Styles of regulators : evidence from the sec comment letters

Do, Thuc Truc

2018

Do, T. T. (2018). Styles of regulators : evidence from the sec comment letters. Doctoral thesis, Nanyang Technological University, Singapore.

<http://hdl.handle.net/10356/73160>

<https://doi.org/10.32657/10356/73160>

**NANYANG
TECHNOLOGICAL
UNIVERSITY**

**STYLES OF REGULATORS: EVIDENCE FROM
THE SEC COMMENT LETTERS**

**DO THUC TRUC
NANYANG BUSINESS SCHOOL**

2017

STYLES OF REGULATORS: EVIDENCE FROM THE SEC COMMENT LETTERS

DO THUC TRUC

Nanyang Business School

*A thesis submitted to Nanyang Technological University in
partial fulfilment of the requirement for the degree of Doctor
of Philosophy*

2017

Acknowledgments

First of all, I would like to express my most sincere gratitude to my supervisor Prof Zhang Huai, for sharing his deep knowledge of accounting research with me, as well as his patience and understanding in guiding me through this thesis. Without his dedicated support and unwavering encouragement, this thesis would not have been possible. He has also greatly helped me in my PhD journey and set a good example for my future career in the academic world. I also would like to thank other committee members for their invaluable guidance: Prof Kevin Koh, Prof Tong Yen Hee and Prof Luo Jiang. Their comments have greatly helped me advance in my thesis, and enabled me to gain a deeper understanding of the topic.

I would like to thank Prof Tan Hun Tong, Prof Ke Bin, Prof Clive Lennox, Prof Wu Yuan, Prof Ho Mian Lian for giving the basic and solid training in accounting research, as well in econometrics and academic writing. I would like to extend my gratitude to Prof Zeng Yachang, Prof Laurence van Lent and Prof Terence Ng for giving me invaluable comments on my thesis. I would also like to thank Prof Premila Gowri, Prof Tan Seet Koh, Prof El'fred Boo, Prof Jian Ming, Prof Clement Tan, Prof Asad Kausar, Prof Heather Li, Prof Shen Rui, Prof Yin Huaxiang and other NBS faculty members from whom I have learnt so much through attending their pre-colloquium, listening to their ways of thinking in seminars and working with them. I would also like to thank Prof Margaret Abernethy, Prof Hung Chung Yu, Prof Qin Bo, Prof Flora Kuang, Prof Wang Rencheng and other faculty members at the University of Melbourne for giving me important insights when I did a brownbag of my thesis there.

I also want to thank my dear girlfriend Deborah Ngo Thu Tran sincerely. She has been with me for 6 years and given me tonnes of support and encouragement even in the darkest hours of my life. Her love and encouragement are simply irreplaceable. I hope that we will continue to have each other in the next phase of our lives. I would also to thank my dad, my

mom, my sister and her family for supporting my pursuit. Mom, you passed away suddenly during my third year of PhD, but I still always feel your presence and love. You will always be a part of me no matter where you are now. My dad and my sister have been extremely supportive throughout my entire life and I would not have been able to complete this without their help.

My gratitude also goes to my friends and my seniors at Nanyang Business School. In no particular order, I want to thank Lukas Helikum, Zhang Jin, Xu Tu, Vincent Chee, Michael Joseph, Yeo Feng, Liu Na, Xiao Li, Yu Yao, Qiang Wei, Li Lingwei, Zhang Xiaojun, Cao Tongrui, Yang Yanjia, Yoo Gsong, Kenny Phua, Zhang Li and others for being part of my PhD journey. We have had so much fun together and I have learnt so much from interacting with all of you. My PhD life would have been much less exciting without your presence.

Lastly, I would also like to thank Bee Hua, Karen, Tsai Ting, Adeline and other administrative staff members for your kind help and patience.

Table of Contents

1. Introduction.....	2
2. Literature review, institutional background and hypotheses development.....	9
2.1. Literature review on SEC regulation	9
2.2. Institutional background	11
2.3. Hypotheses development	13
3. Research design	16
3.1. Sample formation and variable definition.....	16
3.2. Empirical methods	19
3.3. Robustness tests	20
3.4. Staff member fixed effect: Observable characteristics	21
4. Empirical results	22
4.1. Descriptive statistics	22
4.2. Baseline results – Remediation costs (H1)	24
4.3. Baseline results – Comment letter contents (H2).....	25
4.4. Baseline results – Financial reporting quality (H3)	27
4.5. Baseline results – Styles of Head vs Non-Head.....	29
4.6. Robustness test: Controlling for CEO fixed effects.....	30
4.7. Robustness test: Falsification test	32
4.8. Staff fixed effects: Observable characteristics	33
5. Additional tests	36
5.1. Simulation tests of F-statistics on staff fixed effects	36
5.2. Consequences of SEC staff styles	36
5.3. Alternative measures of financial reporting quality.....	38
6. Conclusion	39
References.....	41
Figure 1 – Extract of Comment Letter	47
Figure 2 – SEC Staff Member’s LinkedIn (Sample)	48
Table 1 – Descriptive Statistics.....	50
Table 2 – Effects of SEC Staff Members on Remediation Costs (H1)	51
Table 3 – Effects of SEC Staff Members on Comment Letter Contents (H2).....	52
Table 4 – Effects of SEC Staff Members on Financial Reporting Quality (H3)	54
Table 5 – Partitioning of SEC Staff Members into Head Fixed Effects and Non-Head Fixed Effects.....	55

Table 6 – Effects of SEC Staff Members, Controlling for CEO Fixed Effects	56
Table 7 – Effects of SEC Staff Members: Falsification Tests	58
Table 8 – Descriptive Statistics of SEC Staff Characteristics.....	60
Table 9 – Effects of SEC Staff Members: Observable Characteristics.....	61
Table 10 – Simulation Results for the F-test on Staff Fixed Effects	64
Table 11 – Consequences of SEC Staff Styles	65
Table 12 – Alternative Measures of Financial Reporting Quality	66
Appendix A – Variables Definition	67
Appendix B – Assignment of Accounting Topics to Sub-Categories.....	71
Appendix C1 – Correlation Matrix	73
Appendix C2 – Full Regression Results	76
Appendix C3 – Percentages of Staff Fixed Effects that are Significant	80
Appendix C4 – Effects of SEC Staff Members: Observable Characteristics (Alternative Method)	81

Styles of regulators: Evidence from the SEC comment letters

Do Thuc Truc*

ABSTRACT

Security regulations are enforced by the SEC staff. Conceptually, the regulations shall be enforced uniformly despite enforcers' personal differences. I offer evidence to the contrary. Using the setting of SEC filing review process, I find that SEC staff members exhibit personal "styles" in their reviews. Their personal styles significantly affect firms' remediation costs, the contents of the SEC letter, and firms' financial reporting quality. I find that female staff members are associated with higher remediation costs while the SEC staff members with CPA qualifications are more likely to emphasize accounting disclosures and firms under their supervision are more likely to report truthfully (lower F-score). Overall, the paper offers consistent evidence that SEC regulation enforcers exhibit individual differences and their styles affect firms' financial reporting quality.

Keywords: Regulation enforcement; SEC; Comment letters; Fixed effects

*The author is a PhD candidate at Nanyang Business School, Nanyang Technological University. This thesis is submitted for the fulfilment of PhD award in 2017. I would like to thank my committee members Huai Zhang (supervisor), Kevin Koh, Yen Hee Tong and Jiang Luo for their invaluable guidance. The author's email address is thuctruc001@e.ntu.edu.sg. All errors are my own.

“The enforcement of the law cannot depend on the justice of a cause or one man's conscience.”

- Harold H. Greene

1. Introduction

Dating back to Beach (1918), law literature has long recognized the importance of uniform enforcement of regulations. Once the regulations are in place, conceptually, they are to be enforced equally despite enforcers' personal differences. Individualized enforcement of regulations raises “fairness” concerns and reduces the effectiveness of regulations in deterring illegal behaviours (Polinsky & Shavell, 2007; White, 2010). An analogy is, if some police officers are more lenient in enforcing traffic laws and issue warnings to instead of fining speeding drivers, those speeding drivers who are fined by stricter officers may feel that they have been unfairly treated. The criticism on enforcement ultimately lowers the effectiveness of the rules in deterring speeding. A classical paper, Kadish (1962) states that “The cognate principle of procedural regularity and fairness, in short, due process of law, commands that the legal standard be applied to the individual with scrupulous fairness in order to minimize the chances of convicting the innocent, protect against abuse of official power, and generate an atmosphere of impartial justice”. In reality, in cases where enforcers potentially have discretion, enforcers (e.g., police officers) are required to strictly follow standard pre-set procedures and protocols when enforcing the laws.¹

In the U.S., the Securities and Exchange Commission (SEC) is the main public enforcer of security regulations governing the capital markets. I am interested in whether the SEC staff members exhibit their individual differences in their enforcement actions. My study is motivated by recent studies in economics, finance and accounting which stress individual differences in decision making (Bamber, Jiang, & Wang, 2010; Bertrand & Schoar, 2003; Dejong & Ling, 2013; Dyreng, Hanlon, & Maydew,

¹ For example, the U.K. publishes the Code for Crown Prosecutors, Canada publishes The Federal Prosecution Service Deskbook, Hong Kong publishes Prosecution Code, and Australia publishes Prosecution Policy of the Commonwealth (Australia's Federal Prosecution Service, 2016; Depart of Justice, 2015; Director of Public Prosecution, 2013; Public Prosecution Service of Canada, 2014). These examples show that different governments across the world care about consistency when officials carry out law enforcements, and, hence, publish public codes of conduct for prosecutors to ensure that they apply the laws consistently and do not abuse their discretion.

2010; Ewens & Rhodes-Kropf, 2015; Gao, Martin, & Pacelli, 2016; Ge, Matsumoto, & Zhang, 2011; Graham, Li, & Qiu, 2012; Liu, Mao, & Tian, 2016; Yang, 2012). The argument is that decision makers operate within bounds of rationality and their decisions are influenced by their own experiences and values (Hambrick & Mason, 1984).²

I examine the research question in the setting of the SEC comment letters on firms' 10-K filings. When firms file their 10-K filings with the SEC, the SEC personnel in charge review their filings and issue comments in letters addressed to the firms. The firms typically address these comments by amending their current filings or effecting such changes in future filings.³

The SEC comment letter offers an ideal setting for me to investigate my research question for the following three important reasons. First, this setting allows me to attribute decisions to individuals because these letters are signed by specific SEC staff members at the Division of Corporation Finance.⁴ Similar to the engagement partners who sign on the audit reports, the staff members who sign on the letters are likely the leaders and the main decision makers of the review process.⁵

Second, the SEC began to publicize comment letters in its EDGAR database in 2005. My sample includes 4,798 comment letter conversations on 2,797 firms signed by 135 individuals for the period between 2005 and 2015. This large panel dataset offers sufficient number of observations to draw causality inferences and conduct various robustness tests.

Third, prior research has demonstrated that the SEC's review process has a profound impact on firms' financial reporting. Comment letters by SEC staff can cause firms to restate their financial statements, to modify their current and subsequent disclosures, to reduce accrual-based earnings

² Scientific studies in neuroscience also suggest that people think and behave differently from one another. For example, the level of hormone might shape people's physical characteristics as well as their behaviour (Lefevre, Lewis, Perrett, & Penke, 2013). Testosterone is thought to influence behaviour because it shapes an individual's neural circuitry early in life and the brain responds to changes in current testosterone levels (Jia, Van Lent, & Zeng, 2014). On the other hand, cultural studies also suggest that the language one speaks can shape one's behaviour due to the way the language encodes time (Chen, 2013; Kim, Kim, & Zhou, 2017).

³ In extreme cases where fraud is found, the case might be referred to Division of Enforcement for litigation.

⁴ The details on the filing review process can be found by accessing the following webpage (SEC, 2017): <https://www.sec.gov/divisions/corpfin/cffilingreview.htm>

⁵ This approach is also used in Gao et al. (2016) who identify loan officers responsible for approving bank loans by their signatures attached to the end of loan agreements filed with SEC EDGAR.

management, and to resolve uncertainty in firms' fair value estimates (Bens, Cheng, & Neamtiu, 2016; Brown, Tian, & Tucker, 2016; Cassell, Dreher, & Myers, 2013; Cunningham, Johnson, Johnson, & Lisic, 2016; Johnston & Petacchi, 2017). Given the impact of the SEC review process, whether the process can be attributed to personal differences offers new insights on determinants of disclosure quality.

Using 14,207 unique firm-year observations for the period 2005-2015, I regress the dependent variables (to be discussed later) on firm fixed effects, year fixed effects, SEC individual staff fixed effects and a set of time-varying control variables to examine personal styles of SEC staff members. This fixed-effects-based research design was introduced by Bertrand and Schoar (2003) and used in a variety of settings (Bamber et al., 2010; Dejong & Ling, 2013; Ge et al., 2011; Yang, 2012). I extract the coefficient estimates of the SEC staff fixed effects and use the distribution of the estimates to explore the economic significance of SEC staff fixed effects.

I acknowledge the concern that the matching between firms and SEC staff members is not entirely random, for example, more complex firms might be assigned to a more experienced staff member. In my research design, I control for many firms' time-varying characteristics such as whether they are undergoing M&A, the number of business segments they have, etc. I continue to find that SEC staff members have styles in their enforcement actions that cannot be explained by the firms' characteristics.⁶

I document significant personal styles in the SEC staff members' reviewing of 10-K filings in terms of remediation costs, contents of the comment letters, and the financial reporting quality of the firms being reviewed. Cassell et al. (2013) measure remediation costs of SEC comment letters through the number of rounds of communications the firms have to go through with the SEC, and the time it takes to complete the communication process. They find that the severity of the consequence varies with several characteristics. When I compare the staff member at 25th percentile to the staff member at

⁶ The argument that SEC staff members are not randomly matched to firms is also consistent with the idea that some staff members have distinct styles and firms are matched based on their styles.

75th percentile, the number of rounds increases by 52%, and the length of the review process increases by 142%. These statistics suggest that individual SEC staff members play an important role in determining the remediation costs. Simply put, some staff members are tougher than others.

I continue to investigate the contents of the SEC comment letters by analysing the topics raised in the SEC comment letters. Following Cassell et al. (2013), I use the total number of topics raised in the comment letters to proxy for their contents. I expand the scope of enquiry by considering the emphases of the letters. Cassell et al. (2013) classify the topics raised by the SEC comment letters into six categories: Accounting Rule and Disclosure, Internal Control Disclosure, Management Discussion and Analysis, Regulatory Filing, Risk Factor Disclosure, and Other Disclosure. The emphasis on each category is computed by dividing the number of topics in the focal category by the total number of topics raised in the letter. I find that when I compare the staff member at 25th percentile to the staff member at 75th percentile, the number of topics raised increases by 51%, the emphasis on Accounting Disclosure increases by 38%, the emphasis on MD&A increases by 30.8% and the emphasis on Regulatory Filings increases by 18.9%, among others. Within the category of accounting disclosures, I further split the topics into four sub-categories: Core Earnings, Non-Core Earnings, Accounting Classification and Fair Value.⁷ I find substantial staff fixed effects when I examine the emphases within the accounting disclosure category. The results suggest that individual SEC staff members seem to have their own “pet” topics.

Finally, given prior evidence that SEC comment letters shape firms’ disclosures, I investigate whether firms’ financial reporting quality is affected by staff members’ personal styles. My measures of financial reporting quality include discretionary accruals (a measure of earnings management), F-score (a measure of fraudulent reporting), the size of SEC 10-K filing (a measure of comprehensiveness) and Fog index (a measure of report readability). Together, these measures capture different aspects of firms’ disclosures and they are widely studied in prior literature (Dechow, Ge, Larson, & Sloan, 2011; Dechow, Ge, & Schrand, 2010; Loughran & McDonald, 2014, 2016). I find that the F-test on joint

⁷ Please refer to Appendix B for details on how I classify accounting topics.

significance of the SEC staff fixed effects is statistically significant in all related regressions. When I go from the staff member at 25th percentile to the staff member at 75th percentile, discretionary accrual is higher by 5.3% of total assets, the F-score is higher by 0.188 (i.e., the probability of misstatement increases by 18.8%), the size of the filing increases by 35%, and the Fog index increases by 1.35 (i.e., an additional 1.35 years of education is required to have an equal level of understand of the filings reviewed by an SEC staff member at the 75th percentile and the filings reviewed by the one at the 25th percentile of the distribution). In sum, these results suggest that personal styles of SEC staff members have an economically meaningful impact on firms' financial reporting quality.

I conduct two additional robustness checks. Remediation costs, contents of comment letters and firms' financial reporting quality may also be determined by the CEO. To control for the impact of the management, I augment the benchmark regression equation by adding the CEO fixed effects. I find that the fixed effects of SEC staff members remain significant in all of the analyses, suggesting that my findings cannot be attributed to the correlations between SEC staff members and managers.

In addition, I conduct "falsification tests" to establish causality between SEC staff members and firms' disclosures. Specifically, I identify firm-years where there are changes in the SEC reviewing staff members. Let's say, firm XYZ is reviewed by the SEC staff member A before 2011 and by B afterwards. I regress the disclosure measures in the years prior to the switch (i.e., the years before 2011) on the fixed effect of the later SEC staff member (i.e., the dummy for B) (pseudo staff). If the results are driven by the SEC staff member fixed effect representing non-time-varying firm characteristics, such as firm or industry, I expect the (pseudo) SEC staff fixed effect to remain significant in my test. If, however, the results reflect the influence of the SEC staff members on firms' disclosures, I expect the (pseudo) staff fixed effect to be insignificant, since the later reviewer is unlikely to influence earlier disclosures. The results indicate that the (pseudo) SEC staff fixed effects are insignificant in the

falsification tests, which lends support to the notion that the SEC staff members' personal styles causally influence firms' disclosures.⁸

After documenting staff member fixed effects, I dig deeper to shed light on the “black box” of these fixed effects. I am interested in examining the roles played by gender, age, professional qualification and work experience. To conduct this test, I manually collect information on SEC staff members by searching for their LinkedIn pages and extract relevant information. I am able to collect information for 66 SEC staff members, reducing the number of usable observations to 5,101. The analyses based on the data present two interesting findings.

First, females make tougher reviewers. Compared to firms whose reviewers are males, firms reviewed by females have to go through 17% more rounds, spend 20% more days in responding to the SEC's comments, and their comment letters need to address 8% more topics. Prior literature has shown that females tend to be more risk-averse than males (Borghans, Heckman, Golsteyn, & Meijers, 2009; Eckel & Grossman, 2008; Jianakoplos & Bernasek, 1998). One explanation for this finding is that aversion to risks leads to higher requirements for the firms to successfully address female reviewers' comments.

Second, professional qualification matters. Specifically, I find significant evidence that the SEC staff members with CPA qualifications are more likely to emphasize accounting disclosures in their comment letters, and firms being reviewed by them file more truthful financial reports (lower F-scores). This is consistent with prior literature suggesting that professional qualification and prior working experience shape individuals' choices (De Franco & Zhou, 2009; Finkelstein & Hambrick, 1996; Gintis & Khurana, 2008).

In addition, I conduct three additional tests that are not only interesting by themselves but also help to strengthen the conclusions drawn in the main tests. Firstly, I conduct simulation tests to check whether the F-statistic is well-specified to test the significance of SEC staff fixed effects (Fee, Hadlock,

⁸ My conclusion is robust to the use of the AKM approach which was introduced by Abowd, Kramarz, and Margolis (1999), refined by Abowd, Creecy, and Kramarz (2002), and used in Gao et al. (2016), Liu et al. (2016), and Ewens and Rhodes-Kropf (2015).

& Pierce, 2013; Gul, Wu, & Yang, 2013) and the results suggest that the F-statistic for SEC staff fixed effects seem to be well-specified. Secondly, I conduct checks on the consequences of SEC staff members' styles by regressing financial reporting quality measures on proxies for SEC staff styles. The empirical results suggest that SEC staff members' styles do matter and have impact on firm outcomes. For example, SEC staff members who focus on accounting issues (both core and non-core earnings issues) influence firms to report lower levels of discretionary accruals. Lastly, I use two alternative measures of financial reporting quality – composite measure of financial reporting quality and disaggregation level of accounting data, that has been introduced by Chen, Miao, and Shevlin (2015), to double check whether SEC staff members' styles have impact on firms' disclosure quality. The inference obtained from these alternative measures is also robust.

This paper contributes to three different lines of literature. It contributes to the line of literature that documents the importance of idiosyncratic factor in decision making. Prior studies demonstrate that managers have individual styles and such styles have a substantial impact on firms' major decisions (Bertrand & Schoar, 2003; Ewens & Rhodes-Kropf, 2015; Gao et al., 2016; Ge et al., 2011; Graham et al., 2012). While managers play an important role in the capital markets, so do regulators. Therefore, whether security regulators exhibit personal styles remains an unexplored important question. The answer to this question has bearings on the perceived fairness of the regulation enforcement and ultimately the deterrence effect of the regulations.

Second, this paper contributes to the line of literature that examines SEC regulation (Correia, 2014; deHaan, Kedia, Koh, & Rajgopal, 2015; Kedia & Rajgopal, 2011) at the individual regulator level and more specifically, SEC comment letters. Cassell et al. (2013) investigate the determinants and consequences of receiving SEC comment letters. Johnston and Petacchi (2017) examine the content, resolution and ensuing informational consequences of SEC comment letters. Bens et al. (2016) investigate the role of SEC comment letters in resolving uncertainty about firms' fair value estimates. Dechow, Lawrence, and Ryans (2016) show that SEC comment letters contain material information that can affect security pricing. Kubick, Lynch, Mayberry, and Omer (2016) find that firms decrease their tax avoidance behaviour after receiving tax-related SEC comment letters. Cunningham et al.

(2016) report that firms reduce accrual-based earnings management after receiving a SEC comment letter. Li and Liu (2017) find that IPOs receiving SEC comment letters have lower valuations. I extend this line of literature by examining whether SEC staff members exhibit their personal styles in their reviewing of firms' filings.

Third, this paper contributes to the literature that examines the determinants of firms' accounting quality. Prior research has documented that several firm characteristics affect accounting quality. For example, strong performance, low leverage, the use of principles-based accounting principles, effective internal control procedures, greater audit efforts and the absence of capital raising activities have been shown to be positively associated with earnings quality (Barth, Landsman, & Lang, 2008; Caramanis & Lennox, 2008; DeFond & Jambalvo, 1994; DeFond & Park, 1997; Doyle, Ge, & McVay, 2007; Teoh, Welch, & Wong, 1998).⁹ I contribute to this line of literature by showing that firms' accounting quality is also shaped by which SEC staff member reviewing the 10-K filings.

The rest of the paper is organised as follows. Section 2 discusses literature review on SEC regulation, institutional background and develops hypotheses. Section 3 discusses the research design, including the empirical methods and sample selection. Section 4 reports the empirical results. Section 5 discusses the additional tests. Section 6 concludes the paper.

2. Literature review, institutional background and hypotheses development

2.1. Literature review on SEC regulation

The SEC is an important regulator in the U.S. capital markets and there have been many papers that try to shed light on the functions and effectiveness of the SEC.

