic conditions in fiscal 2009 created an abnormally high allowance, please tell us why you believe your current allowance is sufficient, and tell us why your allowance as a percentage of accounts receivable is 43% lower than the average allowance for the four years previous to fiscal 2009, excluding the impact of the abnormally high allowance in fiscal 2009. Also, please clarify for us how the \$5 million written off in fiscal 2010 is different from the other fully reserved accounts receivable written off each year, which appear to have been \$8.5 million, \$9.5 million and \$8.6 million in 2010, 2009 and 2008. Please also confirm that the \$5 million you are referring to is part of the \$8.5 million in write-offs disclosed on page F-10 (\$7.4 million), adjusted for the error of \$1.1 million you noted in your response to comment 5. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Response by the Firm to the Second Comment from the Staff:

In response to the Staff's comment, the Company confirms that the \$5 million of write-offs of fully reserved accounts in fiscal 2010 is included in the \$8.5 million in write-offs in fiscal 2010. This \$5 million differs from other reserved accounts receivable previously written off, in that this \$5 million was fully reserved in the prior years, whereas practically all other write-offs were only partially reserved. This \$5 million in fully reserved accounts had been carried on the Company's subledger for purposes of visibility, but the Company ultimately determined to write them off as uncollectible in fiscal 2010.

If this \$5 million in fully reserved accounts had not been written-off in fiscal 2010, (1) the allowance for doubtful accounts would have been \$11.0 million, or 9.7% of gross accounts receivable as of April 30, 2010 (an amount comparable to the allowance for doubtful accounts as a percentage of gross accounts receivable in fiscal 2005, 2006, 2007 and 2008, which was 9.7%, 9.4%, 8.4% and 8.8%, respectively), (2) the allowance for doubtful accounts would have increased \$1.7 million, or 18%, compared to the average allowance for doubtful accounts from fiscal 2005 to 2008, as opposed to the 43% decrease noted by the Staff and (3) the Company's actual write-offs would have been approximately \$3.5 million in fiscal 2010, a decrease in write-offs of \$6.0 million as compared to write-offs in fiscal 2009, or a 63% decrease. This significant decrease in write-offs from fiscal 2009 to fiscal 2010 referenced above resulted from the Company's implementation of aggressive collection efforts in early fiscal 2010, as well as improved economic conditions in the second half of that year. The resulting improvement in write-offs in fiscal 2010 to \$3.5 million (net of the \$5 million write-off of fully reserved accounts receivables described above), coupled with the improving economic conditions and the Company's aggressive collection efforts, led to

the Company's determination that the allowance for doubtful accounts reported in the Company's Annual Report on Form 10-K was sufficient. Underscoring this determination was our historical loss experience, historical percentage of write-offs (net of the \$5 million write-off of fully reserved accounts receivable in fiscal 2010) to allowance for doubtful accounts, assessment of the collectability of specific accounts and our expectations of future collections based upon trends and the type of work for which services are rendered.

SEC comment letter issued 9/15/2009 to Cagles, Inc. regarding 10-K for the year ended 3/28/2009

Comment from the Staff:

“We note that the allowance for doubtful accounts has decreased from \$637 at March 29, 2008 to \$186 at March 28, 2009. In light of the increase in net sales during 2009 and slight decrease in gross accounts receivable at March 28, 2009, please explain to us why you believe the allowance for doubtful accounts is appropriately recorded at March 28, 2009.”

Response by the Firm:

“During the first quarter of the fiscal year ended March 2009, the Company recorded a \$416 recovery of a specific account bad debt accrual that was made during the fiscal year ended March 2007. After this fiscal 2009 adjustment, there was only an additional \$35 decrease in the allowance doubtful accounts during the fiscal year. The \$186 balance in allowance for doubtful accounts at year end March 2009 is appropriate. The Company monitors A/R extensively every business day and we will adjust our allowance, up or down, as required.”

Disclosure-focused comments

SEC comment letter issued 1/6/2009 to Mitcham Industries, Inc. regarding 10-K for the year ended 1/31/2008

Comment from the Staff:

“We note your disclosure on page 9 which indicates that approximately 25% of your outstanding trade accounts receivable were more than 90 days past due. In light of this, please enhance your critical accounting estimate discussion to clearly explain the factors you consider when determining your allowance for doubtful accounts. Please also expand your disclosure to discuss the typical amount of time it takes for your customers to pay their invoices and if you charge any fees associated with these past due accounts.”

Response by the Firm:

“In future filings we will expand our disclosures to include the following information:

- We determine our allowance for doubtful accounts based on a detailed review of outstanding receivable balances. Factors considered include the age of the receivables, the payment history of the customer, the general financial condition of the customer and any financial or operational leverage which we may have in a particular situation.
- The average age of our accounts receivable, which indicates the typical time it takes for customers to make payment.
- We typically do not charge fees on past due accounts, although we do reserve the right to do so in most of our contractual arrangements with our customers.

SEC comment letter issued 5/28/2008 to Temple-Inland, Inc. regarding 10-K for the year ended 12/29/2007

Comment from the Staff:

“Please disclose your accounting policy and methodology you used to estimate the allowance for doubtful accounts, or tell us why you do not believe the disclosure is necessary. Refer to paragraph 13 (b) of SOP 01-6 for guidance.”

Response by the Firm:

“Historically, our allowance for doubtful accounts has not significantly affected the determination of our financial position, cash flows, or results of operations. As a result, we do not consider our policy and methodology related to the allowance for doubtful accounts to be a significant accounting policy as defined in paragraph 12 of APB No. 22. Accordingly, we do not include this information in our discussion of significant accounting policies. We will, however, include the appropriate policy disclosure in future filings.”

SEC comment letter issued 8/9/2007 to HealthSouth Corporation regarding 10-K for the year ended 12/31/2006

Comment from the Staff:

“In a comparative tabular format, detail your payor mix concentrations and related aging of accounts receivable. The aging schedule may be based on management's own reporting criteria (i.e. unbilled, less than 30 days, 30 to 60 days etc.) or some other reasonable presentation. At a minimum, the disclosure should indicate the past due amounts and a breakdown by payor classification (i.e. Medicare, Medicaid, managed care and other, and self-pay). We would expect self-pay to be separately classified from any other grouping. If your billing system does not have the capacity to provide an aging schedule of your receivables, disclose that fact and clarify how this affects your ability to estimate your allowance for bad debts. Describe the steps you take in collecting accounts receivable. Disclose your policy with respect to determining when a receivable is recorded as a bad debt and ultimately written-off and supplement your discussion with the following information:

- a. The threshold (amount and age) for account balance write-offs;
- b. Whether or not and to what extent you use specific identification for account write-offs;

and

- c. Whether or not accounts are written-off prior to going to legal or collection agencies. If not, quantify the amount included in accounts receivable and the related allowance.”

Response by the firm:

See Note 1, Summary of Significant Accounting Policies, “Accounts Receivable,” to the consolidated financial statements included in our Current Report on Form 8-K filed on March 30, 2007 for a tabular presentation of the payor mix of our net accounts receivable

balance. The information as of December 31, 2006 was updated in our Form 10-Q for the quarterly period ended June 30, 2007 to reflect the qualification of our surgery centers, outpatient, and diagnostic divisions as assets held for sale and discontinued operations. The updated information is as follows: (Tables eliminated for brevity)

We estimate our allowance for doubtful accounts based on the aging of our accounts receivable, our historical collection experience for each type of payor, and other relevant factors so that the remaining receivables, net of allowances, are reflected at their estimated net realizable values. Accounts requiring collection efforts are reviewed each 30 days via system-generated work queues that automatically stage accounts requiring collection efforts for patient account representatives. Collection efforts include contacting the applicable party (both in writing and by telephone), providing information (both financial and clinical) to allow for payment or to overturn payor decisions to deny payment, and arranging payment plans with self-pay patients, among other techniques. When all in-house efforts have been exhausted, accounts may be turned over to a collection agency for additional collection efforts. As of December 31, 2006, patient accounts were written off based on account size, age, status with a collection agency, or other information that indicated the account was uncollectible.