Kedia and Rajgopal (2011) hypothesise that constraints facing the SEC affect the SEC's decisions to carry out enforcement actions on firms. Consistent with the resource-constrained

⁹ Interested readers can refer to Dechow et al. (2010) for a more complete review of the literature.

view, the SEC is more likely to investigate firms located closer to its offices. Correia (2014) offers evidence that firms with political connections are less likely to be involved in SEC enforcement actions and if prosecuted, face lower penalties, consistent with the idea of regulatory capture. deHaan et al. (2015) investigate the consequences of the "revolving door" for trial lawyers at the SEC's enforcement division and contrary to popular beliefs, the "revolving door" phenomenon seems to help rather than hurt the SEC in its enforcement activities. Heese, Khan, and Ramanna (2017), in contrast to Correia (2014), offer evidence that politically connected firms are subject to stricter enforcement actions by the SEC (greater likelihood of receiving comment letters and more extensive issues discussed), which is inconsistent with the idea of regulatory capture.

Some papers have looked at specific regulations proposed by the SEC and find mixed evidence on the impact of such regulations. Heflin, Subramanyam, and Zhang (2003) examine whether Regulation Fair Disclosure (Reg FD)'s prohibition of selective disclosure impairs the flow of financial information to the capital markets prior to earnings announcements. They find no evidence of Reg FD impairing the information available to investors, and interestingly, some of the evidence suggests an improvement in information asymmetry. This finding is also echoed in Eleswarapu, Thompson, and Venkataraman (2004) and Ahmed and Schneible (2007). However, not all parties have benefited from this regulation, Gomes, Gorton, and Madureira (2007) show that the adoption of Reg FD causes a significant shift in analyst attention away from small firms, causing them to face higher costs of capital. Zhang and Zheng (2011) look at Regulation G, which requires firms to reconcile proforma earnings with GAAP earnings, and offer evidence that reconciliations help to reduce mispricing. Fang, Huang, and Karpoff (2016) investigate Regulation SHO, which allows certain stocks to be exempted from short sale price tests, easing the short-sell constraints. The evidence suggests that these stocks manage earnings less and price efficiency improves afterwards.

2.2. Institutional background

The Sarbanes-Oxley Act of 2002 requires the SEC to review a SEC registrant's filings at least once every three years. When the SEC deems a filing to be materially deficient or when the SEC requires further clarifications from the firm, the SEC will issue a comment letter. The recipient of the letter is required to respond within ten days, initiating a dialogue between the firm and the SEC. The SEC staff member may request additional information so the staff member can have a better understanding of the firm's disclosure. The SEC might also ask the firm to revise or provide additional disclosure in document filed with the SEC, or to provide additional or different disclosure in a future filing with the SEC. A firm generally responds to each comment in a letter to the staff member and, if appropriate, by amending its filings or agreeing to effect such changes in future filings. One or more rounds of letter exchanges ensue until the SEC is satisfied with the firm's responses and issues a "no further comment" letter.

Dechow et al. (2016) show that the comment letters are predominantly related to firms' annual and quarterly financial reports (Form 10-Ks and Form 10-Qs) while other non-routine transactional filings, such as registration and prospectus filings, receive less attention. Because I am interested in financial reports, I focus on SEC comment letters on Form 10-Ks.

Reviews of filings are conducted by Division of Corporation Finance (DCF). The DCF has eleven offices that implement the filing review process. Listed firms are assigned to an office based on their four-digit SIC code.¹⁰ Firms sharing the same three-digit SIC codes are typically assigned to the same office while firms with the same two-digit SEC code may be allocated to different offices. Given that firms from the same industry are assigned to the same office, and the same firm may be allocated to the same staff member for reviews, the SEC staff member effect can be a manifestation of the industry fixed effects or firm fixed effects. I investigate whether there is a fixed matching between a firm and a

¹⁰ Under certain circumstances a firm's filing may be reviewed by a different office, such as when the filing is associated with a transaction that pertains to another office's area of expertise or if the Division is conducting targeted reviews of specific disclosure items. But, in general, each office's ability to review filings made by firms assigned to a different office is limited because their staffs maintain specific industry expertise (Blackburne, 2014).

staff member. The statistics show that the likelihood of a firm being assigned to the same SEC staff twice in a row is 42%, that is, the majority of firms are likely reviewed by a different SEC staff member the next time. This finding somewhat alleviates the concern. Nevertheless, in the analyses, I deal with this concern by including firm fixed effects in the model, which effectively controls for industry fixed effects, since firms usually do not change their industry membership.

The eleven DCF offices are: Healthcare & Insurance, Consumer Products, Information Technologies & Services, Natural Resources, Transportation & Leisure, Manufacturing & Construction, Financial Services, Real Estate & Commodities, Beverages & Apparel & Mining, Electronics & Machinery and Telecommunications. Each office is staffed with 25 to 35 professionals, most of whom are accountants or lawyers. It is headed by one Assistant Director, at least two Accounting Branch Chiefs and the rest are professional staff members.¹¹

The DCF states on its website that “In its filing reviews, the Division concentrates its resources on critical disclosures that appear to conflict with Commission rules or the applicable accounting standards and on disclosures that appears to be materially deficient in explanation or clarity”. The scope of the reviews may be 1) a full cover-to-cover review, where the entire filing is examined; 2) a review where the staff focus on financial statements and related disclosures, such as Management’s Discussion and Analysis of Financial Conditions; and 3) a targeted review where the staff focuses on selected items in the filing. The Division does not disclose the criteria it uses to select firms to review, to uphold the integrity of the review process.

The review usually involves one examiner and one reviewer. The examiner will examine the filings and evaluate the disclosures from an investor’s perspective. When she identifies cases where improvement can be made in disclosure clarity and compliance with existing regulations, she will offer such comments to the firm. In many cases, a second person is assigned to review the filing and the comments proposed by the examiner to help achieve consistency in comments across filing reviews.¹²

¹¹ Please refer to <https://www.sec.gov/divisions/corpfin/cffilingreview.htm> for complete details.

¹² As it is not explicitly stated on the SEC website, my reading of the literature seems to suggest that the examiner is the one who signs the comment letters. This is because the examiner is the one that looks at firms’ filings in

I deem the person who signs the comment letter as the one who is responsible for the comments. I conduct textual analyses to identify the official designation of the signing person. I find that virtually all professionals within the DCF office can sign on the comment letters. Although the heads of the office (accounting branch chiefs and assistant directors) are responsible to sign the majority of letters, about 32% of letters are signed by other staff members, including staff accountants and staff attorneys.

2.3. Hypotheses development

Do SEC staff members exhibit their personal styles when enforcing security regulations? The answer to the question is far from obvious. On the one hand, there exist powerful arguments supporting a negative answer. First, Lieberman and O'Connor (1972) and Hannan and Freeman (1984) show that individuals' choices are limited by environmental and organizational constraints, such as standard procedures and norms. The SEC has taken measures to ensure consistency in reviewing filings. For each comment letter, a reviewer might be assigned for the purpose. In addition, the SEC regularly publishes Staff Accounting Bulletins to reflect the official views regarding accounting-related disclosure practices. These Bulletins serve as guidance for staff members in reviewing the SEC filings. What's more, GA0 (2013) reports that the DCF conducts internal supervisory control activities to ensure uniformity in reviewing SEC filings. These activities include archiving all reviews and the related documents, and regular meetings among SEC staff members. The archived documents serve as benchmarks for later reviews, while regular meetings help to share information and standardise the practices of individual staff members. These measures taken by the SEC reduce the chances of idiosyncratic influence. Second, Hitt and Tyler (1991) and Hambrick (2007) argue that the socialisation and selection process limits the heterogeneity of top managers. In the case of DCF staff members, given the job requirements, almost all DCF staff members are either accountants or lawyers, and they typically

details to propose issues for discussion and drafts the comment letters. SEC comment letters do not usually specify who is the examiner and who is the reviewer, limiting my further exploration on this issue.

have college degrees. The similarity in educational and professional backgrounds promotes homogeneity in reviewing the SEC filings.

On the other hand, Hambrick and Mason (1984) propose *upper echelons theory*, which suggests that decisions are affected by individual specific factors. The impact of idiosyncratic factors is especially meaningful in complex and ambiguous situations, where the optimal solution is not easily defined. In these situations, decision makers operate within bounds of rationality, and their decisions can be influenced by their own experiences and values (Finkelstein & Hambrick, 1996; Hambrick, 2007; Hambrick & Mason, 1984). The upper echelons theory is well supported by empirical results. Prior studies demonstrate that managers have individual styles and such styles have substantial impact on firms' investment and financing decisions, disclosures, financial reporting policies, and tax avoidance behaviour (Bamber et al., 2010; Dejong & Ling, 2013; Dyreng et al., 2010; Ge et al., 2011; Yang, 2012). In the SEC filing review setting, the goal is to identify circumstances where improvement can be made in the filings' expositional clarity and compliance with SEC rules and accounting standards. This presents a complex and ambiguous situation where subjective assessment is required and individual attributes can play an important role. For example, a staff member with many years of accounting experience may find the firm's disclosure of accounting policies sufficient, while another staff member with less accounting experience may demand more disclosures from the firm. Depending on experience and education, SEC staff members may also be divided on the degree of compliance with SEC rules and accounting standards. In sum, whether the SEC staff members exhibit personal styles in reviewing SEC filings is an open empirical question.

Cassell et al. (2013) are probably the first study to investigate the SEC comment letters. They find that, in addition to the factors explicitly stated in Section 408 of the Sarbanes-Oxley Act, poor profitability, high complexity, small auditing firm, and weak corporate governance increase the likelihood of receiving a comment letter, the extent of comments, and the cost of remediation. I am unable to examine whether the SEC staff members exhibit personal styles in their decisions to issue comment letters, because I do not get to observe the SEC members on letters that are never sent out. I can, however, study whether the SEC staff members exhibit their personal styles in terms of remediation

costs. Cassell et al. (2013) use two proxies for remediation costs. One is the number of days between the initial receipt of a comment letter and the receipt of a final SEC “no further comment” letter while the other is the number of rounds of letter exchanges between the SEC and the firm before the issuance of “no further comment” letter.

If the SEC staff members exhibit personal styles in reviewing firms’ filings, some staff members may be more demanding on firms than others (due to personal attributes, such as risk-aversion), resulting in consistently higher remediation costs. My first hypothesis (stated in the alternative form) is as follows.

H1: The styles of SEC staff members affect the remediation costs.

When reviewing SEC filings, staff members are required to identify areas where there is a lack in clarity and compliance with regulations. These areas represent deviations from norms, and a good understanding of the norms of the relevant topics is essential. Since SEC staff members have different levels of experience and familiarity with each topic, they may choose to focus on areas where they have comparable advantage, resulting in substantial differences in the contents of their comment letters. Cassell et al. (2013) measure the contents of letters through the number of topics raised in the letter. I include this in the analysis. In addition, I measure the contents through the emphasis of each letter. The emphasis on each category is computed by dividing the number of topics in the category by the total number of topics. If SEC staff members exhibit personal styles, the contents of their comment letters will differ substantially. This leads to H2, which is stated in the alternative form.

H2: The styles of SEC staff members affect the contents of the comment letters.

Several studies document the impact of SEC comment letters on firms’ financial reporting. Bozanic, Dietrich, and Johnson (2014) show that firms usually modify their annual reports according to intentions expressed in the SEC comment letters. They also find that disclosure changes prompted by the SEC comment letters are associated with a decrease in information asymmetry and an increase in media and analyst following. Johnston and Petacchi (2017) find that firms frequently revise their financial statements after receiving SEC comment letters. When the comment letter issues are resolved,

the adverse selection component of the bid-ask spread decreases while Earnings Response Coefficients (ERCs) increase. Bens et al. (2016) document that after firms receive SEC comment letters focusing on their fair value disclosure policies, investor uncertainty regarding these firms' fair value estimates is reduced, compared to the pre-letter period. Their findings highlight the role played by the SEC comment letters in fair value disclosures. Brown et al. (2016) find that firms modify their subsequent years' risk factor disclosures when their industry peers receive SEC comments on this disclosure, suggesting a spill-over effect. Dechow et al. (2016) show abnormally high level of insider trading prior to the public disclosure of SEC comment letters related to revenue recognition. They also find a small negative return at the comment letter release date and a negative drift in the post-release period. Their evidence suggests that investors do not properly incorporate the pricing implication of SEC comment letters. Cunningham et al. (2016) show that after receiving SEC comment letters, firms reduce their accrual-based earnings management, as a result of heightened monitoring from the SEC. Overall, prior literature suggests that the SEC comment letters have substantial impact on firms' financial reporting.

If the SEC staff members exhibit personal styles in their comment letters, I expect that their styles will in turn influence the firms' financial reporting. My H3 is stated in the alternative form.

H3: The styles of SEC staff members affect the financial reporting quality of the firms receiving the letter.

3. Research design

3.1. Sample formation and variable definition

As SEC only makes comment letters publicly available on EDGAR from August 2004, I choose 2005 as the starting year. Hence, my sample covers the period from 2005 to 2015. I collect firms' accounting variables from Compustat, stock prices from CRSP, executives' info from Execucomp, annual reports from EDGAR and comment letter information from Audit Analytics. I extract personal information of SEC Staff members by searching for their LinkedIn pages on Google.

Audit Analytics Comment Letter Conversation database organises the exchange of comment letters between firm and the SEC into conversations (based on the topics and filings covered in the comment letters). For each conversation, I can extract the name(s) of SEC staff member(s) involved in the conversation. For the tests, I restrict the sample to the conversations where there is only one SEC staff member involved¹³, to more clearly identify the SEC staff member's individual style effect and the comment letter conversation topic is about the 10-K filed with the SEC. I deem the SEC staff member who signs the comment letter to be the main one responsible for that firm's financial statements and can influence that firm's financial reporting.¹⁴ One example of comment letter is given in Figure 1. In the sample, I observe that 43.40% of comment letters are signed by accounting branch chiefs, 24.90% are signed by assistant directors, 14.33% are signed by senior assistant chief accountants, 3.44% are signed by senior staff accountants, 3.18% are signed by staff accountants, and the rest are signed by others (attorney-advisor, senior counsel, etc). I also observe that for each office, there are always at least two different staff members signing comment letters every year, alleviating the concern that I am just capturing the effect of the SEC office.^{15,16}

As required by the Sarbanes-Oxley Act of 2002, the SEC is required to undertake some level of review of each reporting company at least once every three years. Hence, not every company is issued with one comment letter every year. For example, a company might be issued with a comment letter by Adam in 2007 and then again by Adam in 2010. In my study, I assume that in 2008 and 2009, the company's accounting is also "affected" by Adam, i.e. I fill in the missing years by the name of the most recent staff member.^{17,18}

¹³ The number of conversations includes more than one SEC staff member is 6,314 and these are dropped from the final sample. The remaining observations comprise 72% of the original sample from the Audit Analytics Database.

¹⁴ A similar approach is used by Gao et al. (2016) to identify the loan officers responsible for approving bank loans.

¹⁵ Furthermore, I have firm fixed effects in my regressions. As firms rarely change their business, their industry classifications remain relatively constant, and hence the effect of SEC office they are assigned to will be absorbed by firm fixed effects.

¹⁶ In the sample period, the median number of firms each staff member covers each year is 20.

¹⁷ I believe the backfilling of data is appropriate as firms have no incentives to change their disclosures back to original positions as their future filings might be reviewed by the same staff member in the future. Furthermore, this practice just adds more noise to the variable measurement, which biases against finding significant results.

¹⁸ I have also done a sensitivity check by removing the backfilled data and I get similar results.

I use two variables to reflect firms' remediation costs: *round* – the number of exchanges between SEC and the firm (from the first letter to the “no further comment” letter), and *time* – the number of days between the first letter and the “no further comment” letter. To examine the comment letter contents, I use a variety of variables. *Topic* is the number of topics raised in the comment letter conversation as defined by Audit Analytics. Emphases on different topics are measured by *emp_accdis* – the number of Accounting Disclosure topics divided by the total number of topics, *emp_intcon* – the number of Internal Control topics divided by the total number of topics, *emp_mda* – the number of MD&A topics divided by the total number of topics, *emp_regfil* – the number of Regulatory Filing¹⁹ topics divided by the total number of topics, *emp_risk* – the number of Risk Factor Disclosure topics divided by the total number of topics, and *emp_other* – the number of Other Disclosure topics divided by the total number of topics.

Emphases on sub-topics in Accounting Disclosure are measured by *emp_acccore* – the number of Core Earnings topics divided by the total number of accounting topics, *emp_accnon* – the number of Non-Core Earnings topics divided by the total number of accounting topics, *emp_accclass* – the number of Accounting Classification topics divided by the total number of accounting topics, and *emp_accfv* – the number of Fair Value topics divided by the total number of accounting topics.

Lastly, to examine firms' financial reporting quality, I employ four different measures. *Dacc* is the level of discretionary accrual, calculated based on the cross-sectional performance-matched modified Jones model (Kothari, Leone, & Wasley, 2005), *fscore* is the measure of financial misstatement (Dechow et al., 2011), *file_size* is the natural logarithm of the size of 10-K and *fog_index* is the measure of readability of the 10-K (Loughran & McDonald, 2016). I measure *dacc* and *fscore* in the following year (t+1) to address the concern that firms might not change their accounting practices and financial figures immediately in the year they receive the comment letters. This is also consistent with the argument in Cunningham et al. (2016) where the receipt of a comment letter serves as a salient cue that the firm is being monitored by the SEC. If the firm views this monitoring as an additional

¹⁹ Regulatory Filings include specific Reg S-K and Reg S-X disclosure requirements, among others.

constraint on their accrual earnings management, forcing them to re-evaluate the perceived costs of engaging in such earnings management, they will decrease their discretionary accruals in the period following the receipt of a comment letter, and this can also affect their F-score.

3.2. Empirical methods

To test whether SEC staff members' individual styles affect the remediation costs, comment letter contents and financial reporting quality of firms, I regress the outcome variables of interest on SEC staff member fixed effects and test whether the SEC staff fixed effects are significant. Specifically, I regress the variables of interest (*round*, and *time* for remediation costs; *topic*, *emp_accdis*, *emp_intcon*, *emp_mda*, *emp_regfil*, *emp_risk*, *emp_other*, *emp_acccore*, *emp_accnon*, *emp_accclass* and *emp_accfv* for comment letter contents; *dacc*, *fscore*, *file_size*, *fog_index* for financial reporting quality) on a set of SEC staff indicator variables as well as a set of firm indicator variables²⁰, year indicator variables, and time-varying control variables. To be able to identify the SEC staff fixed effects, I only retain observations of SEC staff members who have "switched" among firms, i.e. an SEC staff member must be observed in at least another firm in the sample and/or a firm must be commented on by at least 2 SEC staff members in the sample.

$$\begin{aligned}
Outcome_{it} = & \alpha_0 + \alpha_1 big_n_{it} + \alpha_2 second_tier_{it} + \alpha_3 audtenure_{it} + \alpha_4 restate_{it} + \\
& \alpha_5 m_weak_{it} + \alpha_6 lnmarketcap_{it} + \alpha_7 loss + \alpha_8 m_a_{it} + \alpha_9 restructuring_{it} + \\
& \alpha_{10} salesgrowth_{it} + \alpha_{11} segments_{it} + \alpha_{12} bankruptcyrank_{it} + \alpha_{13} ceo_chair + \\
& \alpha_{14} ceo_tenure_{it} + \alpha_{15} cfo_tenure + \alpha_{16} highvolatility + \alpha_{17} auditordismissed_{it} + \\
& \alpha_{18} auditorresigned + Firm_i + Year_t + Staff_j + \varepsilon_{it}
\end{aligned} \tag{1}$$

In each case, I perform an F-test for the joint significance of the SEC staff indicator variables to test for the presence of SEC staff fixed effects. While year and firm fixed effects control for year-

²⁰ The SEC Corporation Finance Division assigns firms to one of its 11 SEC offices based on the firms' primary industries. As the firms' primary industries do not change much over time, the firm fixed effects have already subsumed the SEC office fixed effects and hence I do not control for SEC offices in the analyses.

and firm-specific factors associated with enforcement processes and reporting outcomes, I also control for time-varying control variables that have been shown to be associated with the outcome variables. Following prior literature (Cassell et al., 2013), I control for auditor characteristics, *big_n*, an indicator variable for Big N auditor, *second_tier*, an indicator variable for second tier auditor, *audtenure*, tenure of the current auditor with the firm, *auditordismissed*, an indicator variable if the auditor is dismissed, *auditorresigned*, an indicator variable if the auditor resigns. I also control for management characteristics with *ceo_chair*, an indicator variable for CEO that is also the chair of board of directors, *ceo_tenure*, the tenure of the CEO with the firm, *cfo_tenure*, the tenure of the CFO with the firm. Lastly, I also control for firms' financial performances with *m_weak*, an indicator for firms with material weaknesses in its internal controls, *restate*, an indicator variable if the firm restates its financial statements, *lnmarketcap*, natural logarithm of firm's market capitalisation, *loss*, an indicator variable for loss-making firms, *m_a*, an indicator variable for firms engaging in mergers & acquisition activities, *restructuring*, an indicator variable for firms that are restructuring the business, *salesgrowth*, percentage change in revenue from prior year, *segments*, the number of business segments reported, *bankruptcyrank*, the decile rank of the firm's financial health, *highvolatility*, an indicator for firms in the highest quartile of stock returns volatility in the prior 12 months.

3.3. Robustness tests

I employ two tests to check the robustness of the results. The first test is to control for the impact of the management on firms' policies (Bamber et al., 2010; Bertrand & Schoar, 2003; Dyreng et al., 2010; Ge et al., 2011; Yang, 2012). To do so, I employ the same regression equation as the benchmark model but add in the CEO fixed effects. I then proceed to perform an F-test for the joint significance of the SEC staff indicator variables to test for a SEC staff fixed effect, incremental to the CEO fixed effects.

$$Outcome_{it} = \alpha_0 + \alpha_1 big_n_{it} + \alpha_2 second_tier_{it} + \alpha_3 audtenure_{it} + \alpha_4 restate_{it} + \alpha_5 m_weak_{it} + \alpha_6 lnmarketcap_{it} + \alpha_7 loss + \alpha_8 m_a_{it} + \alpha_9 restructuring_{it} +$$

$$\begin{aligned}
& \alpha_{10}salesgrowth_{it} + \alpha_{11}segments_{it} + \alpha_{12}bankruptcyrank_{it} + \alpha_{13}ceo_{chair} + \\
& \alpha_{14}ceo_{tenure}_{it} + \alpha_{15}cfo_{tenure} + \alpha_{16}highvolatility + \alpha_{17}auditordismissed_{it} + \\
& \alpha_{18}auditorresigned + Firm_i + Year_t + CEO_k + Staff_j + \varepsilon_{it}
\end{aligned} \tag{2}$$

Secondly, I conduct ‘‘falsification tests’’ to show that SEC staff members indeed have individual style effects on the covered firms. I do so by looking at firm years where there is a change in the SEC staff member covering the firm. I regress the outcome variables in the years prior to the switch on an indicator variable for the new SEC staff member. I expect that there should not be any significant fixed effects of the new SEC staff member on the firm’s prior outcomes. For example, assume that firm XYZ has a new SEC staff member (B) covering the firm in 2011. I look at the five years prior to the switch (2006 – 2010) and regress the outcome variables for 2006 – 2010 on staff indicator for B. I expect that the fixed effect should not be significant as B could not influence firm XYZ’s enforcement process and financial reporting at that point in time yet (pseudo SEC staff fixed effects).