APPENDIX E

Disclosed Risk Factors Description (Agarwal, Gupta, and Israelsen 2016)

The following is a list of the 20 most common words for each of the 30 extracted risk factor topics from a set of 27,339 10-K and S-1 filings from 1996 through 2010 from Agarwal, Gupta, and Israelsen (2016). For each of the 30 extracted risk factors, a name is chosen based on the words and industries most closely associated with these factors and based on reading through a sample of disclosures assigned to each topic. However, it is the words that define the topics, not the title. In this subsection, we briefly examine each of the 30 disclosed risk factors. The discussion is based on the word distributions from Table A2, on the distribution of disclosures (in the 10-Ks) across industries. The extracted risk factors are listed in alphabetical order.

Accounting contains words like reporting, accounting, result, statement, material and require and deals generally with the risk that statements may be incorrect. It is most likely to be disclosed in industries such as “measuring and control equipment” (LabEq), “Recreation” (Toys), and “Business Services” (BusSv) as well as firms that are not easily classified into an industry (Other). Industries that are unlikely to disclose this risk are “Agriculture” (Agric), “Coal” (Coal), and “Utilities” (Util).

Competition contains words associated with competition or product market competition like company, competition, compete, market, product and services. It is most commonly disclosed in industries where product market competition is most likely, such as “Textiles”

(Ttxtls), “Candy & Soda” (Soda), “Beer & Liquor” (Beer), and “Food Products” (Food).

Industries that are least likely to disclose competition risk are industries in which there are larger barriers to entry such as “Petroleum and Natural Gas” (Oil), “Utilities” (Util), “Non-Metallic and Industrial Metal Mining” (Mines), “Precious Metals” (Gold), Coal, and “Pharmaceutical Products” (Drugs).

Contractual contains words associated with contract risk such as agreement, contract, terminate, obligation, and renew. This risk is commonly disclosed in industries that rely on government contracts such as “Defense” (Guns), “Restaurants, Hotels, Motels” (Meals), Coal, and the “Aircraft” (Aero). At the other extreme are industries like “Banking” (Bank), “Medical Equipment” (MedEq), “Measuring and Control Equipment” (LabEq) and Gold.

Costs contains words associated with the risk that input prices may change such as costs, increase, labor, equipment, adversely, and affect. This risk is commonly disclosed in 10-Ks in industries such as “Transportation” (T rans), “Shipbuilding, Railroad Equipment” (Ships), Aero, “Construction” (Cnstr), and Guns . At the other extreme are industries like “Banking” (Bank), “Medical Equipment” (MedEq), “Measuring and Control Equipment” (LabEq) and Gold.

Credit contains words associated with credit or the ability to raise capital such as credit, debt, ability, capital, additional, and require. This risk is the most prevalent in industries like F un, FabPr, Ttxtls, and Coal. The industries least likely to disclose Credit risk are Comps, MedEq, Insur, Banks, and Drugs.

Demand contains words associated with changes in demand or the economic environment such as economic, conditions, affect, result, customer, and demand. This is most commonly disclosed in industries with seasonal or fluctuating demand such as Smoke. Meals, Clths,

Rtail, Beer. Industries with inelastic demand such as Oil, MedEq, Hlth, and Drugs are less likely to disclose this risk. Gold is the industry least likely to disclose Demand risk.

Disclosure contains words such as risk, statement, forward, looking, uncertainty. This risk is most commonly included as a disclaimer about relying on forward-looking statements.

Industries most likely to emphasize this risk are Smoke, Soda, FabPr, Rubbr, and Books. At the other extreme lie Telcm, T rans, MedEq, Drugs, and Coal.

EnviroReg contains words associated with environmental regulation or impact such as environmental, regulation, state, federal, permit, emission. The firms most likely to emphasize this risk are those operating in industries subject to environmental regulation such as Coal, Gold, Util, and Mines. At the other extreme lie Clths, Smoke, Comps, Banks, Insur.

Financing contains words dealing with the need to acquire additional capital such as acquisition, acquire, additional, capital, operations, and need. Firms in RIEst, Boxes, Aero, and Mines are especially likely to disclose this risk, while firms in Rtail, Meals, Clths, Insur, Smoke are less likely.

FinMarket contains words associated with aggregate financial market risk such as such as investment, financial, market, rates, credit, affect. Firm in industries such as Banks, Fin, Insur, Util, and RIEst are the most likely to disclose FinMarket risk. Industries which place less emphasis on this risk are FabPr, Toys, MedEq, Drugs, and Guns.

Growth contains words associated with growth or expansion such as growth, new, business, ability, and expand. Firms in industries like Rtail, Meals, Clths, Hshld, and Whlsl are most associated with this risk disclosure, while those in Aero, Boxes, Coal, Gold, Oil are the least likely to disclose.

HealthCare contains words associated with healthcare and healthcare programs such as healthcare, program, reimbursement, medical, state. Not surprisingly, the industries most associated with these disclosures are Hlth, MedEq, Drugs, Insur, and P erSv. At the other extreme are the industries Fun, Txtls, Oil, Clths, and Gold.

HumanCapital contains words associated with the risk of hiring and retaining key employees such as retain, key, personnel, ability, attract, depend. It is most commonly disclosed in human-capital intensive industries like BusSv, Fin, Hlth, PerSv, and LabEq and least commonly disclosed in Chems, Beer, Boxes, Smoke, Util.

Insurance contains words dealing with risk associated with insurance such as insurance, claim, liability, coverage, losses. Firms in the industry Insur are those most likely to disclose this risk. Other industries associated with this risk are Ships, FabP r, Guns, and Cnstr. The industries whose firms are least likely to disclose this risk are Comps, Books, Clths, Banks, and Telcm.

IntellProp contains words about the risks associated with intellectual property and patents as patent, intellectual, property, infringement, application, and license. Reassuringly, the firms most likely to discuss IntellProp risk are those in the industries Drugs, MedEq, LabEq, Comps, and Chips. Industries whose firms make very little mention of this risk are T rans, Insur, Util, and Banks.

International contains words dealing with risks associated with foreign exchange risk and international markets such as foreign, currency, exchange, political, tax, and china. The firms most likely to make these disclosures are found in industries like Boxes, Mach, Txtls, Rubbr, and Clths, where international markets are more likely to play significant roles. At the other

extreme lie firms in more localized or service industries such as Meals, Util, Banks, and Hlth.

Internet contains words such as internet, advertising, sales, content, increase, and revenue. Internet risk is the disclosure least likely to be made. The industries with disclosures most closely associated with this risk are Books, PerSv, Telcm, Fun, and BusSv. Industries such as Oil, Ships, Boxes, FabPr, and Steel are those least likely to make disclosures about internet risk.

Legal contains words about litigation and legal risk such as court, action, federal, lawsuit, claim, and law. The industries whose firms are most likely to discuss this risk are Smoke, Hlth, Guns, Gold, and Insur. Many of these firms and industries are heavily regulated and have been subjects of lawsuits and legal action. Firms least likely to disclose Legal risk tend to lie in the industries LabEq, Toys, Txtls, Soda, and Clths.

Oil contains words associated with energy prices and production such as oil, natural, gas, price, production, and reserves. Not surprisingly, firms making these risk disclosures are more likely to be in industries that either produce energy or extract precious metals such as Oil, Gold, Mines, Util, and Coal. Firms in the industries Banks, MedEq, Hlth, Comps, and Drugs are the least likely to disclose Oil risk.