3.4. Staff member fixed effect: Observable characteristics

The tests so far only help to establish whether SEC staff members’ individual styles affect the covered firms’ remediation costs, comment letter contents and financial reporting quality. In the next test, I want to learn more about what makes up the SEC staff members’ individual styles and how staff members’ characteristics impact the covered firms. To analyse the role of staff members’ characteristics in influencing remediation costs, comment letter contents and financial reporting quality, I re-estimate regressions similar to the benchmark equation, but replacing the staff member indicator variables with a set of variables representing the staff characteristics:

$$\begin{aligned}
Outcome_{it} = & \alpha_0 + \alpha_1big_n_{it} + \alpha_2second_tier_{it} + \alpha_3audtenure_{it} + \alpha_4restate_{it} + \\
& \alpha_5m_weak_{it} + \alpha_6lnmarketcap_{it} + \alpha_7loss + \alpha_8m_a_{it} + \alpha_9restructuring_{it} + \\
& \alpha_{10}salesgrowth_{it} + \alpha_{11}segments_{it} + \alpha_{12}bankruptcyrank_{it} + \alpha_{13}ceo_{chair} + \\
& \alpha_{14}ceo_{tenure}_{it} + \alpha_{15}cfo_{tenure} + \alpha_{16}highvolatility + \alpha_{17}auditordismissed_{it} + \\
& \alpha_{18}auditorresigned + Firm_i + Year_t + \sum \beta * Staff_characteristic_{jt} + \varepsilon_{it}
\end{aligned} \tag{3}$$

The staff characteristics I look at are gender, age, CPA qualification, MBA degree holder, and SEC tenure. These variables have been commonly used by prior papers (Bamber et al., 2010; Bertrand & Schoar, 2003; Ge et al., 2011). Gender is known to be associated with behaviour and prior papers have demonstrated that females tend to be more risk averse than males (Borghans et al., 2009; Eckel & Grossman, 2008). Age shapes behaviour, because experience in the youth affects individuals' valuation and choices (Hambrick & Mason, 1984; Malmendier & Nagel, 2011). Professional qualification and experience substantially influence individual preferences (Finkelstein & Hambrick, 1996; Franke, 2001; Goertzel & Hengst, 1971).

I refrain from making any prediction about the directional effects of these variables as I am doing a very exploratory study of these observable characteristics. *Female* is dummy variable that equals to 1 if the SEC staff member is female, and 0 otherwise. *Age* is the biological age of the SEC staff member. I approximate this number by extracting the year the SEC staff member obtains her college degree and assume that a typical person obtains college degree at the age of 22. *CPA* is dummy variable that equals to 1 if the SEC staff member has obtained CPA qualification, and 0 otherwise. *MBA* is dummy variable that equals to 1 if the SEC staff member has obtained an MBA degree, and 0 otherwise. *Sec_exp* is the number of years the staff member has been working at SEC.

I hand collect information on staff characteristics by locating their LinkedIn profile pages and extract relevant information. An example of the SEC staff member's LinkedIn page is shown in Figure 2 (identifying information has been hidden). Not all SEC staff members have a LinkedIn page and I am only able to collect information on 66 SEC staff members, reducing the number of usable observations to 5,101.

4. Empirical results

4.1. Descriptive statistics

My final sample consists of 14,207 firm-year observations where I can obtain all the variables of interest. I report the descriptive statistics of the main variables of interest in Table 1. The mean of

round is 4.73, the mean of *time* is 68.8 days. For comment letter content, on average, SEC staff members raise about 10.15 topics, discuss Accounting Disclosure issues 23.1% of the time (*emp_accdis*), Internal Control issues 1.4% of the time (*emp_intcon*), MD&A issues 27.4% of the time (*emp_mda*), Regulatory Filings 17.2% of the time (*emp_regfil*), Risk Factors 2.4% of the time (*emp_risk*) and Other issues 28.4% of the time (*emp_other*). For subcategories in accounting topics, on average, SEC staff members discuss Core Earnings issue 18.4% of the time (*emp_acccore*), Non-Core Earnings issue about 40.4% of the time (*emp_accnon*), Classification issues about 11.5% of the time (*emp_accclass*) and Fair Value issues about 7.5% of the time (*emp_accfv*). The mean of *dacc* is -0.005, the mean of *fscore* is 0.975, the mean of *file_size* (in Mb) is 8.81 and the mean of *fog_index* is 16.06. This is largely in line with the means reported in prior literature.

For example, Cassell et al. (2013) report the mean for *round* is 2.75, the mean for *time* is 80 days and the mean for *topic* is 11.7. Ge et al. (2011) report the mean of -0.012 for their measure of discretionary accrual and 1.082 for the F-Score in their sample. The mean of *file_size* (in Mb) in my sample is 8.81, which is higher than the mean of 2.51 reported in Loughran and McDonald (2014). However, my sample covers firms that have been issued comment letters and it could be that these firms are more complex than the general population of firms covered in Loughran and McDonald (2014), and I also cover a more recent sample (2005 to 2015) than Loughran and McDonald (2014). The mean of *fog_index* is 16.06 in my sample, which is just slightly lower than the reported mean of 18.94 in Loughran and McDonald (2014).

Due to the large number of control variables, I will just discuss only a subset. The mean of *big_n* is 0.746, the mean of *m_weak* is 0.084, the mean of *loss* is 0.291 and the mean of *segments* is 2.897. Cassell et al. (2013) report the mean of *big_n* is 0.781, the mean of *m_weak* is 0.066, the mean of *loss* is 0.249 and the mean of *segments* is 2.053. It seems that my sample descriptive statistics are largely in line with prior literature.

Appendix C1 provides the correlation matrix of the main variables used for empirical tests. Many of control variables are significantly correlated with the dependent variables of interests,

justifying the need to add in these control variables in the regressions. The correlation matrix also seems to suggest some evidence of style clustering. For example, staff members who focus on internal control issues (*emp_intcon*) are also likely to focus on risk factor disclosures (*emp_risk*), with the Spearman correlation coefficient to be 0.06, significant at 1%. Staff members who focus on MD&A issues (*emp_mda*) are also likely to focus on other disclosure issues (*emp_other*), with the Spearman correlation coefficient to be 0.22, also significant at less than 1%. While the idea of style clustering is interesting, I do not perform further analysis on this issue as it requires further theoretical developments and more sophisticated statistical techniques which are beyond the scope of the present study.

4.2. Baseline results – Remediation costs (H1)

Panel A of Table 2 presents the results for the analyses of whether SEC staff members have effect on firms' remediation costs. For each variable of remediation costs, the first row reports the adjusted R-squared from a baseline regression without the SEC staff indicator variables (i.e. only firm fixed effects, year fixed effects and time-varying firm-level controls). The second row reports the F-statistics, the associated p-value from the tests of the joint significance of the SEC staff fixed effects, and the adjusted R-squared when I add in the SEC staff indicator variables into the regression (i.e., Equation 1).²¹

The first remediation cost proxy I examine is number of rounds (*round*). The adjusted R-squared in the baseline regression is 66.4%. When I include SEC staff fixed effects, the adjusted R-squared increases slightly to 69.2%. The F-statistic is 8.46, which is significant at less than 1% level. I can therefore reject the null hypothesis that SEC staff members have no impact on the number of comment letter rounds with the firms.

The second remediation cost proxy I examine is time to close review process (*time*). The adjusted R-squared in the baseline regression is 67.3%. When I include SEC staff fixed effects, the

²¹ I also report the full regression results (with coefficient estimates for control variables) of the main tests in Appendix C2 for the benefit of readers.

adjusted R-squared increases to 70.4%. The F-statistic is 9.34, which is significant at less than 1% level. I can reject the null hypothesis that SEC staff members have no impact on the time of the comment letter process.

To assess the economic significance of the SEC staff fixed effects on remediation costs, I examine the distribution of the SEC staff fixed effects which are reported in Panel B of Table 2. I report the mean, median, 25th percentile and 75th percentile of the estimated SEC staff fixed effects. Overall, the difference between an SEC staff member at the 75th percentile and an SEC staff member at the 25th percentile can be quite significant.²²

The first row (*round*) in Panel B shows that SEC staff member at 75th percentile requires 52% more rounds than SEC staff member at 25th percentile (after adjusting for log-transform of dependent variables). The second row (*time*) in Panel B shows that SEC staff member at 75th percentile requires 142% more days than SEC staff member at 25th percentile to close the comment process.

Overall, across 2 measures of remediation costs, I find consistent results that support the hypothesis that SEC staff members have effects on firms that they issue comment letters for.

4.3. Baseline results – Comment letter contents (H2)

Panel A of Table 3 presents the results for the analyses of whether SEC staff members have effect on firms' comment letter contents. For each variable of comment letter contents, the first row reports the adjusted R-squared from a baseline regression without the SEC staff indicator variables (i.e. only firm fixed effects, year fixed effects and time-varying firm-level controls). The second row reports the F-statistics, the associated p-value from the tests of the joint significance of the SEC staff fixed

²² In addition, I also notice that the percentage of staff fixed effects estimated that are significant at the 10% conventional level is relatively high (Appendix C3). It varies between 15% and 67% depending on the variables of interest. This ensures that the results are not driven by a small number of significant coefficients. To gauge whether the percentage figure is large or small, one should remember that under the null hypothesis that individual SEC staff members have no effects incremental to the other variables considered in the regressions, one would expect about 10 percent of SEC staff members to have coefficients significant at the 10 percent level (Gul et al., 2013).

effects, and the adjusted R-squared when I add in the SEC staff indicator variables into the regression (i.e., Equation 1). As there are 11 variables to capture different comment letter contents, I will just discuss some of the variables below. For the remaining variables, interpretation of the results is similar.

Following Cassell et al. (2013), I measure the contents of comment letters through the number of topics raised in the comment letter. In addition, I measure the contents through emphases on different categories.

The first comment letter content proxy I examine is number of topics (*topic*). The adjusted R-squared in the baseline regression is 66.1%. When I include SEC staff fixed effects, the adjusted R-squared increases to 74.1%. The F-statistic is 26.09, which is significant at less than 1% level. I can reject the null hypothesis that SEC staff members have no impact on the number of topics in the comment letter process.

Turning to the emphases on different topics, the first emphasis measure, *emp_accdis*, is computed as the number of topics about Accounting Disclosures divided by the total number of topics in the comment letter conversation. The adjusted R-squared in the baseline regression is 61.4%. When I include SEC staff fixed effects, the adjusted R-squared increases to 68.9%. The F-statistic is 22.69, which is significant at less than 1% level. I can therefore reject the null hypothesis that SEC staff members have no impact on the emphasis of Accounting Disclosure in conversation with the firms.

The second emphasis proxy I examine is emphasis on Internal Controls (*emp_intcon*). This is computed as the number of topics about Internal Controls divided by the total number of topics in the comment letter conversation. The adjusted R-squared in the baseline regression is 66.9%. When I include SEC staff fixed effects, the adjusted R-squared increases to 68.7%. The F-statistic is 6.23, which is significant at less than 1% level. I can reject the null hypothesis that SEC staff members have no impact on the emphasis of Internal Controls in conversation with the firms.

Turning to sub-categories in accounting disclosure, the first accounting sub-topic proxy I examine is emphasis on Core Earnings issue (*emp_acccore*). This is computed as the number of accounting topics about Core Earnings divided by the total number of accounting topics in the comment

letter conversation. The adjusted R-squared in the baseline regression is 63.7%. When I include SEC staff fixed effects, the adjusted R-squared increases to 67.1%. The F-statistic is 9.67, which is significant at less than 1% level. I can reject the null hypothesis that SEC staff members have no impact on the emphasis of Core Earnings in conversation with the firms.

To assess the economic significance of the SEC staff fixed effects on comment letter contents, I examine the distribution of the SEC staff fixed effects which are reported in Panel B of Table 3. I report the mean, median, 25th percentile and 75th percentile of the estimated SEC staff fixed effects. Overall, the difference between an SEC staff member at the 75th percentile and an SEC staff member at the 25th percentile can be quite significant.

The first row (*topic*) in Panel B shows that SEC staff member at 75th percentile asks 51% more topics than SEC staff member at 25th percentile. The second row (*emp_accdis*) in Panel B shows that SEC staff member at 75th percentile comments about Accounting Disclosure issues 38% more than SEC staff member at 25th percentile. The fourth row (*emp_mda*) in Panel B shows that SEC staff member at 75th percentile comments about MD&A issues 31% more than SEC staff member at 25th percentile. The last row (*emp_accfv*) in Panel B shows that SEC staff member at 75th percentile comments about Fair Value issues 35% more than SEC staff at 25th percentile.

Overall, across 11 measures of comment letter contents, I find consistent evidence supporting the hypothesis that SEC staff members have effects on firms that they issue comment letters for.

4.4. Baseline results – Financial reporting quality (H3)

Panel A of Table 4 presents the results for the analyses of whether SEC staff members have effect on firms' financial reporting quality. For each variable of financial reporting quality, the first row reports the adjusted R-squared from a baseline regression without the SEC staff indicator variables (i.e. only firm fixed effects, year fixed effects and time-varying firm-level controls). The second row reports the F-statistics, the associated p-value from the tests of the joint significance of the SEC staff fixed

effects, and the adjusted R-squared when I add in the SEC staff indicator variables into the regression (i.e., Equation 1).

The first financial reporting quality I examine is discretionary accruals (*dacc*) in the following year. The adjusted R-squared in the baseline regression is 82.6%. When I include SEC staff fixed effects, the adjusted R-squared increases slightly to 82.8%. The F-statistic is 1.30, which is significant at less than 5% level. I can reject the null hypothesis that SEC staff members have no impact on the level of discretionary accruals reported by firms.

The second financial reporting quality I examine is *fscore* also in the following year. The adjusted R-squared in the baseline regression is 70.7%. When I include SEC staff fixed effects, the adjusted R-squared increases slightly to 71.2%. The F-statistic is 1.29, which is significant at less than 5% level. I can reject the null hypothesis that SEC staff members have no impact on the F-Score of firms' financial figures.

The third financial reporting quality I examine is *file_size*. The adjusted R-squared in the baseline regression is 88.7%. When I include SEC staff fixed effects, the adjusted R-squared increases slightly to 88.9%. The F-statistic is 1.70, which is significant at less than 1% level. I can reject the null hypothesis that SEC staff members have no impact on the size of 10-Ks filed by the firms.

The last financial reporting quality I examine is *fog_index*. The adjusted R-squared in the baseline regression is 55.6%. When I include SEC staff fixed effects, the adjusted R-squared increases slightly to 56.2%. The F-statistic is 1.21, which is significant at less than 5% level. I can reject the null hypothesis that SEC staff members have no impact on the readability of 10-Ks filed by the firms.

To assess the economic significance of the SEC staff fixed effects, I examine the distribution of the SEC staff fixed effects which are reported in Panel B of Table 4. I report the mean, median, 25th percentile and 75th percentile of the estimated SEC staff fixed effects. Overall, the difference between an SEC staff member at the 75th percentile and an SEC staff member at the 25th percentile can be quite significant.

The first row of Panel B reports the inter-quartile range for SEC staff member on the level of discretionary accrual is 0.057. This indicates that an SEC staff member at the 75th percentile influences firms to have discretionary accruals that are higher than firms covered by an SEC staff member at the 25th percentile by an amount equal to 5.7% of total assets. The second row of Panel B reports the inter-quartile range for SEC staff member on F-Score is 0.184. This is economically significant given that the average F-Score in my sample is only 0.975 (an F-Score less than 1 indicates a lower likelihood of financial misrepresentation than unconditional expectation and vice versa). The third row of Panel B indicates that an SEC staff member at the 75th percentile influences firms to have reports that are lengthier than firms covered by an SEC staff member at the 25th percentile by 35%. The last row of Panel B reports the inter-quartile range for SEC staff member on fog index is 1.35. This indicates that an SEC staff member at the 75th percentile influences firms to have fog index that are higher than firms covered by an SEC staff member at the 25th percentile by an amount equal to 1.35 years of education. This is economically significant given that the average fog index in my sample is only 16.06.

Overall, across 4 measures of financial reporting quality, I find consistent results that support the hypothesis that SEC staff members have effects on firms that they issue comment letters for.

4.5. Baseline results – Styles of Head vs Non-Head

Each DCF office is headed by one assistant director and two accounting branch chiefs. Combined, they sign the majority of comment letters. I am interested in knowing whether the styles of heads overshadow styles of other staff members. To examine this issue, I partition individual staff dummies into two groups: heads and non-heads. I then perform the F-test for the two groups separately. If the SEC staff member fixed effects are entirely due to personal styles of heads, I expect that the F-test on non-heads yields insignificant results. My results are reported in Table 5.

Table 5 show that F-test statistics are significant for both groups for all the dependent variables we examine, suggesting that both heads and non-heads exhibit individual styles. Non-head SEC staff members therefore also play an important role in shaping the SEC comment letter process. Consistent

with the notion that individuals holding leadership positions are more influential, I find that the F-statistics are higher for the Head group for 15 out of the 17 dependent variables I examine.

Overall, I find no evidence that the styles of non-head SEC staff members are overshadowed by the styles of heads.

4.6. Robustness test: Controlling for CEO fixed effects

Prior literature has demonstrated that the top managers' styles also have impact on firms' policies (Bertrand & Schoar, 2003; Ge et al., 2011). Therefore, I conduct additional analyses where I add in the fixed effects for CEO and check whether SEC staff fixed effects survive. I collect info on CEOs by merging the Compustat data with Execucomp which tracks CEOs by unique identifiers. The results are reported in Table 6. For each outcome variable, the first row reports the adjusted R-squared from the regression without the SEC staff indicator variables (i.e. only firm fixed effects, year fixed effects, CEO fixed effects and time-varying firm-level controls). The second row reports the F-statistics, the associated p-value from the tests of the joint significance of the SEC staff fixed effects, and the adjusted R-squared when I add in the SEC staff indicator variables into the regression (i.e., Equation 2).

Panel A reports the test results on firms' remediation costs. The first remediation cost proxy I examine is number of rounds (*round*). The adjusted R-squared in the first regression is 66.8%. When I include SEC staff fixed effects, the adjusted R-squared increases slightly to 70.5%. The F-statistic is 6.50, which is significant at less than 1% level. The second remediation cost proxy I examine is time to close (*time*). The adjusted R-squared in the baseline regression is 70.6%. When I include SEC staff fixed effects, the adjusted R-squared increases to 73.8%. The F-statistic is 6.33, which is significant at less than 1% level.

Panel B reports the test results on firms' comment letter contents. As earlier, I only discuss some of the variables that capture content here due to the constraint of space. The first content proxy I examine is number of topics (*topic*). The adjusted R-squared in the baseline regression is 70.6%. When I include

SEC staff fixed effects, the adjusted R-squared increases to 78.0%. The F-statistic is 17.12, which is significant at less than 1% level. The second content proxy I examine is emphasis on Accounting Disclosure issues (*emp_accdis*). The adjusted R-squared in the first regression is 63.5%. When I include SEC staff fixed effects, the adjusted R-squared increases to 71.2%. The F-statistic is 13.67, which is significant at less than 1% level. The third content proxy I examine is emphasis on Internal Controls (*emp_intcon*). The adjusted R-squared in the first regression is 67.2%. When I include SEC staff fixed effects, the adjusted R-squared increases to 69.4%. The F-statistic is 3.56, which is significant at less than 1% level. Turning to sub-categories in accounting disclosure topics, the first accounting sub-topic content proxy I examine is emphasis on Core Earnings issue (*emp_acccore*). The adjusted R-squared in the baseline regression is 67.4%. When I include SEC staff fixed effects, the adjusted R-squared increases to 71.1%. The F-statistic is 6.41, which is significant at less than 1% level.

Panel C reports the test results on firms' financial reporting quality. The first reporting outcome I examine is discretionary accruals (*dacc*). The adjusted R-squared in the first regression is 88.8%. When I include SEC staff fixed effects, the adjusted R-squared increases slightly to 89.1%. The F-statistic is 1.39, which is significant at less than 1% level. The second reporting outcome I examine is *fscore*. The adjusted R-squared in the first regression is 79.1%. When I include SEC staff fixed effects, the adjusted R-squared increases slightly to 79.8%. The F-statistic is 1.75, which is significant at less than 1% level. The third reporting outcome I examine is *file_size*. The adjusted R-squared in the first regression is 90.6%. When I include SEC staff fixed effects, the adjusted R-squared increases slightly to 90.9%. The F-statistic is 1.86, which is significant at less than 1% level. The last reporting outcome I examine is *fog_index*. The adjusted R-squared in the first regression is 66.4%. When I include SEC staff fixed effects, the adjusted R-squared increases slightly to 67.2%. The F-statistic is 1.27, which is significant at less than 5% level.

Overall, across different measures of remediation costs, comment letter contents and financial reporting quality, I find consistent results that support the hypothesis that SEC staff members have effects on firms that they issue comment letters for, incremental to the styles imposed by the top managers of the firms.

4.7. Robustness test: Falsification test

In this falsification test, I hope to show that the SEC staff member indeed has an influence on the firms they cover. I intend to do so by conducting a falsification test that alters the timing when the SEC staff members start covering the firms. Specifically, I examine the enforcement process and reporting outcomes 5 years prior to the change and regress them on the indicator variables for the SEC staff member after the change. For example, firm XYZ was covered by A between 2007 and 2011 and B since 2012. If I regress outcome variables between 2007 and 2011 on an indicator variable for B (“pseudo SEC staff”), I should not expect any significant fixed effect for SEC staff since B did not have the chance to influence firm XYZ’s outcomes between 2007 and 2011 yet.

The results of my falsification tests are reported in Table 7. For each outcome variable, the first row reports the adjusted R-squared from the regression without the pseudo SEC staff indicator variables (i.e. only firm fixed effects, year fixed effects and time-varying firm-level controls). The second row reports the F-statistics, the associated p-value from the tests of the joint significance of the pseudo SEC staff fixed effects, and the adjusted R-squared when I add in the pseudo SEC staff indicator variables into the regression. Panel A reports the test results on firms’ remediation costs. Panel B reports the test results on firms’ comment letter contents. Panel C reports the test results on firms’ financial reporting quality.

Across the different variables for remediation costs, comment letter contents and financial reporting quality, the results show that none of the F-Statistics for the joint significance of the pseudo SEC staff fixed effects are statistically significant at the 10% level. For example, in panel A of Table 7, when the outcome variable is *round*, the F-statistic is 0.828, which is not significant at 10% level. In another example, in panel C of Table 7, when the outcome variable is *file_size*, the F-statistic is 1.09, which is not significant at 10% level.

Hence, the falsification test results seem to support the idea that SEC staff members indeed influence the remediation costs, comment letter contents and financial reporting quality of firms only when they start issuing comment letters for those firms.

4.8. Staff fixed effects: Observable characteristics

In this test, I hope to peek inside the “black box” of SEC staff members’ styles to see how underlying cognitive abilities and work experiences contribute to the SEC staff members’ styles. I regress firms’ outcomes on personal staff characteristics to see whether there is any correlation. I admit that I am only testing a very small portion of the staff characteristics in the analyses due to time constraints in collecting the staff characteristic data. I report the descriptive statistics of staff member characteristics in Table 8. The regression results are presented in Table 9.

Panel A of Table 8 shows that the majority of SEC staff members are male (68%). In terms of qualification, 30% of SEC staff members have a CPA qualification and 8% report that they have an MBA degree. The majority of the staff members are in the 30 – 49 age group (85%), and more than half of them (61%) have worked at the SEC for more than 10 years.

Panel B of Table 8 shows the correlation between these characteristics. I find that a SEC staff member is likely to have an MBA degree, if he is older and if he also holds a CPA qualification. A SEC staff member with an MBA degree tends to have a longer SEC experience. Unsurprisingly, age and SEC experience are positively correlated.

Table 9 reports the regression results of firms’ remediation costs, comment letter contents and financial reporting quality on staff observable characteristics. Panel A reports the test results on firms’ remediation costs. In Column 1, *round* is the dependent variable and it is positively correlated with *female* and *age*, and negatively correlated with *sec_exp*. Specifically, the coefficient on *female* is 0.156, significant at 1% level, the coefficient on *age* is 0.008, significant at 1% level and the coefficient on *sec_exp* is -0.005, significant at 5% level. This implies that female SEC staff members / older SEC staff members require more rounds in the review process and SEC staff members with longer tenure require fewer rounds in the review process. In Column 2, *time* is the dependent variable and it is positively correlated with *female* as well as *age*, and negatively correlated with *sec_exp*. Specifically, the coefficient on *female* is 0.180, significant at 1% level and the coefficient on *age* is 0.027, significant at 1% level. It means that female SEC staff member / older SEC staff members take longer time to close

the review process. The coefficient on *sec_exp* is -0.02, significant at 1% level. It means that SEC staff members with longer tenure take less time to complete the review process.

Panel B reports the test results on firms' comment letter contents. As there are 11 variables, I will only discuss some outcome variables here. In Column 1, *topic* is the dependent variable and it is negatively correlated with *mba*, the coefficient is -0.193 and it is statistically significant at 1% level. *Topic* is also positively correlated with *female*, the coefficient is 0.077, significant at 5% level and *sec_exp*, the coefficient is 0.008, significant at 1% level. The result suggests that SEC staff members with MBA degree seem to ask fewer topics, and female SEC staff members / SEC staff members with longer tenure ask more topics. In Column 2, *emp_accdis* is the dependent variable and it is positively correlated with *female*, *mba*, *cpa* and *sec_exp*, and negatively correlated with *age*. Specifically, the coefficient on *female* is 0.062, significant at 1% level, the coefficient on *cpa* is 0.110, significant at 1% level, the coefficient on *mba* is 0.09, significant at 10% level, the coefficient on *age* is -0.004, significant at 5% level and the coefficient on *sec_exp* is 0.01, significant at 1% level. This implies that female SEC staff members / SEC staff members with MBA / SEC staff members with CPA / SEC staff members with longer tenure focus more on Accounting Disclosure issues in their comment letters. On the other hand, older SEC staff members focus less on Accounting Disclosure issues. In Column 8, *emp_acccore* is the dependent variable and it is positively correlated with *cpa* and *sec_exp*, and negatively correlated with *age*. Specifically, the coefficient on *cpa* is 0.217, significant at 1% level, the coefficient on *age* is -0.007, significant at 10% level and the coefficient on *sec_exp* is 0.022, significant at 1% level. This implies that SEC staff members with CPA / SEC staff members with longer tenure focus more on Core Earnings issues in their comment letters. On the other hand, older SEC staff members focus less on Core Earnings issues.

Panel C reports the test results on firms' financial reporting quality. In Column 1, *dacc* is the dependent variable and it does not seem to be correlated with any of the staff characteristics. In Column 2, *fscore* is the dependent variable and it is negatively correlated with *cpa*, the coefficient is -0.044 and it is statistically significant at 5% level. The result is interesting as it suggests that SEC staff members with CPA qualification seem to make firms report more truthfully. In Column 3, *file_size* is the

dependent variable and it is negatively correlated with *mba*, the coefficient is -0.226 and it is statistically significant at 5% level. This suggests that SEC staff members with MBA seem to make firms produce shorter reports. In Column 4, *fog_index* is the dependent variable and it is positively correlated with *sec_exp* and negatively correlated with *female*. Specifically, the coefficient on *female* is -0.743, significant at 1% level. It means that female SEC staff member influences financial statements to be more readable. The coefficient on *sec_exp* is 0.106, significant at 1% level, meaning that SEC staff members that have been working at SEC for a long time influence financial statements to be less readable.²³

Although I only do a very exploratory analysis in this area, two interesting results present themselves that deserve further discussion. Firstly, female staff members tend to demand more information from firms (more time, rounds and topics) to close the review process. It could be that female staff members are more risk-averse and demand more information to successfully address their concerns. It could also be that female staff members are a special group of women who self-select to work in demanding positions at the SEC (they are of higher ability and work harder to succeed in a male-dominated profession) (Kumar, 2010). There has been prior research that examines the impact of gender on work outcomes and the results seem rather mixed. Some papers document that female CEOs are more risk-averse and are less likely to engage in unethical behaviour (Barua, Davidson, Rama, & Thiruvadi, 2010; Francis, Hasan, Wu, & Yan, 2014; Huang & Kisgen, 2013). However, other papers show no difference in behaviour between female and male executives (Dyregren et al., 2010; Ge et al., 2011). The finding from this paper, using the setting of female regulators in contrast to female executives, is more consistent with the idea that females are more conservative, and this is reflected in their work outcomes. At the same time, I cannot rule out the alternative explanation that female SEC staff members are a special group of women that strive hard to succeed.

²³ Following Bamber et al. (2010), I also conduct an alternative research design where I regress the staff fixed effects estimated in Model 1 on the staff characteristics and the results are reported in Appendix C4. As discussed in Bamber et al. (2010), this specification suffers from measurement error as the dependent variables (SEC staff fixed effects) are estimated parameters from another regression, which can lead to outlier problem. Nevertheless, I can still replicate the main findings that female staff members are more demanding, and staff members with CPA focus more on accounting disclosures and firms under their review report more truthfully.

Secondly, staff members with CPA qualifications tend to focus more on technical aspects (accounting disclosures) and this influences firms to report more truthfully. There have also been prior papers that look at the impact of qualification on work outcomes and results are somewhat consistent. Higher qualifications tend to bring about more positive work outcomes, such as higher accounting quality, forecast accuracy and internal control quality (Aier, Comprix, Gunlock, & Lee, 2005; Bamber et al., 2010; De Franco & Zhou, 2009; Li, Sun, & Ettredge, 2010). The finding from this paper also cements this point of view.²⁴

5. Additional tests

5.1. Simulation tests of F-statistics on staff fixed effects

I conduct simulation tests to check whether the F-statistic is well-specified to test the significance of SEC staff fixed effects (Fee et al., 2013; Gul et al., 2013). I randomly assign SEC staff members to firm-years they do not issue comment letters on and check whether the F-statistics still give statistical significance. I then repeat the exercise 156 times to obtain the median F-statistic and p-value. I expect the median F-statistic on the scrambled data to be statistically insignificant.

Table 12 reports the results of this simulation exercise. For 15 out of 17 outcome variables, the associated p-values are greater than 0.10, indicating the absence of significant staff fixed effects. I intend to continue my simulation exercise until 1,000 rounds (which is the norm in the literature), but the results thus far suggest that F-test is well-specified for my research setting.

5.2. Consequences of SEC staff styles

An interesting question that arises is whether these differential enforcement styles lead to detrimental or beneficial reporting outcomes. This can further inform the debate on whether

²⁴ Interested readers can refer to Abernethy and Wallis (2017) (a review paper) for more discussion of prior research on demographic characteristics.

uniform enforcement is desirable. Conceptually, the answer is unclear. Is stricter enforcement style always better? Is it always desirable for SEC staff members to be more demanding and ask more questions, as this can cause undue costs to the firms and their investors?

I try to provide some preliminary evidence on this issue by regressing financial reporting outcomes on proxies for SEC staff styles (remediation costs and comment letter contents), while controlling for other factors. Table 11 documents the results of these regressions. In column 1 where *dacc* is the dependent variable, I observe that staff members who focus their discussion on core and non-core earnings issues influence firms to report lower levels of discretionary accruals. The coefficients on *emp_acccore* and *emp_accnon* are -0.022 and -0.059 respectively, statistically significant at 5% and 1% levels respectively. On the other hand, in column 2, I find that when SEC staff members focus on accounting classification and fair value issues, firms somehow report less truthfully (higher Fscore). The coefficients on *emp_accclass* and *emp_accfv* are 0.086 and 0.153 respectively, statistically significant at 5% and 1% levels respectively. In column 5, I use a new dependent variable *10k_a*, which is the (log) size of the 10-KAs (the amendments firms file with SEC to adjust their earlier 10-K filings). The results suggest that when firms spend more time to close the review filing process, they also amend their filings more. The coefficient on *time* is 0.211, significant at 10% level. This is consistent with the idea that firms pay attention to the SEC comment letters and amend their filings according to differential SEC enforcement styles.

Another related question that arises is whether comment topics with greater variation in styles have stronger impact on reporting than those with lesser variation. From Panel B of Table 3, I can observe that discussions on core, non-core earnings, accounting classification and fair value exhibit greater variation in styles (larger interquartile range) than the rest. However, in table 11, there seems to be no difference between this group and the rest when it comes to impact on financial reporting.

Overall, the evidence seems to suggest that SEC staff styles do matter to reporting outcomes, but whether it is beneficial or detrimental, more future research will be needed to answer this issue in greater details.

5.3. *Alternative measures of financial reporting quality*

I also use two alternative measures of financial reporting quality to check the robustness of my findings. Firstly, I compute a composite measure of financial reporting quality by using Principal Component Analysis. I name this measure *comp_frq*, which is the first principal component of the four measures of financial reporting quality (*dacc*, *fscore*, *file_size* and *fog_index*). I then use this measure as a composite measure of financial reporting quality and check whether SEC staff members' styles affect this measure. Secondly, Chen et al. (2015) introduce a new measure of disclosure quality to the accounting literature, the level of accounting data disaggregation. The theoretical premise behind is that finer information should be of higher quality. I compute this measure (*disaggregation*) and also use it as an alternative measure of financial reporting quality. I measure the level of disaggregation at the following year to be consistent with prior empirical choice.

Table 12 reports the main tests when I use these two alternative measures. The F-tests on fixed effects for SEC staff are 1.44 (for *comp_frq*) and 2.26 (for *disaggregation*), both significant at less than 1% level. For *comp_frq*, the difference between staff members at 75th percentile and staff members at 25th percentile is 0.221. For *disaggregation*, the interquartile range is 0.01, meaning that staff members at 75th percentile will influence firms to report accounting data with 1% more details than staff members at 25th percentile. Lastly, SEC staff members with CPA influence firms to report less details but staff members who have been with

SEC for a longer time influence firms to produce reports of more details and also of higher quality.

Overall, the main tests using these two alternative measures of disclosure quality also support the idea that SEC staff members have styles in their enforcement and such style differences can impact firms' reporting outcomes.

6. Conclusion

As the SEC is the main public enforcer of security regulations, I investigate whether SEC staff members exhibit personal styles in their enforcement efforts. I choose the setting of the SEC comment letters, because it allows me to identify the individual staff member responsible for the letter, facilitates robustness checks by providing a big panel dataset, and has a profound impact on firms' financial reporting quality.

The results show that SEC staff members do have their styles and their styles shape remediation costs, contents of the letters and ultimately firms' financial reporting quality. Further analyses show that female staff members are associated with higher remediation costs while the SEC staff members with CPA qualifications are more likely to emphasize Accounting Disclosures and firms under their supervision are more likely to report truthfully (lower F-scores).

The results are clearly of interest to regulators as it informs that staff members exhibit style differences in their enforcements. Depending on circumstances, security regulators might want to take actions to promote more consistent enforcement of relevant regulations. The results are also of interest to academics, since this study contributes to both the "style" literature and the literature on SEC comment letters.

One limitation of the study is the tests involving the observable characteristics of the SEC staff members. As not all SEC staff members have LinkedIn profiles, I could only collect information on a

small sample for the tests. Furthermore, these disclosures are entirely voluntary and there might be selection bias in the collected sample. This could hinder the ability to generalise the findings to the general population of SEC staff members.

A follow-up question is whether firms know that SEC staff members have their personal styles. I have done a check and do not find any anecdotal evidence that firms complain about unfair treatment from the SEC. One explanation is that each firm has only a limited number of observations, forbidding it to draw conclusions. An alternative explanation is that firms understand the personal styles but they are afraid that their complaints of unfair treatments will receive retaliations from the SEC staff. I am unable to distinguish between the two explanations.

References

- Abernethy, M., & Wallis, M. (2017). *Critique on the "manager effects" research and implications for management accounting research*. The University of Melbourne. Working paper.
- Abowd, J. M., Creecy, R. H., & Kramarz, F. (2002). Computing person and firm effects using linked longitudinal employer-employee data. *Technical Report 2002-06 U.S. Census Bureau*.
- Abowd, J. M., Kramarz, F., & Margolis, D. N. (1999). High Wage Workers and High Wage Firms. *Econometrica*, 67(2), 251-333. doi:10.1111/1468-0262.00020
- Ahmed, A. S., & Schneible, R. A. (2007). The impact of regulation Fair Disclosure on investors' prior information quality — Evidence from an analysis of changes in trading volume and stock price reactions to earnings announcements. *Journal of Corporate Finance*, 13(2–3), 282-299. doi:<http://dx.doi.org/10.1016/j.jcorpfin.2006.11.003>
- Aier, J. K., Comprix, J., Gunlock, M. T., & Lee, D. (2005). The Financial Expertise of CFOs and Accounting Restatements. *Accounting Horizons*, 19(3), 123-135. doi:10.2308/acch.2005.19.3.123
- Altman, E. I. (1968). FINANCIAL RATIOS, DISCRIMINANT ANALYSIS AND THE PREDICTION OF CORPORATE BANKRUPTCY. *The Journal of Finance*, 23(4), 589-609. doi:10.1111/j.1540-6261.1968.tb00843.x
- Australia's Federal Prosecution Service. (2016). Prosecution Policy of the Commonwealth. *Australia*.
- Bamber, L. S., Jiang, J., & Wang, I. Y. (2010). What's My Style? The Influence of Top Managers on Voluntary Corporate Financial Disclosure. *The Accounting Review*, 85(4), 1131-1162. doi:10.2308/accr.2010.85.4.1131
- Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International Accounting Standards and Accounting Quality. *Journal of Accounting Research*, 46(3), 467-498. doi:10.1111/j.1475-679X.2008.00287.x
- Barua, A., Davidson, L. F., Rama, D. V., & Thiruvadi, S. (2010). CFO Gender and Accruals Quality. *Accounting Horizons*, 24(1), 25-39. doi:10.2308/acch.2010.24.1.25
- Beach, J. K. (1918). Uniform Interstate Enforcement of Vested Rights. *Faculty Scholarship Series*. 3976.
- Bens, D. A., Cheng, M., & Neamtiu, M. (2016). The Impact of SEC Disclosure Monitoring on the Uncertainty of Fair Value Estimates. *The Accounting Review*, 91(2), 349-375. doi:10.2308/accr-51248
- Bertrand, M., & Schoar, A. (2003). MANAGING WITH STYLE: THE EFFECT OF MANAGERS ON FIRM POLICIES. *Quarterly Journal of Economics*, 118(4), 1169-1208. doi:10.1162/003355303322552775
- Blackburne, T. (2014). *Regulatory Oversight and Reporting Incentives: Evidence from SEC Budget Allocations*. University of Pennsylvania. Publicly Accessible Penn Dissertations. 1209.
- Borghans, L., Heckman, J. J., Golsteyn, B. H. H., & Meijers, H. (2009). Gender Differences in Risk Aversion and Ambiguity Aversion. *Journal of the European Economic Association*, 7(2-3), 649-658. doi:10.1162/JEEA.2009.7.2-3.649

- Bozanic, Z., Dietrich, J. R., & Johnson, B. (2014). *The SEC Comment Letter Process and Firm Disclosure*. SSRN.
- Brown, S., Tian, X., & Tucker, J. W. (2016). *The Spillover Effect of SEC Comment Letters on Qualitative Corporate Disclosure: Evidence from the Risk Factor Disclosure*. Available at SSRN: <https://ssrn.com/abstract=2551451> or <http://dx.doi.org/10.2139/ssrn.2551451>.
- Caramanis, C., & Lennox, C. (2008). Audit effort and earnings management. *Journal of Accounting and Economics*, 45(1), 116-138. doi:<http://dx.doi.org/10.1016/j.jacceco.2007.05.002>
- Cassell, C. A., Dreher, L. M., & Myers, L. A. (2013). Reviewing the SEC's Review Process: 10-K Comment Letters and the Cost of Remediation. *The Accounting Review*, 88(6), 1875-1908. doi:10.2308/accr-50538
- Chen, M. K. (2013). The Effect of Language on Economic Behavior: Evidence from Savings Rates, Health Behaviors, and Retirement Assets. *American Economic Review*, 103(2), 690-731. doi:10.1257/aer.103.2.690
- Chen, S., Miao, B. I. N., & Shevlin, T. (2015). A New Measure of Disclosure Quality: The Level of Disaggregation of Accounting Data in Annual Reports. *Journal of Accounting Research*, 53(5), 1017-1054. doi:10.1111/1475-679x.12094
- Correia, M. M. (2014). Political connections and SEC enforcement. *Journal of Accounting and Economics*, 57(2-3), 241-262. doi:10.1016/j.jacceco.2014.04.004
- Cunningham, L., Johnson, B., Johnson, S., & Lisic, L. L. (2016). *The Switch Up: An Examination of Changes in Earnings Management after Receiving SEC Comment Letters*. SSRN.
- De Franco, G., & Zhou, Y. (2009). The Performance of Analysts with a CFA (R) Designation: The Role of Human-Capital and Signaling Theories. *Accounting Review*, 84(2), 383-404. doi:10.2308/accr.2009.84.2.383
- Dechow, P., Ge, W., Larson, C. R., & Sloan, R. G. (2011). Predicting Material Accounting Misstatements*. *Contemporary Accounting Research*, 28(1), 17-82. doi:10.1111/j.1911-3846.2010.01041.x
- Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50(2-3), 344-401. doi:10.1016/j.jacceco.2010.09.001
- Dechow, P., Lawrence, A., & Ryans, J. P. (2016). SEC Comment Letters and Insider Sales. *Accounting Review*, 91(2), 401-439. doi:10.2308/accr-51232
- DeFond, M. L., & Hung, M. (2003). An empirical analysis of analysts' cash flow forecasts. *Journal of Accounting and Economics*, 35(1), 73-100. doi:[http://dx.doi.org/10.1016/S0165-4101\(02\)00098-8](http://dx.doi.org/10.1016/S0165-4101(02)00098-8)
- DeFond, M. L., & Jambalvo, J. (1994). Debt covenant violation and manipulation of accruals. *Journal of Accounting and Economics*, 17(1), 145-176. doi:[http://dx.doi.org/10.1016/0165-4101\(94\)90008-6](http://dx.doi.org/10.1016/0165-4101(94)90008-6)
- DeFond, M. L., & Park, C. W. (1997). Smoothing income in anticipation of future earnings. *Journal of Accounting and Economics*, 23(2), 115-139. doi:[http://dx.doi.org/10.1016/S0165-4101\(97\)00004-9](http://dx.doi.org/10.1016/S0165-4101(97)00004-9)

- deHaan, E., Kedia, S., Koh, K., & Rajgopal, S. (2015). The revolving door and the SEC's enforcement outcomes: Initial evidence from civil litigation. *Journal of Accounting and Economics*, 60(2-3), 65-96. doi:10.1016/j.jacceco.2015.07.010
- Dejong, D., & Ling, Z. (2013). Managers: Their Effects on Accruals and Firm Policies. *Journal of Business Finance & Accounting*, 40(1-2), 82-114. doi:10.1111/jbfa.12012
- Department of Justice. (2015). Prosecution Code. *The Government of the Hong Kong Special Administrative Region*.
- Director of Public Prosecution. (2013). The Code for Crown Prosecutors. *United Kingdom*.
- Doyle, J. T., Ge, W., & McVay, S. (2007). Accruals Quality and Internal Control over Financial Reporting, 1141.
- Dyreng, S. D., Hanlon, M., & Maydew, E. L. (2010). The Effects of Executives on Corporate Tax Avoidance. *The Accounting Review*, 85(4), 1163-1189. doi:10.2308/accr.2010.85.4.1163
- Eckel, C. C., & Grossman, P. J. (2008). Chapter 113 Men, Women and Risk Aversion: Experimental Evidence. *Handbook of Experimental Economics Results*, 1, 1061-1073. doi:[http://dx.doi.org/10.1016/S1574-0722\(07\)00113-8](http://dx.doi.org/10.1016/S1574-0722(07)00113-8)
- Eleswarapu, V. R., Thompson, R., & Venkataraman, K. (2004). The Impact of Regulation Fair Disclosure: Trading Costs and Information Asymmetry. *The Journal of Financial and Quantitative Analysis*, 39(2), 209-225.
- Ewens, M., & Rhodes-Kropf, M. (2015). Is a VC Partnership Greater Than the Sum of Its Partners? *The Journal of Finance*, 70(3), 1081-1113. doi:10.1111/jofi.12249
- Fang, V. W., Huang, A. H., & Karpoff, J. M. (2016). Short Selling and Earnings Management: A Controlled Experiment. *The Journal of Finance*, 71(3), 1251-1294. doi:10.1111/jofi.12369
- Fee, C. E., Hadlock, C. J., & Pierce, J. R. (2013). Managers with and without Style: Evidence Using Exogenous Variation. *Review of Financial Studies*, 26(3), 567-601. doi:<http://rfs.oxfordjournals.org/content/by/year>
- Finkelstein, S., & Hambrick, D. C. (1996). *Strategic leadership: Top executives and their effects on organizations*: West Publishing Company.
- Francis, B. B., Hasan, I., Wu, Q., & Yan, M. (2014). Are Female CFOs Less Tax Aggressive? Evidence from Tax Aggressiveness. *The Journal of the American Taxation Association*, 36(2), 171-202. doi:10.2308/atax-50819
- Franke, V. C. (2001). *Generation X and the military : A comparison of attitudes and values between west point cadets and college students* (Vol. 29). Journal of Political and Military Sociology.
- GAO. (2013). SECURITIES AND EXCHANGE COMMISSION: Continued Management Attention Would Strengthen Internal Supervisory Controls. *US Government Accountability Office*.
- Gao, J., Martin, X., & Pacelli, J. (2016). *What Begets Loan Performance? The Human Factor in the Corporate Lending Market*. Indiana University. Kelley School of Business Research Paper No. 16-80.