Payout contains words such as dividend, pay, distribution, capital, subsidiary. The industries Insur, Smoke, Banks, RIEst, and Fin are the industries most likely to disclose Payout risk while MedEq, Soda, Clths, LabEq, Guns are the industries least likely to disclose this risk.

ProdApproval contains words associated with the product approval process such as product, approval, clinical, trial, fda, and regulatory. Not surprisingly this risk is most commonly disclosed by firms in regulated industries such as Drugs, MedEq, Smoke, Agric, Hlth. Firms

in service industries such as F in and Banks and less innovative industries such as Steel, Books, and Ships are much less likely to make this disclosure.

ProductDevl contains words about the development of new products, technologies, and services such as product, new, technology, market, development, ability and introduce. Firms in high tech industries such as Comps, Chips, and LabEq are the most likely to disclose this risk. Firms in the BusSv are also likely to disclose this risk. At the other extreme lie firms in industries associated with older technologies such as T rans, Mines, Util, Coal, and Gold. Like the previous risk, ProductDevl contains words associated with the development of new products such as product, development, candidate, market, commercialization. However, these disclosures tend to be made in research and development-intensive industries such as Drugs, MedEq, LabEq, Agric, and ElcEq. As was the case with the previous risk factor, firms in “old economy” industries such as Insur, Trans, Coal, Txtls, Banks are those least likely to disclose this risk.

RealEstate contains words associated with real estate and mortgages such as loan, real, estate, losses, property, and mortgage. This risk the most likely to be disclosed in industries that rely heavily on real estate such as REEst, Util, Coal, Gold or in industries that are affected by securitized claims on real estate such as Banks. Manufacturing industries such as Clths, Rubbr, Comps, MedEq, and Drugs are the least likely to discuss RealEstate risk.

Regulation contains words such as regulation, state, federal, subject, change, and compliance. Firms in highly regulated the highly regulated industries such as Beer, Insur, Hlth, Banks, and Guns tend to focus more attention on this risk. Firms in the less-regulated manufacturing industries Chips, Paper, Rubbr, Steel, and Boxes, are less likely to emphasize this risk.

Revenue contains words associated with items on the income statement such as revenue, tax, net, future, income, and estimate. The firms emphasizing Revenue risk tend to cluster in the industries Cnstr, Aero, Insur, and BusSv, while those in MedEq, Rubbr, Drugs, Soda, and Meals are the least likely to emphasize this risk.

Stakeholder contains words associated with corporate control and ownership such as stock, share, board, right, control. Firms in the industries F un, F in, Gold, T elcm, and Rubbr are those most commonly discussing this risk in their 10-Ks. At the other extreme are the industries Hshld, Aero, F abP r, U til, and Boxes.

StockPrice contains words associated with stock market or stock price risk such as stock, price, market, decline, fluctuation, and affect. Firms in “high beta” industries, such as Mines, Comps, Drugs, and Gold, or those directly impacted by stock markets as is the case with the industry Fin, are the most likely to emphasize this risk. Firms in the industries Insur, Soda, Guns, Util, and Aero, are less likely to disclose StockPrice risk.

SupplyChain contains words associated with the risk associated with supply chains such as product, customer, supplier, manufacturing, material, component, and delay. Firms disclosing this risk tend to fall in the manufacturing industries Chips, Steel, Agric, Clths, and Soda. These industries generally rely on suppliers when manufacturing goods. Disclosing firms may be suppliers, themselves. Firms that are less likely to emphasize SupplyChain risk cluster in the industries Gold, Fun, RIEst, Insur, and Banks.

Systems contains words associated with the risk of systems interruption or data failure such as system, information, failure, data, disruption, and security. Firms in data intensive industries such as BusSv, Fin, Rtail, Comps, and Telcm are those most commonly discussing

Systems risk. Firms in manufacturing and commodity industries like Autos, Coal, Mines, Gold, and Smoke, are much less likely to emphasize this risk.