- Ge, W., Matsumoto, D., & Zhang, J. L. (2011). Do CFOs Have Style? An Empirical Investigation of the Effect of Individual CFOs on Accounting Practices*. *Contemporary Accounting Research*, 28(4), 1141-1179. doi:10.1111/j.1911-3846.2011.01097.x
- Gintis, H., & Khurana, R. (2008). Corporate honesty and business education: A behavioral model. In P. J. Zak (Ed.), *In Moral Markets: The Critical Role of Values in the Economy* (pp. 300-327). Princeton, NJ: Princeton University Press.
- Goertzel, T., & Hengst, A. (1971). The Military Socialization of University Students. *Social Problems*, 19(2), 258-267. doi:10.2307/799489
- Gomes, A., Gorton, G., & Madureira, L. (2007). SEC Regulation Fair Disclosure, information, and the cost of capital. *Journal of Corporate Finance*, 13(2-3), 300-334. doi:<http://dx.doi.org/10.1016/j.jcorpfin.2006.11.001>
- Graham, J. R., Li, S., & Qiu, J. (2012). Managerial Attributes and Executive Compensation. *Review of Financial Studies*, 25(1), 144-186. doi:10.1093/rfs/hhr076
- Gul, F. A., Wu, D., & Yang, Z. (2013). Do Individual Auditors Affect Audit Quality? Evidence from Archival Data. *The Accounting Review*, 88(6), 1993-2023. doi:10.2308/accr-50536
- Hambrick, D. C. (2007). Upper Echelons Theory: An Update. *The Academy of Management Review*, 32(2), 334-343. doi:10.2307/20159303
- Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. *Academy of Management Review*, 9(2), 193-206. doi:10.5465/AMR.1984.4277628
- Hannan, M. T., & Freeman, J. (1984). Structural Inertia and Organizational Change. *American Sociological Review*, 49(2), 149-164. doi:10.2307/2095567
- Heese, J., Khan, M., & Ramanna, K. (2017). Is the SEC captured? Evidence from comment-letter reviews. *Journal of Accounting and Economics*, 64(1), 98-122. doi:10.1016/j.jacceco.2017.06.002
- Heflin, F., Subramanyam, K. R., & Zhang, Y. A. (2003). Regulation FD and the financial information environment: Early evidence. *Accounting Review*, 78(1), 1-37. doi:10.2308/accr.2003.78.1.1
- Hitt, M. A., & Tyler, B. B. (1991). Strategic decision models: Integrating different perspectives. *Strategic Management Journal*, 12(5), 327-351. doi:10.1002/smj.4250120502
- Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? *Journal of Financial Economics*, 108(3), 822-839. doi:<https://doi.org/10.1016/j.jfineco.2012.12.005>
- Jia, Y., Van Lent, L., & Zeng, Y. (2014). Masculinity, Testosterone, and Financial Misreporting. *Journal of Accounting Research*, 52(5), 1195-1246. doi:10.1111/1475-679x.12065
- Jianakoplos, N. A., & Bernasek, A. (1998). ARE WOMEN MORE RISK AVERSE? *Economic Inquiry*, 36(4), 620-630. doi:10.1111/j.1465-7295.1998.tb01740.x
- Johnston, R., & Petacchi, R. (2017). Regulatory oversight of financial reporting: securities and exchange commission comment letters. *Contemporary Accounting Research*. doi:10.1111/1911-3846.12297

- Kadish, S. H. (1962). Legal Norm and Discretion in the Police and Sentencing Processes. *Harvard Law Review*, 75(5), 904-931. doi:10.2307/1338645
- Kedia, S., & Rajgopal, S. (2011). Do the SEC's enforcement preferences affect corporate misconduct? *Journal of Accounting & Economics*, 51(3), 259-278. doi:10.1016/j.jacceco.2011.01.004
- Kim, J., Kim, Y., & Zhou, J. (2017). Languages and earnings management. *Journal of Accounting and Economics*, 63(2-3), 288-306. doi:10.1016/j.jacceco.2017.04.001
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting & Economics*, 39(1), 163-197. doi:10.1016/j.jacceco.2004.11.002
- Kubick, T. R., Lynch, D. P., Mayberry, M. A., & Omer, T. C. (2016). The Effects of Regulatory Scrutiny on Tax Avoidance: An Examination of SEC Comment Letters. *Accounting Review*, 91(6), 1751-1780. doi:10.2308/accr-51433
- Kumar, A. (2010). Self-Selection and the Forecasting Abilities of Female Equity Analysts. *Journal of Accounting Research*, 48(2), 393-435. doi:10.1111/j.1475-679X.2009.00362.x
- Lefevre, C. E., Lewis, G. J., Perrett, D. I., & Penke, L. (2013). Telling facial metrics: facial width is associated with testosterone levels in men. *Evolution and Human Behavior*, 34(4), 273-279. doi:<http://dx.doi.org/10.1016/j.evolhumbehav.2013.03.005>
- Li, B., & Liu, Z. (2017). The oversight role of regulators: evidence from SEC comment letters in the IPO process. *Review of Accounting Studies*. doi:10.1007/s11142-017-9406-2
- Li, C., Sun, L., & Ettredge, M. (2010). Financial executive qualifications, financial executive turnover, and adverse SOX 404 opinions. *Journal of Accounting and Economics*, 50(1), 93-110. doi:<https://doi.org/10.1016/j.jacceco.2010.01.003>
- Lieberson, S., & O'Connor, J. F. (1972). Leadership and Organizational Performance: A Study of Large Corporations. *American Sociological Review*, 37(2), 117-130. doi:10.2307/2094020
- Liu, T., Mao, Y., & Tian, X. (2016). *Do Individuals or Firms Matter More? The Case of Patent Generation*. Cornell University, SHA School. Retrieved from <http://scholarship.sha.cornell.edu/workingpapers/22>
- Loughran, T. I. M., & McDonald, B. (2014). Measuring Readability in Financial Disclosures. *The Journal of Finance*, 69(4), 1643-1671. doi:10.1111/jofi.12162
- Loughran, T. I. M., & McDonald, B. (2016). Textual Analysis in Accounting and Finance: A Survey. *Journal of Accounting Research*, 54(4), 1187-1230. doi:10.1111/1475-679x.12123
- Malmendier, U., & Nagel, S. (2011). Depression Babies: Do Macroeconomic Experiences Affect Risk Taking?*. *The Quarterly Journal of Economics*, 126(1), 373-416. doi:10.1093/qje/qjq004
- Palmrose, Z.-V., & Scholz, S. (2004). The Circumstances and Legal Consequences of Non-GAAP Reporting: Evidence from Restatements*. *Contemporary Accounting Research*, 21(1), 139-180. doi:10.1506/WBF9-Y69X-L4DX-JMV1
- Polinsky, A. M., & Shavell, S. (2007). Chapter 6 The Theory of Public Enforcement of Law. 1, 403-454. doi:10.1016/s1574-0730(07)01006-7
- Public Prosecution Service of Canada. (2014). The Federal Prosecution Service Deskbook. *Canada*.

- SEC. (2017). Filing Review Process. Retrieved from <https://www.sec.gov/divisions/corpfin/cffilingreview.htm>
- Teoh, S. H., Welch, I., & Wong, T. J. (1998). Earnings management and the underperformance of seasoned equity offerings¹. *Journal of Financial Economics*, 50(1), 63-99. doi:[http://dx.doi.org/10.1016/S0304-405X\(98\)00032-4](http://dx.doi.org/10.1016/S0304-405X(98)00032-4)
- White, R. (2010). Preemption in Green Marketing The Case for Uniform. *Indiana Law Journal*, 85.
- Yang, H. I. (2012). Capital market consequences of managers' voluntary disclosure styles. *Journal of Accounting and Economics*, 53(1-2), 167-184. doi:10.1016/j.jacceco.2011.08.003
- Zhang, H., & Zheng, L. (2011). The valuation impact of reconciling pro forma earnings to GAAP earnings. *Journal of Accounting and Economics*, 51(1-2), 186-202. doi:10.1016/j.jacceco.2010.07.001

Figure 1 – Extract of Comment Letter

DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

March 29, 2010

By U.S. Mail and Facsimile to: (415) 975-6871

Richard D. Levy
Executive Vice President and Controller
Wells Fargo & Company
420 Montgomery Street
San Francisco, CA 94163

Dear Mr. Levy:

We are currently reviewing your Form 10-K for fiscal year ended December 31, 2009. In our effort to better understand the decisions you made in determining the accounting for certain of your repurchase agreements, securities lending transactions, or other transactions involving the transfer of financial assets with an obligation to repurchase the transferred assets, we ask that you provide us with information relating to those decisions and your disclosure.

.....
.....
.....

Please contact me at (202) 551-3492 if you have any questions.

Sincerely,

John P. Nolan
Senior Assistant Chief Accountant

Figure 2 – SEC Staff Member’s LinkedIn (Sample)

CPA
Senior Staff Accountant at U.S. Securities and Exchange Commission
Ellicott City, Maryland | Accounting

Current

U.S. Securities and Exchange Commission

Previous

U.S. Securities and Exchange Commission, KPMG LLP

Education

University of Missouri-Columbia, College of Business

421
connections

Background

Experience

Senior Staff Accountant, Division of Corporation Finance
U.S. Securities and Exchange Commission
July 2016 – Present (6 months) | Washington D.C. Metro Area

Perform regulatory oversight and compliance of publicly registered companies, with a focus on the information technologies and services industry. Specific duties involve reviewing and analyzing SEC filings, identifying and resolving complex accounting and reporting issues, and researching and providing interpretation of regulations and statutes.

Office of the Managing Executive, Management and Program Analyst, Division of Corporation Finance
U.S. Securities and Exchange Commission
August 2013 – July 2016 (3 years) | Washington D.C. Metro Area

Worked on a variety of strategic and business management projects, with a focus on business operations, information technology and knowledge management. Collaborated with staff at all levels of the Division and Agency, including senior staff and management. Specific tasks included managing all aspects of our Division's budget, overseeing and managing our Division's contracts, managing Division resources and research tools for staff, managing Division communication efforts, managing the risk management process as the Division Risk Officer, working on business continuity and assisting with technology projects.

► 1 honor or award

Senior Staff Accountant, Division of Corporation Finance
U.S. Securities and Exchange Commission
July 2007 – August 2013 (6 years 2 months) | Washington D.C. Metro Area

Performed regulatory oversight and compliance of publicly registered companies, with a focus in the financial services and banking industries. Specific duties involve reviewing and analyzing SEC filings, identifying and resolving complex accounting and reporting issues, and researching and providing interpretation of regulations and statutes.

Audit Manager
KPMG LLP
August 2002 – June 2007 (4 years 11 months) | Baltimore, Maryland Area

Provided independent audit services for various clients in the non-profit, health care and financial services sectors.

Education

University of Missouri-Columbia, College of Business

Masters, Accounting

2001 – 2002

University of Missouri-Columbia, College of Business

B.S., Accounting

1997 – 2001

Activities and Societies: [Zeta Tau Alpha](#), [Delta Sigma Pi](#), [Beta Alpha Psi](#)

Park Hill High School

1993 – 1997

Organizations

Days End Farm Horse Rescue

Board of Directors

Starting January 2012

Treasurer, April 2013 to present

Assistant Treasurer, December 2012 to April 2013

Auxiliary Member, January 2012 to December 2012

Mid-Maryland Triathlon Club

Starting April 2013

University of Missouri Alumni Association, DC/Baltimore chapter

Starting August 2010

Table 1 – Descriptive Statistics

This table reports the descriptive statistics for the main variables in the analyses. The definition of each variable can be found in the appendix.

Variable	N	mean	sd	p25	p50	p75
<i>round</i>	14,207	4.729	2.324	3	4	6
<i>time</i>	14,207	68.82	69.21	28	49	86
<i>topic</i>	14,207	10.15	5.679	6	9	13
<i>emp_accdis</i>	14,207	0.231	0.145	0.143	0.267	0.333
<i>emp_intcon</i>	14,207	0.0141	0.0493	0	0	0
<i>emp_mda</i>	14,207	0.274	0.150	0.143	0.250	0.364
<i>emp_regfil</i>	14,207	0.172	0.137	0	0.182	0.286
<i>emp_risk</i>	14,207	0.0237	0.0639	0	0	0
<i>emp_other</i>	14,207	0.284	0.114	0.222	0.286	0.333
<i>emp_acccore</i>	14,207	0.184	0.265	0	0	0.316
<i>emp_accnon</i>	14,207	0.404	0.349	0	0.429	0.667
<i>emp_accclass</i>	14,207	0.115	0.210	0	0	0.174
<i>emp_accfv</i>	14,207	0.0750	0.129	0	0	0.125
<i>dacc_{t+1}</i>	14,207	-0.005	0.246	-0.082	-0.004	0.073
<i>fscore_{t+1}</i>	14,207	0.975	0.600	0.490	0.865	1.330
<i>file_size (in Mb)</i>	14,207	8.814	10.851	1.582	4.036	13.30
<i>fog_index</i>	14,207	16.06	3.821	14.04	15.11	17.26
<i>big_n</i>	14,207	0.746	0.436	0	1	1
<i>second_tier</i>	14,207	0.090	0.287	0	0	0
<i>audtenure</i>	14,207	7.516	3.682	5	7	10
<i>restate</i>	14,207	0.107	0.310	0	0	0
<i>m_weak</i>	14,207	0.084	0.278	0	0	0
<i>lnmarketcap</i>	14,207	6.364	2.027	4.958	6.353	7.758
<i>loss</i>	14,207	0.291	0.454	0	0	1
<i>m_a</i>	14,207	0.036	0.185	0	0	0
<i>restructuring</i>	14,207	0.016	0.126	0	0	0
<i>salesgrowth</i>	14,207	0.248	6.243	-0.031	0.062	0.176
<i>segments</i>	14,207	2.897	2.171	1	2	4
<i>bankruptcyrank</i>	14,207	4.873	2.384	3	5	7
<i>ceo_chair</i>	14,207	0.079	0.270	0	0	0
<i>ceo_tenure</i>	14,207	3.018	3.734	0	1	6
<i>cfo_tenure</i>	14,207	1.873	2.430	0	1	3
<i>highvolatility</i>	14,207	0.310	0.463	0	0	1
<i>auditordismissed</i>	14,207	0.050	0.218	0	0	0
<i>auditorresigned</i>	14,207	0.012	0.108	0	0	0

Table 2 – Effects of SEC Staff Members on Remediation Costs (H1)

Panel A reports the test results for SEC staff fixed effects on firms' remediation costs. The remediation cost proxies are number of rounds (*round*), and time to close (*time*). Reported in the table are the results from fixed effects panel regressions. For each dependent variable, the fixed effects included are row 1: firm and year fixed effects; row 2: firm, year, and SEC staff fixed effects. I report the test results of joint significance for the staff fixed effects. The first number is the F-statistic, and in parentheses, the p-value and number of constraints. Also reported are the number of observations (N) and adjusted R-Squared (Adj. R²) for each regression. The control variables include *big_n*, *second_tier*, *audtenure*, *restate*, *m_weak*, *lnmarketcap*, *loss*, *m_a*, *restructuring*, *salesgrowth*, *segments*, *bankruptcyrank*, *ceo_chair*, *ceo_tenure*, *cfo_tenure*, *highvolatility*, *auditordismissed*, *auditorresigned*. All variables are defined in the Appendix. Panel B reports the distribution of the staff fixed effects from the regressions in Panel A. The interquartile range is adjusted for dependent variables that I use the log values (*round* and *time*).

Panel A: Remediation Costs						
	F-test on fixed effects for SEC Staff			N	Adj. R² (%)	
<i>round</i>				14,207	66.4	
<i>round</i>	8.46	(0.00, 134)		14,207	69.2	
<i>time</i>				14,207	67.3	
<i>time</i>	9.34	(0.00, 134)		14,207	70.4	

Panel B: Distribution of SEC Staff Fixed Effects						
Variable	N	mean	p25	p50	p75	Inter-quartile range (Adjusted for log transformation)
<i>round</i>	135	-0.107	-0.309	-0.083	0.112	52%
<i>time</i>	135	-0.168	-0.607	-0.116	0.278	142%

Table 3 – Effects of SEC Staff Members on Comment Letter Contents (H2)

Panel A reports the test results for SEC staff fixed effects on firms' comment letter contents. The proxies are number of comment topics (*topic*), percentage of topics about Accounting Disclosure (*emp_accdis*), percentage of topics about Internal Controls (*emp_intcon*), percentage of topics MD&A (*emp_mda*), percentage of topics about Regulatory Filings (*emp_regfil*), percentage of topics about Risk Factor disclosure (*emp_risk*), percentage of topics about Other disclosure (*emp_other*), percentage of accounting topics about Core Earnings issues (*emp_acccore*), percentage of accounting topics about Non-Core Earnings issues (*emp_accnon*), percentage of accounting topics about Classification (*emp_accclass*), and percentage of accounting topics about Fair Value (*emp_accfv*). Reported in the table are the results from fixed effects panel regressions. For each dependent variable, the fixed effects included are row 1: firm and year fixed effects; row 2: firm, year, and SEC staff fixed effects. I report the test results of joint significance for the staff fixed effects. The first number is the F-statistic, and in parentheses, the p-value and number of constraints. Also reported are the number of observations (N) and adjusted R-Squared (Adj. R²) for each regression. The control variables include *big_n*, *second_tier*, *audtenure*, *restate*, *m_weak*, *lnmarketcap*, *loss*, *m_a*, *restructuring*, *salesgrowth*, *segments*, *bankruptcyrank*, *ceo_chair*, *ceo_tenure*, *cfo_tenure*, *highvolatility*, *auditordismissed*, *auditorresigned*. All variables are defined in the Appendix. Panel B reports the distribution of the staff fixed effects from the regressions in Panel A.

Panel A: Comment Letter Contents			
	F-test on fixed effects for SEC Staff	N	Adj. R² (%)
<i>topic</i>		14,207	66.1
<i>topic</i>	26.09 (0.00, 134)	14,207	74.1
<i>emp_accdis</i>		14,207	61.4
<i>emp_accdis</i>	22.69 (0.00, 134)	14,207	68.9
<i>emp_intcon</i>		14,207	66.9
<i>emp_intcon</i>	6.23 (0.00, 134)	14,207	68.7
<i>emp_mda</i>		14,207	60.2
<i>emp_mda</i>	26.41 (0.00, 134)	14,207	69.3
<i>emp_regfil</i>		14,207	62.8
<i>emp_regfil</i>	12.95 (0.00, 134)	14,207	67.8
<i>emp_risk</i>		14,207	59.5
<i>emp_risk</i>	10.99 (0.00, 134)	14,207	64.1
<i>emp_other</i>		14,207	60.1
<i>emp_other</i>	26.65 (0.00, 134)	14,207	69.4
<i>emp_acccore</i>		14,207	63.7
<i>emp_acccore</i>	9.67 (0.00, 134)	14,207	67.1
<i>emp_accnon</i>		14,207	62.4
<i>emp_accnon</i>	15.40 (0.00, 134)	14,207	67.6
<i>emp_accclass</i>		14,207	63.1
<i>emp_accclass</i>	9.31 (0.00, 134)	14,207	66.7
<i>emp_accfv</i>		14,207	62.8
<i>emp_accfv</i>	9.05 (0.00, 134)	14,207	66.1

Panel B: Distribution of SEC Staff Fixed Effects						
Variable	N	mean	p25	p50	p75	Inter-quartile range
<i>topic</i>	135	-0.107	-0.255	-0.048	0.160	51%
<i>emp_accdis</i>	135	-0.020	-0.275	-0.018	0.105	38%
<i>emp_intcon</i>	135	0.001	-0.017	-0.007	0.009	2.6%
<i>emp_mda</i>	135	0.012	-0.181	-0.015	0.127	30.8%
<i>emp_regfil</i>	135	-0.014	-0.089	0.003	0.100	18.9%
<i>emp_risk</i>	135	0.021	-0.031	-0.001	0.045	7.5%
<i>emp_other</i>	135	-0.045	-0.179	-0.029	0.065	24.4%
<i>emp_acccore</i>	135	-0.078	-0.386	-0.103	0.201	58.7%
<i>emp_accnon</i>	135	-0.009	-0.390	-0.041	0.232	62.2%
<i>emp_accclass</i>	135	-0.120	-0.346	-0.137	0.107	45.3%
<i>emp_accfv</i>	135	0.001	-0.222	0.010	0.132	35.4%

Table 4 – Effects of SEC Staff Members on Financial Reporting Quality (H3)

Panel A reports the test results for SEC staff fixed effects on firms' financial reporting quality. The financial reporting quality proxies are discretionary accrual ($dacc_{t+1}$), f-score ($fscore_{t+1}$), report complexity ($file_size$) and report readability (fog_index). Reported in the table are the results from fixed effects panel regressions. For each dependent variable, the fixed effects included are row 1: firm and year fixed effects; row 2: firm, year, and SEC staff fixed effects. I report the test results of joint significance for the staff fixed effects. The first number is the F-statistic, and in parentheses, the p-value and number of constraints. Also reported are the number of observations (N) and adjusted R-Squared (Adj. R²) for each regression. The control variables include *big_n*, *second_tier*, *audtenure*, *restate*, *m_weak*, *lnmarketcap*, *loss*, *m_a*, *restructuring*, *salesgrowth*, *segments*, *bankruptcyrank*, *ceo_chair*, *ceo_tenure*, *cfo_tenure*, *highvolatility*, *auditordismissed*, *auditorresigned*. All variables are defined in the Appendix. Panel B reports the distribution of the staff fixed effects from the regressions in Panel A. The interquartile range is adjusted for dependent variables that I use the log values (*file_size*).

Panel A: Financial Reporting Quality						
	F-test on fixed effects for SEC Staff		N	Adj. R² (%)		
$dacc_{t+1}$			14,207	82.6		
$dacc_{t+1}$	1.30	(0.01, 134)	14,207	82.8		
$fscore_{t+1}$			14,207	70.7		
$fscore_{t+1}$	1.29	(0.01, 134)	14,207	71.2		
$file_size$			14,207	88.7		
$file_size$	1.70	(0.00, 134)	14,207	88.9		
fog_index			14,207	55.6		
fog_index	1.21	(0.04, 134)	14,207	56.2		

Panel B: Distribution of SEC Staff Fixed Effects						
Variable	N	mean	p25	p50	p75	Inter-quartile range (Adjusted for log transformation)
$dacc_{t+1}$	135	-0.007	-0.033	-0.003	0.023	0.057
$fscore_{t+1}$	135	-0.053	-0.139	-0.041	0.045	0.184
$file_size$	135	-0.067	-0.193	-0.015	0.107	35%
fog_index	135	-0.127	-0.608	0.032	0.740	1.348

Table 5 – Partitioning of SEC Staff Members into Head Fixed Effects and Non-Head Fixed Effects

This table reports the F-test results for the joint significance of SEC staff fixed effects by dividing staff members into head fixed effects and member fixed effects. Panel A reports the test results on firms' remediation costs. Panel B reports the test results on firms' comment letter contents. Panel C reports the test results on firms' financial reporting quality. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Panel A: Remediation Costs		
	F-test on fixed effects for Heads (N = 44)	F-test on fixed effects for Non-Heads (N = 91)
<i>round</i>	10.84***	8.14***
<i>time</i>	11.03***	8.48***
Panel B: Comment Letter Contents		
	F-test on fixed effects for Heads (N = 44)	F-test on fixed effects for Non-Heads (N = 91)
<i>topic</i>	10.90***	29.16***
<i>emp_accdis</i>	21.79***	17.08***
<i>emp_intcon</i>	8.30***	6.49***
<i>emp_mda</i>	23.18***	5.89***
<i>emp_regfil</i>	17.22***	5.70***
<i>emp_risk</i>	13.13***	5.05***
<i>emp_other</i>	22.50***	10.38***
<i>emp_acccore</i>	11.33***	10.05***
<i>emp_accnon</i>	16.39***	13.39***
<i>emp_accclass</i>	9.96***	9.39***
<i>emp_accfv</i>	9.84***	6.86***
Panel C: Financial Reporting Quality		
	F-test on fixed effects for Heads (N = 44)	F-test on fixed effects for Non-Heads (N = 91)
<i>dacc_{t+1}</i>	1.78***	1.73***
<i>fscore_{t+1}</i>	1.41*	1.21*
<i>file_size</i>	1.32*	1.76***
<i>fog_index</i>	1.77***	1.35*

Table 6 – Effects of SEC Staff Members, Controlling for CEO Fixed Effects

This table reports the test results for SEC staff fixed effects after controlling for CEO fixed effects. Panel A reports the test results on firms' remediation costs. Panel B reports the test results on firms' comment letter contents. Panel C reports the test results on firms' financial reporting quality. Reported in the table are the results from fixed effects panel regressions. For each dependent variable, the fixed effects included are row 1: firm, year and CEO fixed effects; row 2: firm, year, CEO and SEC staff fixed effects. I report the test results of joint significance for the CEO and staff fixed effects. The first number is the F-statistic, and in parentheses, the p-value and number of constraints. Also reported are the number of observations (N) and adjusted R-Squared (Adj. R²) for each regression. The control variables include *big_n*, *second_tier*, *audtenure*, *restate*, *m_weak*, *lnmarketcap*, *loss*, *m_a*, *restructuring*, *salesgrowth*, *segments*, *bankruptcyrank*, *ceo_chair*, *ceo_tenure*, *cfo_tenure*, *highvolatility*, *auditordismissed*, *auditorresigned*. All variables are defined in the Appendix.

Panel A: Remediation Costs			
	F-test on fixed effects for SEC Staff	N	Adj. R² (%)
<i>round</i>		7,622	66.8
<i>round</i>	6.50 (0.00, 110)	7,622	70.5
<i>time</i>		7,622	70.6
<i>time</i>	6.33 (0.00, 110)	7,622	73.8

Panel B: Comment Letter Contents			
	F-test on fixed effects for SEC Staff	N	Adj. R² (%)
<i>topic</i>		7,622	70.6
<i>topic</i>	17.12 (0.00, 110)	7,622	78.0
<i>emp_accdis</i>		7,622	63.5
<i>emp_accdis</i>	13.67 (0.00, 110)	7,622	71.2
<i>emp_intcon</i>		7,622	67.2
<i>emp_intcon</i>	3.56 (0.00, 110)	7,622	69.4
<i>emp_mda</i>		7,622	65.1
<i>emp_mda</i>	15.34 (0.00, 110)	7,622	73.3
<i>emp_regfil</i>		7,622	68.6
<i>emp_regfil</i>	10.77 (0.00, 110)	7,622	74.1
<i>emp_risk</i>		7,622	64.4
<i>emp_risk</i>	8.01 (0.00, 110)	7,622	69.2
<i>emp_other</i>		7,622	65.1
<i>emp_other</i>	18.62 (0.00, 110)	7,622	74.5
<i>emp_acccore</i>		7,622	67.4
<i>emp_acccore</i>	6.41 (0.00, 110)	7,622	71.1
<i>emp_accnon</i>		7,622	64.4
<i>emp_accnon</i>	9.32 (0.00, 110)	7,622	69.8

<i>emp_accclass</i>		7,622	66.3
<i>emp_accclass</i>	6.40 (0.00, 110)	7,622	70.0
<i>emp_accfv</i>		7,622	65.6
<i>emp_accfv</i>	6.26 (0.00, 110)	7,622	69.2

Panel C: Financial Reporting Quality

	F-test on fixed effects for SEC Staff	N	Adj. R² (%)
<i>dacc_{t+1}</i>		7,622	88.8
<i>dacc_{t+1}</i>	1.39 (0.00, 110)	7,622	89.1
<i>fscore_{t+1}</i>		7,622	79.1
<i>fscore_{t+1}</i>	1.75 (0.00, 110)	7,622	79.8
<i>file_size</i>		7,622	90.6
<i>file_size</i>	1.86 (0.00, 110)	7,622	90.9
<i>fog_index</i>		7,622	66.4
<i>fog_index</i>	1.27 (0.03, 110)	7,622	67.2

Table 7 – Effects of SEC Staff Members: Falsification Tests

This table reports the test results for falsification tests of SEC staff fixed effects. In these falsification tests, I regress the outcome variables on the staff fixed effect before the staff member covers the firm to see whether the staff member indeed has influence on the firm (pseudo staff fixed effect). Panel A reports the test results on firms' remediation costs. Panel B reports the test results on firms' comment letter contents. Panel C reports the test results on firms' financial reporting quality. Reported in the table are the results from fixed effects panel regressions. For each dependent variable, the fixed effects included are row 1: firm and year fixed effects; row 2: firm, year, and pseudo SEC staff fixed effects. I report the test results of joint significance for the staff fixed effects. The first number is the F-statistic, and in parentheses, the p-value and number of constraints. Also reported are the number of observations (N) and adjusted R-Squared (Adj. R²) for each regression. The control variables include *big_n*, *second_tier*, *audtenure*, *restate*, *m_weak*, *lnmarketcap*, *loss*, *m_a*, *restructuring*, *salesgrowth*, *segments*, *bankruptcyrank*, *ceo_chair*, *ceo_tenure*, *cfo_tenure*, *highvolatility*, *auditordismissed*, *auditorresigned*. All variables are defined in the Appendix.

Panel A: Remediation Costs			
	F-test on fixed effects for pseudo SEC Staff	N	Adj. R² (%)
<i>round</i>		5,333	29.6
<i>round</i>	0.828 (0.90, 106)	5,333	30.9
<i>time</i>		5,333	28.9
<i>time</i>	0.919 (0.71, 106)	5,333	30.5
Panel B: Comment Letter Contents			
	F-test on fixed effects for pseudo SEC Staff	N	Adj. R² (%)
<i>topic</i>		5,333	31.7
<i>topic</i>	1.143 (0.15, 106)	5,333	33.7
<i>emp_accdis</i>		5,333	31.5
<i>emp_accdis</i>	0.97 (0.57, 106)	5,333	33.4
<i>emp_intcon</i>		5,333	35.5
<i>emp_intcon</i>	0.76 (0.97, 106)	5,333	36.9
<i>emp_mda</i>		5,333	33.4
<i>emp_mda</i>	0.87 (0.82, 106)	5,333	35.1
<i>emp_regfil</i>		5,333	30.2
<i>emp_regfil</i>	1.08 (0.29, 106)	5,333	32.1
<i>emp_risk</i>		5,333	32.8
<i>emp_risk</i>	0.902 (0.75, 106)	5,333	34.5
<i>emp_other</i>		5,333	31.6
<i>emp_other</i>	0.92 (0.71, 106)	5,333	33.4
<i>emp_acccore</i>		5,333	31.1
<i>emp_acccore</i>	0.81 (0.92, 106)	5,333	32.5
<i>emp_accnon</i>		5,333	30.0
<i>emp_accnon</i>	0.80 (0.93, 106)	5,333	31.3

<i>emp_accclass</i>		5,333	29.8
<i>emp_accclass</i>	0.85 (0.86, 106)	5,333	31.3
<i>emp_accfv</i>		5,333	29.6
<i>emp_accfv</i>	0.88 (0.79, 106)	5,333	30.8

Panel C: Financial Reporting Quality

	F-test on fixed effects for pseudo SEC Staff	N	Adj. R² (%)
<i>dacc_{t+1}</i>		5,333	76.7
<i>dacc_{t+1}</i>	0.64 (1.00, 106)	5,333	77.1
<i>fscore_{t+1}</i>		5,333	68.8
<i>fscore_{t+1}</i>	1.02 (0.44, 106)	5,333	69.7
<i>file_size</i>		5,333	89.0
<i>file_size</i>	1.09 (0.25, 106)	5,333	89.4
<i>fog_index</i>		5,333	60.1
<i>fog_index</i>	0.94 (0.65, 106)	5,333	61.0

Table 8 – Descriptive Statistics of SEC Staff Characteristics

This table reports the descriptive statistics of SEC staff members. Their personal information is extracted from their LinkedIn profiles (if available). Panel A reports the summary statistics of the staff characteristics. Panel B reports the correlation matrix between the staff characteristics (Pearson's correlation coefficients are shown in the lower triangle while Spearman's rank correlations appear above the diagonal). All variables are defined in the Appendix. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Panel A: Summary Statistics		
	Frequency	Percent
N = 66		
Gender		
Male	45	68%
Female	21	32%
Accounting Qualification		
CPA	20	30%
No CPA	46	70%
Higher Education		
MBA	5	8%
No MBA	61	92%
Age		
20 – 29	4	6%
30 – 39	29	44%
40 – 49	27	41%
50 – 59	4	6%
> 59	2	3%
SEC tenure		
<10	26	39%
10 – 19	36	55%
>19	4	6%

Panel B: Correlation Matrix between SEC Staff Characteristics					
Variable	<i>female</i>	<i>cpa</i>	<i>mba</i>	<i>age</i>	<i>sec_exp</i>
<i>female</i>		-0.03	0.05	-0.11	0.05
<i>cpa</i>	-0.03		0.31**	-0.04	0.07
<i>mba</i>	0.05	0.31**		0.17	0.24**
<i>age</i>	-0.14	-0.04	0.21*		0.72***
<i>sec_exp</i>	-0.01	-0.01	0.16	0.62***	

Table 9 – Effects of SEC Staff Members: Observable Characteristics

This table reports the results of outcome variables on SEC staff characteristics:

$$\text{Dep_var}_{it} = \alpha_0 + \sum \delta * \text{Controls}_{it} + \text{Firm}_i + \text{Year}_t + \sum \beta * \text{Staff Characteristic}_{jt} + \varepsilon_{it}$$

Panel A reports the test results on firms' remediation costs. Panel B reports the test results on firms' comment letter contents. Panel C reports the test results on firms' financial reporting quality. Each column corresponds to a separate regression with the dependent variable on top. Due to space constraint, I only report the coefficients for the independent variables of interest. *Female* is a dummy for female staff members, *cpa* is a dummy for SEC staff members with CPA, *mba* is a dummy for SEC staff members with MBA, *age* is the age of the SEC staff members and *sec_exp* is the tenure of the staff members with SEC. The control variables include *big_n*, *second_tier*, *audtenure*, *restate*, *m_weak*, *lnmarketcap*, *loss*, *m_a*, *restructuring*, *salesgrowth*, *segments*, *bankruptcyrank*, *ceo_chair*, *ceo_tenure*, *cfo_tenure*, *highvolatility*, *auditordismissed*, *auditorresigned*. All variables are defined in the Appendix. Standard errors are presented in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels. Coefficients on control variables, year and firm dummies are not tabulated for parsimony.

Panel A: Remediation Costs		
Variable	(1) round	(2) time
<i>female</i>	0.156*** (0.029)	0.180*** (0.058)
<i>cpa</i>	0.029 (0.026)	-0.002 (0.052)
<i>mba</i>	0.022 (0.056)	0.089 (0.113)
<i>age</i>	0.008*** (0.002)	0.027*** (0.004)
<i>sec_exp</i>	-0.005** (0.002)	-0.020*** (0.0052)
Observations	5,101	5,101
R-squared	0.720	0.726
Firm fixed effect	Yes	Yes
Year fixed effect	Yes	Yes
Controls	Yes	Yes

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Panel B: Comment Letter Contents											
Variable	(1) <i>topic</i>	(2) <i>emp_accdis</i>	(3) <i>emp_intcon</i>	(4) <i>emp_mda</i>	(5) <i>emp_regfil</i>	(6) <i>emp_risk</i>	(7) <i>emp_other</i>	(8) <i>emp_acccore</i>	(9) <i>emp_accnon</i>	(10) <i>emp_accclass</i>	(11) <i>emp_accfv</i>
<i>female</i>	0.077** (0.030)	0.062*** (0.024)	0.005 (0.006)	0.086*** (0.030)	-0.046*** (0.016)	-0.039*** (0.007)	0.039** (0.018)	0.094 (0.060)	0.091* (0.049)	0.234*** (0.045)	-0.027 (0.031)
<i>cpa</i>	0.018 (0.027)	0.110*** (0.021)	0.006 (0.005)	0.106*** (0.027)	-0.024* (0.014)	-0.012** (0.006)	-0.015 (0.017)	0.217*** (0.054)	0.180*** (0.044)	0.163*** (0.041)	-0.0008 (0.028)
<i>mba</i>	-0.193*** (0.058)	0.090* (0.046)	0.0008 (0.011)	0.199*** (0.058)	0.055* (0.031)	0.028** (0.013)	0.044 (0.036)	-0.047 (0.117)	-0.286*** (0.095)	-0.380*** (0.088)	0.150** (0.061)
<i>age</i>	0.0004 (0.002)	-0.004** (0.002)	0.001*** (0.0004)	0.001 (0.002)	0.002** (0.001)	-0.0004 (0.0005)	0.003*** (0.001)	-0.007* (0.004)	-0.013*** (0.003)	0.009*** (0.003)	-0.007*** (0.002)
<i>sec_exp</i>	0.008*** (0.002)	0.010*** (0.002)	-0.0006 (0.0004)	-0.003 (0.002)	-0.005*** (0.001)	-0.001* (0.0006)	-0.004*** (0.001)	0.022*** (0.005)	0.028*** (0.004)	-0.002 (0.004)	0.009*** (0.002)
Observations	5,101	5,101	5,101	5,101	5,101	5,101	5,101	5,101	5,101	5,101	5,101
R-squared	0.724	0.677	0.695	0.690	0.714	0.700	0.691	0.705	0.682	0.698	0.681
Firm fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Panel C: Financial Reporting Quality				
Variable	(1) <i>dacc_{t+1}</i>	(2) <i>fscore_{t+1}</i>	(3) <i>file_size</i>	(4) <i>fog_index</i>
<i>female</i>	0.007 (0.011)	-0.037 (0.030)	0.061 (0.049)	-0.743*** (0.271)
<i>cpa</i>	0.005 (0.011)	-0.044** (0.022)	0.034 (0.044)	0.097 (0.198)
<i>mba</i>	0.022 (0.023)	0.078 (0.053)	-0.226** (0.096)	0.281 (0.562)
<i>age</i>	0.001 (0.0007)	-0.0002 (0.001)	0.002 (0.003)	0.013 (0.011)
<i>sec_exp</i>	-0.001 (0.0009)	0.0005 (0.002)	-0.001 (0.004)	0.106*** (0.017)
Observations	5,101	5,101	5,101	5,101
R-squared	0.858	0.416	0.910	0.481
Firm fixed effect	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 10 – Simulation Results for the F-tests on Staff Fixed Effects

This table reports the simulation test results on the F-tests for the joint significance of SEC staff indicators when I randomly assign SEC staff members to firm-years where the SEC staff members have not commented on. Reported are the median F-statistics for 156 rounds of simulation, with the associated p-values.

Panel A: Remediation Costs		
Simulation round = 156	Median F-statistic	Median p-value
<i>round</i>	1.012	0.35
<i>time</i>	1.028	0.18
Panel B: Comment Letter Contents		
Simulation round = 156	Median F-statistic	Median p-value
<i>topic</i>	0.995	0.57
<i>emp_accdis</i>	0.952	0.95
<i>emp_intcon</i>	0.956	0.93
<i>emp_mda</i>	1.006	0.42
<i>emp_regfil</i>	1.036	0.11
<i>emp_risk</i>	1.050	0.05
<i>emp_other</i>	1.036	0.12
<i>emp_acccore</i>	1.031	0.15
<i>emp_accnon</i>	1.055	0.07
<i>emp_accclass</i>	0.958	0.92
<i>emp_accfv</i>	1.004	0.44
Panel C: Financial Reporting Quality		
Simulation round = 156	Median F-statistic	Median p-value
<i>dacc_{t+1}</i>	1.015	0.31
<i>fscore_{t+1}</i>	1.014	0.32
<i>file_size</i>	0.971	0.84
<i>fog_index</i>	0.974	0.81

Table 11 – Consequences of SEC Staff Styles

This table reports the results of financial reporting quality variables on SEC staff styles:

$$\text{Financial_Reporting}_{it/t+1} = \alpha_0 + \sum \beta * \text{Styles}_{it} + \sum \partial * \text{Controls}_{it} + \text{Firm}_i + \text{Year}_t + \varepsilon_{it}$$

In columns (1) – (4), the dependent variables are four different measures of reporting quality – discretionary accrual, Fscore, file size and Fog Index respectively. In column (5), *10k_a* is the size of the 10-K amendments that are filed with the SEC after the financial year end. To proxy for styles of SEC staff members, I use *round*, *time*, *topic*, *emp_accdis*, *emp_intcon*, *emp_mda*, *emp_regfil*, *emp_risk*, *emp_other*, *emp_acccore*, *emp_accnon*, *emp_accclass* and *emp_accfv*. All variables are defined in the Appendix. Standard errors are presented in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels. Coefficients on control variables, year and firm dummies are not tabulated for parsimony.

Variable	(1) <i>dacc_{t+1}</i>	(2) <i>fscore_{t+1}</i>	(3) <i>file_size</i>	(4) <i>fog_index</i>	(5) <i>10k_a</i>
<i>round</i>	0.00005 (0.008)	0.016 (0.026)	0.090*** (0.034)	-0.099 (0.162)	-0.500 (0.330)
<i>time</i>	-0.002 (0.003)	-0.007 (0.010)	0.0007 (0.013)	-0.016 (0.063)	0.211* (0.128)
<i>topic</i>	0.002 (0.006)	-0.0008 (0.019)	-0.054** (0.025)	0.060 (0.118)	0.241 (0.241)
<i>emp_accdis</i>	0.062 (0.046)	-0.156 (0.154)	0.508** (0.197)	-1.269 (0.947)	-0.715 (1.931)
<i>emp_intcon</i>	0.006 (0.090)	-0.125 (0.301)	0.705* (0.392)	-3.535* (1.883)	2.157 (3.840)
<i>emp_mda</i>	0.011 (0.041)	-0.103 (0.137)	0.367** (0.176)	-1.019 (0.843)	-1.119 (1.721)
<i>emp_regfil</i>	0.006 (0.042)	-0.004 (0.140)	0.444** (0.179)	-1.595* (0.859)	-1.541 (1.753)
<i>emp_risk</i>	-0.034 (0.062)	-0.204 (0.206)	0.582** (0.266)	-1.237 (1.278)	-3.186 (2.607)
<i>emp_other</i>	0.027 (0.050)	-0.033 (0.154)	0.465** (0.195)	-1.137 (0.938)	0.169 (1.913)
<i>emp_acccore</i>	-0.022** (0.009)	0.037 (0.031)	-0.030 (0.039)	0.204 (0.188)	-0.508 (0.384)
<i>emp_accnon</i>	-0.059*** (0.018)	0.089 (0.061)	0.018 (0.078)	0.202 (0.372)	-0.954 (0.759)
<i>emp_accclass</i>	-0.011 (0.012)	0.086** (0.040)	0.065 (0.051)	0.039 (0.246)	-0.369 (0.501)
<i>emp_accfv</i>	-0.009 (0.016)	0.153*** (0.053)	-0.086 (0.068)	-0.335 (0.327)	-0.211 (0.668)
Observations	14,207	14,207	14,207	14,207	13,718
R-squared	0.816	0.745	0.886	0.587	0.311
Controls	Yes	Yes	Yes	Yes	Yes
Firm fixed effect	Yes	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes	Yes

Table 12 – Alternative Measures of Financial Reporting Quality

This table reports the results when using two alternative measures of financial reporting quality, composite measure and level of disaggregation (Chen et al., 2015). Panel A reports the results from fixed effects panel regressions. For each dependent variable, the fixed effects included are row 1: firm and year fixed effects; row 2: firm, year, and SEC staff fixed effects. I report the test results of joint significance for the staff fixed effects. The first number is the F-statistic, and in parentheses, the p-value and number of constraints. Also reported are the number of observations (N) and adjusted R-Squared (Adj. R²) for each regression. The control variables are as earlier. All variables are defined in the Appendix. Panel B reports the distribution of the staff fixed effects from the regressions in Panel A. Panel C reports the results of regressing alternative measures of financial reporting quality on observable staff characteristics, with coefficients of controls suppressed for parsimony. ***, ** and * denote significance at 1%, 5% and 10% levels.

Panel A: Alternative Measure of Disclosure Quality: Disaggregation Level						
Variable	F-test on fixed effects for SEC Staff	N	Adj. R² (%)			
<i>comp_frq</i>		14,207	76.1			
<i>comp_frq</i>	1.44 (0.00, 134)	14,207	76.4			
<i>disaggregation_{t+1}</i>		9,552	95.5			
<i>disaggregation_{t+1}</i>	2.26 (0.00, 100)	9,552	95.6			

Panel B: Distribution of SEC Staff Fixed Effects						
Variable	N	mean	p25	p50	p75	Inter-quartile range
<i>comp_frq</i>	134	-0.028	-0.123	0.009	0.098	0.221
<i>disaggregation_{t+1}</i>	101	0.003	-0.004	0.0007	0.006	0.010

Panel C: Observable Characteristics		
Variable	(1) <i>comp_frq</i>	(2) <i>disaggregation_{t+1}</i>
<i>female</i>	-0.0212 (0.0817)	-0.004 (0.003)
<i>cpa</i>	-0.00579 (0.0725)	-0.012*** (0.002)
<i>mba</i>	-0.0582 (0.174)	0.0003 (0.006)
<i>age</i>	-0.00262 (0.00507)	-0.0002 (0.0002)
<i>sec_exp</i>	0.0118* (0.00624)	0.0005** (0.0002)
Observations	5,101	3,381
R-squared	0.790	0.968
Firm fixed effect	Yes	Yes
Year fixed effect	Yes	Yes
Controls	Yes	Yes

Appendix A – Variables Definition

Variable	Definition
<i>round</i>	The number of comment letters from the SEC, representing the number of rounds from the first letter to the "no further comment" letter. In the regressions, I take the natural logarithm of number of rounds.
<i>time</i>	The response time (in days) from the first comment letter to the "no further comment" letter. In the regressions, I take the natural logarithm of number of days.
<i>topic</i>	The total number of issue codes assigned by Audit Analytics in the comment letter conversation database. In the regressions, I take the natural logarithm of number of topics.
<i>emp_accdis</i>	The percentage of total number of comment topics that are related to Accounting Rule and Disclosure (assigned by Audit Analytics)
<i>emp_intcon</i>	The percentage of total number of comment topics that are related to Internal Control Disclosure (assigned by Audit Analytics)
<i>emp_mda</i>	The percentage of total number of comment topics that are related to Management Discussion and Analysis (MD&A) (assigned by Audit Analytics)
<i>emp_regfil</i>	The percentage of total number of comment topics that are related to Regulatory Filing, e.g. specific Reg S-K and Reg S-X disclosure requirements (assigned by Audit Analytics)
<i>emp_risk</i>	The percentage of total number of comment topics that are related to Risk Factor Disclosure (assigned by Audit Analytics)
<i>emp_other</i>	The percentage of total number of comment topics that are related to Other Disclosure, e.g. disclosures relating to executive and director compensation, legal matters, non-GAAP measures, related party transactions (assigned by Audit Analytics)
<i>emp_acccore</i>	The percentage of total number of Accounting Rule and Disclosure Issues that are related to Core Earnings (e.g. revenue, operating expenses). Following Cassell et al. (2013), I sub-divide topics in the Accounting Rule and Disclosure Issues category by using the modified framework in Palmrose and Scholz (2004).
<i>emp_accnon</i>	The percentage of total number of Accounting Rule and Disclosure Issues that are related to Non-Core Earnings (e.g. impairment, restructurings)
<i>emp_accclass</i>	The percentage of total number of Accounting Rule and Disclosure Issues that are related to Classification Issues (e.g. balance sheet and cash flow classification issues)
<i>emp_accfv</i>	The percentage of total number of Accounting Rule and Disclosure Issues that are related to Fair Value Issues

dacc

Discretionary Accrual – Based on the cross-sectional performance-matched modified Jones model (Kothari et al., 2005), specifically, the residuals from the following pooled regression based on two-digit SIC code:

$$\frac{TA_{it}}{ASSET_{it-1}} = \alpha_0 + \alpha_1 \frac{1}{ASSET_{it-1}} + \alpha_2 \frac{\Delta SALES_{it} - \Delta AR_{it}}{ASSET_{it-1}} + \alpha_3 \frac{PPE_{it}}{ASSET_{it-1}} + \alpha_4 \frac{NI_{it}}{ASSET_{it-1}} + \varepsilon_{it}$$

Where for firm *i* year *t*, TA_{it} is total accruals, which equal Net Income minus Cash Flow from Operations; $ASSET_{it-1}$ is lagged Total Assets; $\Delta SALES_{it}$ is the change in Sales; ΔAR_{it} is the change in Accounts Receivables; and PPE_{it} is Net Property, Plant, and Equipment. NI_{it} is Net Income.

fscore

The scaled predicted probability from substituting time variant firm characteristics into the following logit model, which uses estimated coefficients from Dechow et al. (2011) (Model 2, Table 7):

Predicted Value = Intercept + α_0 RSSTaccruals + α_1 Δ Receivables + α_2 Δ Inventory + α_3 %Soft Assets + α_4 Δ Cash sales + α_5 Δ ROA + α_6 Actual Issuance + α_7 Δ Abnormal employees + α_8 Existence of operating leases

F-score is calculated as the predicted probability from the above model (i.e. $e^{\text{Predicted Value}} / (1 + e^{\text{Predicted Value}})$) divided by the unconditional expectation of misstatement.

file_size

The natural logarithm of the size of 10-K filed by the firm on EDGAR, the file has been scrubbed (i.e. tags, embedded items and other non-text features have been removed) (Loughran & McDonald, 2016). The Python script of calculating the file size is obtained from McDonald's website.

fog_index

Measure of readability of the 10-K. It is calculated by the following formula:

$$\text{Fog_index} = (\text{Words per sentence} + \text{Percent of Complex Words}) * 0.4$$

10k_a

The natural logarithm of the size of 10-KA filed by the firm on EDGAR, the file has been scrubbed (i.e. tags, embedded items and other non-text features have been removed)

comp_frq

A composite measure of financial reporting quality, computed as the first principal component of the four measures of financial reporting quality (*dacc*, *fscore*, *file_size* and *fog_index*)

disaggregation

The level of disaggregation of accounting data in 10-K, computed as the simple average of value-weighted disclosure quality score of balance sheet items (DQ_BS) and equally-weighted disclosure quality score of income statement items (DQ_IS). Please refer to Chen et al. (2015) for complete details.

<i>restate</i>	An indicator variable that is equal to 1 if the company files a 10-K restatement in year t, and 0 otherwise
<i>m_weak</i>	An indicator variable that is equal to 1 if the internal control audit opinion (under SOX Section 404) or the management certification (under SOX Section 302) as reported in Audit Analytics is qualified for a material weakness in year t, and 0 otherwise
<i>lnmarketcap</i>	The natural logarithm of market capitalization
<i>loss</i>	An indicator variable that is equal to 1 if earnings before extraordinary items is negative in year t, and 0 otherwise
<i>m_a</i>	An indicator variable that is equal to 1 for non-zero acquisitions or mergers as reported on a pre-tax basis in year t, and 0 otherwise
<i>restructuring</i>	An indicator variable that is equal to 1 for non-zero restructuring costs as reported on a pre-tax basis in year t, and 0 otherwise
<i>salesgrowth</i>	The percentage change in annual sales from year t-1 to year t
<i>segments</i>	The number of business segments reported in the Compustat Segments database
<i>bankruptcyrank</i>	<p>The decile rank of the company's Altman's Z-score. Companies in the decile having the poorest financial health are assigned a value of 10 and so on down to 1 for the highest financial health. Altman's Z-score is measured following DeFond and Hung (2003) and Altman (1968):</p> $\text{Z-score} = 1.2 * [\text{net working capital (ACT-LCT)/total assets (AT)}] + 1.4 * [\text{retained earnings (RE)/total assets}] + 3.3 * [\text{earnings before interest and taxes (PI + XINT)/total assets}] + 0.6 * [\text{market value of equity (CSHO * PRCC_F)/book value of liabilities (LT)}] + 1.0 * [\text{sales (SALE)/total assets}].$
<i>ceo_chair</i>	An indicator variable that is equal to 1 if the CEO is also the chairman of the board of directors, and 0 otherwise. This variable is set equal to 0 if the data are missing.
<i>ceo_tenure</i>	The number of years the CEO has served in his/her current role. This variable is set equal to 0 if the data are missing.
<i>cfo_tenure</i>	The number of years the CFO has served in his/her current role. This variable is set equal to 0 if the data are missing.
<i>highvolatility</i>	An indicator variable that is equal to 1 if the volatility of abnormal monthly stock returns (equal to the monthly return [RET] minus the value weighted return [VWRTD]) is in the highest quartile in a given fiscal year, and 0 otherwise. Return volatility is calculated as the standard deviation of monthly stock returns for the 12-month period ending in the last month of the fiscal year.

<i>auditordismissed</i>	An indicator variable that is equal to 1 if the auditor was dismissed in year t, and 0 otherwise
<i>auditorresigned</i>	An indicator variable that is equal to 1 if the auditor resigned in year t, and 0 otherwise
<i>big_n</i>	An indicator variable that is equal to 1 if the auditor in year t is a Big 4 audit firm (i.e., Deloitte, Ernst & Young, KPMG, or PricewaterhouseCoopers), and 0 otherwise
<i>second_tier</i>	An indicator variable that is equal to 1 if the auditor is a second-tier audit firm (i.e., BDO Seidman, Crowe Horwath, Grant Thornton, or McGladrey & Pullen), and 0 otherwise
<i>audtenure</i>	The number of consecutive years (through year t) during which the auditor has audited the company
<i>female</i>	Indicator variable that is equal to 1 if the SEC staff member is female, and 0 otherwise
<i>age</i>	Age of the SEC staff, I approximate this number by assuming that SEC staff member obtains his/ her college degree at 22 years old. The year the SEC staff member obtains his / her college degree is extracted from the LinkedIn profile page.
<i>cpa</i>	Indicator variable that is equal to 1 if the SEC staff member discloses he / she has CPA on LinkedIn profile page, and 0 otherwise
<i>mba</i>	Indicator variable that is equal to 1 if the SEC staff member discloses he / she has obtained an MBA on LinkedIn profile page, and 0 otherwise
<i>sec_exp</i>	The number of years the SEC staff member has been working at SEC

Appendix B – Assignment of Accounting Topics to Sub-Categories

The following table provides a list of all Accounting topics coded by Audit Analytics (AA). I follow Palmrose and Scholz (2004) and Cassell et al. (2013) to classify Accounting Disclosure into 4 subcategories: Core Earnings topics (those affecting revenues, cost of goods sold, selling, general and administrative expenses, and other primary operating activities), Non-Core Earnings topics (those affecting special one-time items or non-operating activities, e.g., impairments, restructurings, M&A, discontinued operations, extraordinary items, taxes and goodwill), Classification topics and Fair Value topics.

AA Topic	AA Topic Description	Assigned Classification
176	Accounts receivable and cash reporting issues	Core
190	Depreciation, depletion, or amortization reporting issues	Core
192	Expense (payroll, selling, general, and administrative, and other recording issues)	Core
202	Inventory, vendor, and/or cost of sales issues	Core
204	Lease, leasehold improvements (SFAS 13 and SFAS 98)	Core
205	Liabilities, payables, and accrual estimate issues	Core
212	Revenue recognition (including deferred revenue) issues	Core
816	Percentage of completion	Core
1016	Research and development issues	Core
177	Acquisitions, mergers, and business combinations	Non-Core
178	Asset sales, disposals, divestitures, reorganization issues	Non-Core
180	Capitalization of expenditures issues	Non-Core
182	Comprehensive income (equity section) issues	Non-Core
183	Consolidation (FIN 46, variable interest, structured investment vehicles, special purpose entities, and off-balance sheet arrangements)	Non-Core
184	Consolidation, foreign currency/inflation issues	Non-Core
186	Debt, quasi-debt, warrants, and equity (beneficial conversion feature) security issues	Non-Core
187	Deferred, stock-based, and/or executive compensation issues	Non-Core
188	Deferred, stock-based options backdating only	Non-Core
189	Deferred, stock-based compensation SFAS 123 only (subcategory)	Non-Core
194	Financial derivatives/hedging (SFAS 133) accounting issues	Non-Core
195	Foreign (affiliate or subsidiary) issues	Non-Core
196	Subsidiary issues, U.S. or foreign (subcategory)	Non-Core
200	Investment in subsidiary/affiliate issues	Non-Core
201	Intercompany accounting issues	Non-Core
203	Contingencies and commitments, legal (SFAS 5) accounting issues	Non-Core
206	Pension and related employee plan issues	Non-Core
207	Property, plant, and equipment fixed asset (value/diminution)	Non-Core
208	Intangible assets and goodwill	Non-Core
214	Tax expense/benefit/deferral/other (SFAS 109) issues	Non-Core
254	Asset retirement obligation (SFAS 143) issues	Non-Core
283	Loans receivable, valuation, and allowances issues	Non-Core
284	Loss reserves (loss adjustment expense, reinsurance) disclosure issues	Non-Core

897	Tax rate disclosure issues	Non-Core
1011	Non-monetary exchange (APB 29, EITF 01-2) issues	Non-Core
1012	Gain or loss recognition issues	Non-Core
1027	Dividend and/or distribution issues	Non-Core
179	Balance sheet classification of assets issues	Classification
181	Cash flow statement (SFAS 95) classification errors	Classification
185	Debt and/or equity classification issues	Classification
191	Earnings per share ratio and classification of income statement issues	Classification
278	Financial statement segment reporting (SFAS 131 subcategory) issues	Classification
931	Investments (SFAS 115) and cash and cash equivalents classification issues	Classification
934	Changes in accounting principles and interpretation issues	Classification
935	Fair value measurement, estimates, use (including vendor-specific objective evidence)	Fair Value

Appendix C1 – Correlation Matrix (Pearson's / Spearman's rank correlation coefficients are shown in the lower / upper triangle)

Variable	No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>dacc_{t+1}</i>	1		0.13***	-0.04***	0.03***	-0.01*	0.02**	-0.01	0.03***	0.03***	0.02*	-0.03***	-0.06***
<i>fscore_{t+1}</i>	2	-0.05***		0.03***	-0.02**	-0.01	0.06***	0	0.09***	0	-0.01	-0.07***	-0.04***
<i>file_size</i>	3	-0.01	0		0.34***	-0.03***	-0.15***	-0.09***	-0.11***	-0.12***	0.11***	0	-0.01
<i>fog_index</i>	4	0	0	0.38***		-0.02***	-0.1***	-0.05***	-0.07***	-0.06***	0.05***	0.01	-0.01
<i>round</i>	5	0	0.01*	-0.03***	-0.02**		0.67***	0.75***	0.1***	0.05***	-0.09***	0	0.15***
<i>topic</i>	6	0	0	-0.14***	-0.08***	0.71***		0.57***	0.61***	0.18***	-0.47***	-0.13***	0.18***
<i>time</i>	7	0.03***	0.01	-0.05***	-0.03***	0.66***	0.49***		0.16***	0.09***	-0.15***	-0.02*	0.14***
<i>emp_accdis</i>	8	-0.01	0	-0.11***	-0.05***	0.1***	0.54***	0.1***		-0.03***	-0.55***	-0.49***	-0.1***
<i>emp_intcon</i>	9	0.01	0	-0.1***	-0.04***	-0.03***	0.03***	0	-0.12***		-0.11***	0.01	0.06***
<i>emp_mda</i>	10	0.01	0.02*	0.12***	0.05***	-0.09***	-0.38***	-0.08***	-0.5***	-0.05***		-0.2***	-0.22***
<i>emp_regfil</i>	11	0	-0.02***	0.01*	0.01	-0.03***	-0.2***	-0.05***	-0.53***	0	-0.23***		0.11***
<i>emp_risk</i>	12	-0.01	0	0.01	0.01	0.04***	0	0.02**	-0.21***	0.01	-0.14***	0.11***	
<i>emp_other</i>	13	0	0	0.08***	0.05***	-0.06***	-0.41***	-0.07***	-0.69***	-0.06***	0.12***	0.25***	-0.01
<i>emp_acccore</i>	14	0.01	0	-0.12***	-0.02**	0.07***	0.15***	0.07***	0.25***	0.04***	-0.11***	-0.16***	-0.04***
<i>emp_accnon</i>	15	-0.01	0	-0.02**	-0.02***	0.07***	0.4***	0.06***	0.73***	-0.08***	-0.39***	-0.37***	-0.12***
<i>emp_accclass</i>	16	-0.01*	0	-0.03***	-0.02**	0.07***	0.12***	0.04***	0.17***	-0.02**	-0.07***	-0.1***	-0.03***
<i>emp_accfv</i>	17	0.01*	0.01	-0.01	-0.01	0.11***	0.17***	0.06***	0.3***	-0.05***	-0.18***	-0.14***	-0.02**
<i>auditordismissed</i>	18	0.01	0	-0.07***	-0.02***	0.03***	0.04***	0.01*	0.02***	0.03***	0	-0.02**	-0.02*
<i>auditorresigned</i>	19	0.01	0	-0.05***	-0.01	0.04***	0.05***	0.04***	0.01	0.04***	-0.01	0	-0.01
<i>audtenure</i>	20	-0.01	-0.01	0.45***	0.18***	-0.04***	-0.13***	-0.04***	-0.08***	-0.07***	0.05***	0.01	0.01
<i>bankruptcyrank</i>	21	0.05***	0.02*	0.09***	-0.01	0.05***	0.03***	0.02*	0.02**	0.01	0.01	-0.02***	0.01
<i>big_n</i>	22	-0.05***	-0.01	0.18***	0.02**	-0.07***	-0.1***	-0.05***	-0.04***	-0.09***	0.03***	-0.02*	0
<i>ceo_chair</i>	23	-0.02**	-0.01	-0.2***	-0.15***	0	0.07***	0.02***	0.08***	0	-0.03***	-0.06***	-0.03***
<i>ceo_tenure</i>	24	-0.03***	-0.01*	0.29***	0.1***	-0.05***	-0.08***	-0.02*	-0.03***	-0.07***	0.04***	-0.01	-0.02***
<i>cfo_bod</i>	25	-0.01	0	0.25***	0.12***	-0.01	-0.05***	-0.01	-0.02***	-0.03***	0.04***	0	0.01
<i>cfo_tenure</i>	26	-0.03***	-0.01	0.42***	0.17***	-0.05***	-0.12***	-0.05***	-0.08***	-0.08***	0.07***	0.02*	0
<i>highvolatility</i>	27	0.03***	0.03***	-0.1***	-0.03***	0.06***	0.05***	0.04***	-0.01	0.05***	0	0.01	0.01
<i>lnmarketcap</i>	28	-0.08***	0	0.41***	0.11***	-0.03***	-0.09***	-0.01	-0.04***	-0.11***	0.06***	-0.03***	0.01
<i>loss</i>	29	0.07***	0.02*	-0.11***	-0.04***	0.06***	0.04***	0.03***	0	0.05***	-0.01	0.01	0.02*
<i>m_a</i>	30	0.01	0.01	0.13***	0.07***	-0.02***	-0.03***	-0.02**	-0.02*	-0.02**	0.02**	0.01	-0.01
<i>m_weak</i>	31	0.03***	0.02**	-0.05***	-0.02**	0.05***	0.08***	0.05***	0.03***	0.11***	0	-0.05***	0
<i>restate</i>	32	-0.01	-0.01	-0.02***	-0.01	0	0.01	0.01	0.03***	-0.01	-0.01	-0.01	-0.01
<i>restructuring</i>	33	0	0	0.02**	0.01	0	0	0	0	-0.01	0.01	-0.01	0
<i>salesgrowth</i>	34	0.06***	0.54***	-0.01	0	0.01	-0.01	0	0	-0.01	0.01	-0.02*	0
<i>second_tier</i>	35	0.01*	0.01	-0.15***	-0.05***	0.01	0.03***	0	0.04***	0.04***	-0.04***	0	-0.01
<i>segments</i>	36	-0.03***	0	0.18***	0.06***	-0.04***	0.01*	-0.03***	0.05***	-0.04***	-0.01*	-0.05***	-0.01

(continued on next page)

Variable	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
<i>dacc_{t+1}</i>	-0.02**	0.04***	0	-0.03***	0.07***	0.03***	0.02***	-0.05***	0.13***	-0.13***	-0.07***	-0.12***	-0.01
<i>fscore_{t+1}</i>	-0.06***	0.04***	0.04***	0.08***	0.07***	0	0	0	-0.13***	0.04***	0.02**	0.08***	0.03***
<i>file_size</i>	0.09***	-0.16***	-0.03***	-0.08***	-0.06***	-0.06***	-0.05***	0.43***	0.1***	0.18***	-0.2***	0.28***	0.25***
<i>fog_index</i>	0.07***	-0.04***	-0.05***	-0.08***	-0.03***	-0.03***	0	0.16***	-0.03***	-0.01	-0.19***	0.04***	0.12***
<i>round</i>	-0.08***	0.15***	0.1***	0.18***	0.2***	0.02**	0.02**	-0.02***	0.05***	-0.04***	0.01	-0.03***	-0.01
<i>topic</i>	-0.53***	0.4***	0.5***	0.42***	0.46***	0.04***	0.03***	-0.12***	0.03***	-0.08***	0.08***	-0.06***	-0.04***
<i>time</i>	-0.13***	0.18***	0.12***	0.18***	0.19***	0.02**	0.03***	-0.05***	0.02***	-0.03***	0.05***	-0.02*	-0.02***
<i>emp_accdis</i>	-0.73***	0.45***	0.73***	0.43***	0.49***	0.02***	0.01	-0.09***	0.02***	-0.04***	0.08***	-0.02**	-0.03***
<i>emp_intcon</i>	-0.11***	0.07***	0	0.05***	0.02**	0.05***	0.05***	-0.09***	0.01	-0.11***	0.02***	-0.08***	-0.04***
<i>emp_mda</i>	0.22***	-0.26***	-0.41***	-0.28***	-0.31***	0	-0.01	0.04***	0	0.03***	-0.03***	0.03***	0.03***
<i>emp_regfil</i>	0.28***	-0.19***	-0.33***	-0.16***	-0.19***	-0.02**	0	0.01	-0.03***	-0.02*	-0.05***	-0.01	0
<i>emp_risk</i>	-0.06***	0.02**	-0.04***	0.01	0.04***	-0.01	0	-0.01	0.02**	-0.01	-0.02**	-0.03***	0
<i>emp_other</i>		-0.36***	-0.56***	-0.34***	-0.37***	-0.03***	-0.03***	0.12***	-0.04***	0.07***	-0.06***	0.05***	0.02**
<i>emp_acccore</i>	-0.2***		0.02**	0.13***	0.13***	0.01	0.02**	-0.1***	-0.03***	-0.06***	0.04***	-0.08***	-0.05***
<i>emp_accnon</i>	-0.52***	-0.17***		0.12***	0.32***	0.02*	0.01	-0.03***	0.07***	-0.01	0.07***	0.02***	0
<i>emp_accclass</i>	-0.14***	-0.09***	-0.1***		0.15***	0.01	-0.01	-0.08***	-0.05***	-0.01*	0.06***	0.01	-0.02**
<i>emp_accfv</i>	-0.2***	-0.04***	0.14***	-0.06***		0.01*	0	-0.04***	0.05***	-0.02**	0.02**	-0.01	-0.01
<i>auditordismissed</i>	-0.03***	0	0.02*	0	0.01		0.48***	-0.2***	0.04***	-0.1***	0.01	-0.1***	-0.02***
<i>auditorresigned</i>	-0.03***	0.01	0.01	-0.01	0	0.48***		-0.12***	0.01	-0.12***	-0.01*	-0.08***	-0.02*
<i>audtenure</i>	0.11***	-0.07***	-0.03***	-0.04***	-0.01	-0.21***	-0.13***		-0.05***	0.43***	-0.08***	0.36***	0.17***
<i>bankruptcyrank</i>	-0.04***	-0.03***	0.07***	-0.07***	0.04***	0.04***	0.01	-0.05***		-0.01	-0.03***	-0.14***	0.01
<i>big_n</i>	0.07***	-0.04***	-0.01	0.01	0	-0.1***	-0.12***	0.43***	-0.02**		0.14***	0.37***	0.08***
<i>ceo_chair</i>	-0.05***	0.01	0.07***	0.03***	-0.01	0.01	-0.01*	-0.08***	-0.04***	0.14***		0.25***	-0.07***
<i>ceo_tenure</i>	0.05***	-0.08***	0.02**	0.02*	-0.01	-0.09***	-0.07***	0.35***	-0.13***	0.3***	0.19***		0.15***
<i>cfo_bod</i>	0.01*	-0.03***	0	-0.01	0.01	-0.02***	-0.02*	0.18***	0.01	0.08***	-0.07***	0.15***	
<i>cfo_tenure</i>	0.09***	-0.08***	-0.02**	-0.01	-0.01	-0.09***	-0.06***	0.42***	-0.13***	0.28***	-0.05***	0.66***	0.19***
<i>highvolatility</i>	-0.02**	0.06***	-0.03***	-0.05***	0.01	0.07***	0.04***	-0.17***	0.21***	-0.2***	-0.1***	-0.25***	-0.06***
<i>lnmarketcap</i>	0.06***	-0.09***	0.02***	0.02***	-0.02*	-0.13***	-0.09***	0.37***	-0.21***	0.53***	0.19***	0.49***	0.15***
<i>loss</i>	-0.02*	0.06***	-0.02**	-0.07***	0.03***	0.07***	0.03***	-0.14***	0.44***	-0.16***	-0.1***	-0.25***	-0.06***
<i>m_a</i>	0.01	-0.01	0	0	0.01	0	-0.01	0.06***	-0.01	0.01*	-0.05***	0.04***	0.05***
<i>m_weak</i>	-0.06***	0.02***	0.02**	0	0.01	0.12***	0.09***	-0.13***	0.1***	-0.09***	-0.01	-0.11***	-0.04***
<i>restate</i>	-0.03***	0.01*	0.01	0.01	0	0	0.01	-0.02***	0.01	0.01	0.01*	-0.02**	-0.02**
<i>restructuring</i>	0	0.02**	0	-0.02*	0	-0.01	-0.01	0.01*	0.03***	0.04***	0.02**	0.02***	0
<i>salesgrowth</i>	0.01	0	-0.02*	0	0	0	0	-0.01	0.02*	-0.02**	-0.01	-0.02**	0
<i>second_tier</i>	-0.04***	0.04***	0.01	-0.01	0.01	0.05***	0.03***	-0.16***	-0.02***	-0.54***	-0.06***	-0.13***	-0.04***
<i>segments</i>	-0.01	-0.06***	0.06***	0.05***	0.01	-0.01	-0.02*	0.11***	0.03***	0.15***	0.1***	0.17***	0.05***

(continued on next page)

Variable	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
<i>dacc_{t+1}</i>	-0.11***	0.11***	-0.25***	0.23***	0.02***	0.06***	0	0	-0.13***	0.06***	-0.04***
<i>fscore_{t+1}</i>	0.08***	-0.08***	0.1***	-0.15***	0.07***	0.01	-0.01	0	0.2***	0.02**	0.13***
<i>file_size</i>	0.37***	-0.1***	0.41***	-0.11***	0.13***	-0.05***	-0.02**	0.02**	-0.01	-0.15***	0.18***
<i>fog_index</i>	0.1***	0.01	0.04***	0	0.07***	-0.02***	-0.02**	0	0.02**	-0.04***	0
<i>round</i>	-0.03***	0.05***	-0.03***	0.05***	-0.02**	0.04***	0.01	0.01	0.02**	-0.01	-0.04***
<i>topic</i>	-0.1***	0.03***	-0.08***	0.02***	-0.03***	0.07***	0.02**	0.01	0.01	0.04***	0.03***
<i>time</i>	-0.04***	0.05***	-0.01	0.04***	-0.02***	0.06***	0.01*	0.01	0.03***	-0.01	-0.04***
<i>emp_accdis</i>	-0.07***	-0.01	-0.04***	0	-0.02**	0.03***	0.03***	0	0	0.03***	0.06***
<i>emp_intcon</i>	-0.1***	0.05***	-0.12***	0.05***	-0.02**	0.13***	-0.01	-0.01	0	0.05***	-0.01*
<i>emp_mda</i>	0.04***	0.01	0.06***	-0.01	0.02**	0	-0.01	0.01	0.01	-0.03***	-0.03***
<i>emp_regfil</i>	0.02**	0	-0.03***	0.01	0.01	-0.05***	-0.02*	-0.01	0	0.01	-0.05***
<i>emp_risk</i>	-0.01	0.02**	-0.01	0.03***	-0.01	0.01	-0.01	0	0	-0.01	0
<i>emp_other</i>	0.09***	-0.02**	0.06***	-0.01	0.01	-0.06***	-0.03***	0	-0.02**	-0.04***	-0.02***
<i>emp_acccore</i>	-0.11***	0.06***	-0.12***	0.06***	-0.02**	0.04***	0.02**	0.02**	0.01	0.05***	-0.05***
<i>emp_accnon</i>	-0.01*	-0.03***	0.02**	-0.02**	0	0.02***	0.01	0	-0.01	0.01	0.06***
<i>emp_accclass</i>	-0.03***	-0.04***	0	-0.07***	-0.01	0.02**	0.02**	-0.02**	0.02*	0.01	0.08***
<i>emp_accfv</i>	-0.03***	0.02*	-0.04***	0.04***	0	0.03***	0.01	0	-0.01	0.02**	0.02***
<i>auditordismissed</i>	-0.11***	0.07***	-0.13***	0.07***	0	0.12***	0	-0.01	-0.01	0.05***	-0.01
<i>auditorresigned</i>	-0.08***	0.04***	-0.09***	0.03***	-0.01	0.09***	0.01	-0.01	0.01	0.03***	-0.02*
<i>audtenure</i>	0.42***	-0.17***	0.37***	-0.14***	0.06***	-0.14***	-0.02***	0.01*	-0.08***	-0.17***	0.1***
<i>bankruptcyrank</i>	-0.13***	0.19***	-0.18***	0.43***	0	0.09***	0.01	0.03***	-0.18***	-0.02***	0.04***
<i>big_n</i>	0.35***	-0.2***	0.53***	-0.16***	0.01*	-0.09***	0.01	0.04***	0.01	-0.54***	0.15***
<i>ceo_chair</i>	0.06***	-0.1***	0.2***	-0.1***	-0.05***	-0.01	0.01*	0.02**	0.05***	-0.06***	0.1***
<i>ceo_tenure</i>	0.84***	-0.28***	0.59***	-0.28***	0.03***	-0.13***	-0.02***	0.03***	-0.01	-0.15***	0.2***
<i>cfo_bod</i>	0.18***	-0.06***	0.15***	-0.06***	0.05***	-0.04***	-0.02**	0	0.02***	-0.04***	0.05***
<i>cfo_tenure</i>		-0.26***	0.55***	-0.27***	0.05***	-0.14***	-0.03***	0.02**	-0.02***	-0.14***	0.17***
<i>highvolatility</i>	-0.22***		-0.4***	0.35***	-0.01	0.11***	0.01	-0.01	0.01	0.07***	-0.16***
<i>lnmarketcap</i>	0.46***	-0.39***		-0.41***	0.04***	-0.16***	-0.02**	0.04***	0.14***	-0.23***	0.24***
<i>loss</i>	-0.23***	0.35***	-0.41***		-0.02**	0.13***	0.01	-0.01	-0.19***	0.07***	-0.14***
<i>m_a</i>	0.07***	-0.01	0.04***	-0.02**		-0.01	0	0.01	0.02**	-0.01	0.04***
<i>m_weak</i>	-0.12***	0.11***	-0.15***	0.13***	-0.01		0.04***	0.01*	0	0.04***	-0.02**
<i>restate</i>	-0.03***	0.01	-0.02*	0.01	0	0.04***		0	0.01	0	0.01
<i>restructuring</i>	0.01	-0.01	0.04***	-0.01	0.01	0.01*	0		0.01*	-0.01	0.01
<i>salesgrowth</i>	-0.02*	0.03***	0	0.02***	0	0.02**	-0.01	0		-0.01*	-0.04***
<i>second_tier</i>	-0.12***	0.07***	-0.22***	0.07***	-0.01	0.04***	0	-0.01	0.01		-0.07***
<i>segments</i>	0.14***	-0.16***	0.27***	-0.14***	0.04***	-0.02**	0	0.01	-0.02**	-0.07***	

Appendix C2 – Full Regression Results

This table reports the coefficient estimates for the control variables in the main tests (H1, H2 and H3). Panel A reports the test results on firms' remediation costs. Panel B reports the test results on firms' comment letter contents. Panel C reports the test results on firms' financial reporting quality. ***, ** and * denote significance at 1%, 5% and 10% levels.

Panel A: Remediation Costs		
Variable	(1) <i>round</i>	(2) <i>time</i>
<i>auditordismissed</i>	-0.004 (0.013)	-0.013 (0.025)
<i>auditorresigned</i>	0.060*** (0.027)	0.112*** (0.051)
<i>audtenure</i>	0.001 (0.002)	0.0003 (0.003)
<i>bankruptcyrank</i>	0.002 (0.003)	0.005 (0.005)
<i>big_n</i>	-0.046*** (0.019)	-0.084*** (0.036)
<i>ceo_chair</i>	-0.001 (0.012)	0.036 (0.023)
<i>ceo_tenure</i>	-0.002 (0.001)	0.004 (0.003)
<i>cfo_tenure</i>	0.002 (0.002)	-0.001 (0.004)
<i>highvolatility</i>	0.009 (0.007)	0.007 (0.013)
<i>lnmarketcap</i>	-0.004 (0.006)	0.002 (0.011)
<i>loss</i>	0.010 (0.008)	0.012 (0.016)
<i>m_a</i>	-0.012 (0.014)	-0.008 (0.027)
<i>m_weak</i>	0.022*** (0.011)	0.058*** (0.021)
<i>restate</i>	-0.001 (0.008)	0.001 (0.016)
<i>restructuring</i>	-0.015 (0.020)	-0.031 (0.039)
<i>salesgrowth</i>	-0.0002 (0.0004)	0.0001 (0.001)
<i>second_tier</i>	-0.066*** (0.019)	-0.126*** (0.036)
<i>segments</i>	-0.004 (0.003)	-0.002 (0.005)
Constant	1.582*** (0.120)	3.763*** (0.230)
Fixed Effects	Firm, Year and Staff	
Observations	14,207	14,207
R-squared	69.2%	70.4%
F-test for Staff	8.46***	9.34***

Panel B: Comment Letter Contents

Variable	(1) <i>topic</i>	(2) <i>emp_accdis</i>	(3) <i>emp_intcon</i>	(4) <i>emp_mda</i>	(5) <i>emp_regfil</i>	(6) <i>emp_risk</i>	(7) <i>emp_other</i>	(8) <i>emp_acccore</i>	(9) <i>emp_accnon</i>	(10) <i>emp_accclass</i>	(11) <i>emp_accfv</i>
<i>auditordismissed</i>	-0.008 (0.013)	0.010 (0.009)	-0.001 (0.002)	0.001 (0.014)	-0.012* (0.007)	-0.004 (0.003)	0.009 (0.009)	-0.020 (0.027)	0.012 (0.02)	-0.016 (0.018)	-0.0007 (0.013)
<i>auditorresigned</i>	0.045* (0.027)	0.017 (0.019)	0.006 (0.005)	0.022 (0.028)	0.015 (0.014)	0.004 (0.006)	0.012 (0.018)	0.012 (0.054)	0.021 (0.04)	-0.048 (0.037)	-0.005 (0.025)
<i>audtenure</i>	0.002 (0.002)	-0.0001 (0.001)	0.0004 (0.0003)	-0.002 (0.002)	-0.0005 (0.0008)	0.0004 (0.0004)	-0.0007 (0.001)	0.005 (0.003)	0.007*** (0.002)	-0.0005 (0.002)	0.002* (0.001)
<i>bankruptcyrank</i>	0.002 (0.003)	0.002 (0.002)	-0.0004 (0.0005)	0.0009 (0.003)	-0.0001 (0.001)	0.0006 (0.0006)	0.0008 (0.002)	-0.001 (0.005)	0.009** (0.004)	0.0002 (0.004)	-0.004 (0.002)
<i>big_n</i>	-0.05*** (0.019)	-0.026* (0.014)	0.002 (0.003)	0.017 (0.02)	-0.008 (0.01)	-0.002 (0.005)	-0.007 (0.013)	-0.058 (0.038)	-0.072** (0.028)	0.023 (0.026)	-0.02 (0.018)
<i>ceo_chair</i>	0.034*** (0.012)	-0.01 (0.009)	-0.002 (0.002)	0.006 (0.013)	-0.013** (0.006)	0.003 (0.003)	0.003 (0.008)	0.048* (0.025)	0.043** (0.018)	0.004 (0.017)	0.013 (0.012)
<i>ceo_tenure</i>	-0.0009 (0.001)	0.0007 (0.001)	0.0004 (0.0003)	0.001 (0.002)	-0.0003 (0.0008)	-0.0003 (0.0004)	-0.002* (0.001)	-0.0002 (0.003)	-0.003 (0.002)	0.003 (0.002)	-0.004*** (0.001)
<i>cfo_tenure</i>	-0.006*** (0.002)	0.002 (0.001)	-0.0003 (0.0004)	0.005** (0.002)	0.001 (0.001)	-0.0003 (0.0005)	0.004*** (0.001)	0.004 (0.004)	0.008*** (0.003)	-0.009*** (0.003)	-0.003 (0.002)
<i>highvolatility</i>	0.001 (0.007)	0.004 (0.005)	0.0005 (0.001)	0.004 (0.007)	0.0001 (0.004)	0.001 (0.002)	0.005 (0.004)	-0.012 (0.013)	0.01 (0.01)	-0.0003 (0.009)	0.002 (0.006)
<i>lnmarketcap</i>	-0.005 (0.006)	-0.006 (0.004)	-0.001 (0.001)	-0.002 (0.006)	0.004 (0.003)	-0.0003 (0.001)	0.0007 (0.004)	-0.031*** (0.012)	0.005 (0.009)	0.004 (0.008)	-0.005 (0.006)
<i>loss</i>	0.019** (0.008)	-0.012** (0.006)	-0.0009 (0.001)	-0.021** (0.008)	0.011** (0.004)	0.0009 (0.002)	-0.001 (0.005)	0.018 (0.016)	-0.011 (0.012)	0.004 (0.011)	0.031*** (0.008)
<i>m_a</i>	-0.022 (0.014)	0.005 (0.01)	0.003 (0.003)	0.002 (0.015)	-0.003 (0.007)	0.0007 (0.003)	0.006 (0.009)	-0.008 (0.028)	-0.004 (0.021)	-0.007 (0.02)	0.014 (0.013)
<i>m_weak</i>	0.016 (0.011)	0.004 (0.008)	0.014*** (0.002)	0.005 (0.011)	-0.004 (0.006)	-0.004 (0.003)	-0.01 (0.007)	-0.017 (0.022)	0.025 (0.016)	-0.02 (0.015)	0.014 (0.01)
<i>restate</i>	0.002 (0.009)	0.006 (0.006)	0.0003 (0.002)	0.001 (0.009)	0.003 (0.005)	0.0005 (0.002)	-0.007 (0.006)	-0.009 (0.017)	0.012 (0.013)	-0.028** (0.012)	0.003 (0.008)
<i>restructuring</i>	-0.032 (0.02)	0.017 (0.015)	-0.002 (0.004)	0.05** (0.021)	-0.01 (0.011)	0.002 (0.005)	0.001 (0.014)	0.041 (0.041)	-0.006 (0.030)	-0.017 (0.028)	-0.012 (0.019)

<i>salesgrowth</i>	-0.0003 (0.0004)	-0.0001 (0.0003)	0.0000003 (0.00007)	-0.0001 (0.0004)	-0.0001 (0.0002)	-0.00005 (0.0001)	-0.0001 (0.0003)	-0.0004 (0.0008)	-0.0002 (0.0006)	0.00008 (0.0006)	0.0003 (0.0004)
<i>second_tier</i>	-0.059*** (0.019)	-0.03** (0.013)	0.003 (0.003)	0.040** (0.019)	-0.004 (0.010)	-0.004 (0.005)	0.008 (0.013)	0.049 (0.037)	-0.032 (0.028)	-0.041 (0.026)	0.0004 (0.018)
<i>segments</i>	-0.0003 (0.003)	-0.0001 (0.002)	0.0001 (0.0005)	-0.001 (0.003)	-0.00005 (0.001)	-0.001** (0.0006)	0.0003 (0.002)	-0.002 (0.005)	-0.0007 (0.004)	0.002 (0.003)	-0.0005 (0.002)
Constant	2.088*** (0.122)	0.287*** (0.087)	0.021 (0.022)	0.606*** (0.125)	0.144** (0.064)	0.025 (0.029)	0.684*** (0.081)	0.784*** (0.243)	0.522*** (0.178)	0.472*** (0.167)	0.336*** (0.115)
Fixed Effects	Firm, Year and Staff										
Observations	14,207	14,207	14,207	14,207	14,207	14,207	14,207	14,207	14,207	14,207	14,207
R-squared	74.1%	68.9%	68.7%	69.3%	67.8%	64.1%	69.4%	67.1%	67.6%	66.7%	66.1%
F-test for Staff	26.09***	22.69***	6.23***	26.41***	12.95***	10.99***	26.65***	9.67***	15.40***	9.31***	9.05***

Panel C: Financial Reporting Quality				
Variable	(1) <i>dacc_{t+1}</i>	(2) <i>fscore_{t+1}</i>	(3) <i>file_size</i>	(4) <i>fog_index</i>
<i>auditordismissed</i>	-0.002 (0.007)	0.0001 (0.021)	0.025 (0.023)	-0.028 (0.130)
<i>auditorresigned</i>	-0.003 (0.013)	0.027 (0.042)	-0.050 (0.046)	0.083 (0.264)
<i>audtenure</i>	-0.0008 (0.0008)	0.007*** (0.003)	0.004 (0.003)	-0.001 (0.015)
<i>bankruptcyrank</i>	0.008*** (0.001)	-0.017*** (0.004)	0.014*** (0.004)	0.045* (0.025)
<i>big_n</i>	0.018* (0.010)	-0.059* (0.030)	-0.025 (0.033)	0.425** (0.188)
<i>ceo_chair</i>	0.005 (0.006)	0.011 (0.018)	-0.251*** (0.021)	-0.586*** (0.121)
<i>ceo_tenure</i>	-0.001* (0.0008)	-0.004 (0.002)	0.007*** (0.003)	0.01 (0.014)
<i>cfo_tenure</i>	0.0007 (0.001)	0.004 (0.004)	0.013*** (0.004)	0.02 (0.02)
<i>highvolatility</i>	-0.002 (0.003)	0.008 (0.011)	0.018 (0.012)	-0.021 (0.066)
<i>lnmarketcap</i>	0.003 (0.003)	0.038*** (0.010)	0.045*** (0.010)	0.042 (0.057)
<i>loss</i>	0.011** (0.004)	-0.121*** (0.013)	0.011 (0.014)	-0.038 (0.08)
<i>m_a</i>	0.003 (0.007)	0.003 (0.023)	0.002 (0.024)	0.118 (0.139)
<i>m_weak</i>	0.011** (0.006)	-0.036** (0.018)	0.048*** (0.019)	0.114 (0.107)
<i>restate</i>	0.003 (0.004)	0.017 (0.013)	0.021 (0.015)	0.014 (0.084)
<i>restructuring</i>	-0.001 (0.01)	0.044 (0.031)	-0.027 (0.035)	-0.070 (0.199)
<i>salesgrowth</i>	-0.0001 (0.0002)	-0.002*** (0.0007)	0.0004 (0.0007)	0.005 (0.004)
<i>second_tier</i>	0.045*** (0.009)	-0.118*** (0.03)	0.002 (0.032)	0.079 (0.183)
<i>segments</i>	-0.0002 (0.001)	0.012*** (0.004)	0.005 (0.004)	0.008 (0.025)
Constant	-0.150** (0.060)	1.389*** (0.188)	14.140*** (0.209)	11.340*** (1.191)
Fixed Effects		Firm, Year and Staff		
Observations	14,207	14,207	14,207	14,207
R-squared	82.8%	71.2%	88.9%	56.2%
F-test for Staff	1.30**	1.29**	1.70***	1.21**

Appendix C3 – Percentages of Staff Fixed Effects that are Significant

This table reports the percentages of staff fixed effects estimated that are significant ($p < 0.1$) in the main tests (H1, H2 and H3). Panel A reports the test results on firms' remediation costs. Panel B reports the test results on firms' comment letter contents. Panel C reports the test results on firms' financial reporting quality.

Panel A: Remediation Costs			
	No of Fixed Effects Estimated	No of Significant Fixed Effects ($p < 0.1$)	Percentage of Significant Fixed Effects ($p < 0.1$)
<i>round</i>	135	76	56%
<i>time</i>	135	67	50%

Panel B: Comment Letter Contents			
	No of Fixed Effects Estimated	No of Significant Fixed Effects ($p < 0.1$)	Percentage of Significant Fixed Effects ($p < 0.1$)
<i>topic</i>	135	91	67%
<i>emp_accdis</i>	135	80	59%
<i>emp_intcon</i>	135	36	27%
<i>emp_mda</i>	135	66	49%
<i>emp_regfil</i>	135	75	56%
<i>emp_risk</i>	135	56	41%
<i>emp_other</i>	135	78	58%
<i>emp_acccore</i>	135	72	53%
<i>emp_accnon</i>	135	74	55%
<i>emp_accclass</i>	135	71	53%
<i>emp_accfv</i>	135	60	44%

Panel C: Financial Reporting Quality			
	No of Fixed Effects Estimated	No of Significant Fixed Effects ($p < 0.1$)	Percentage of Significant Fixed Effects ($p < 0.1$)
<i>dacc_{t+1}</i>	135	20	15%
<i>fscore_{t+1}</i>	135	36	27%
<i>file_size</i>	135	20	15%
<i>fog_index</i>	135	20	15%

Appendix C4 – Effects of SEC Staff Members: Observable Characteristics (Alternative Method)

This table reports the results of SEC staff fixed effects on SEC staff characteristics:

$$\lambda_j = \alpha_0 + \alpha_1 * female_j + \alpha_2 * cpa_j + \alpha_3 * mba_j + \alpha_4 * age_j + \alpha_5 * sec_exp_j + \varepsilon$$

λ is the SEC staff member-specific fixed effects estimated in Model 1. Panel A reports the test results on remediation costs. Panel B reports the test results on comment letter contents. Panel C reports the test results on financial reporting quality. Each column corresponds to a separate regression with the fixed effects estimated on top. *Female* is a dummy for female staff members, *cpa* is a dummy for SEC staff members with CPA, *mba* is a dummy for SEC staff members with MBA, *age* is the age of the SEC staff members and *sec_exp* is the tenure of the staff members with SEC (most recent). Standard errors are presented in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels.

Panel A: Remediation Costs		
Variable	(1) λ_{round}	(2) λ_{time}
<i>female</i>	0.202* (0.111)	0.338* (0.196)
<i>cpa</i>	0.066 (0.104)	-0.127 (0.159)
<i>mba</i>	0.070 (0.349)	0.542 (0.531)
<i>age</i>	0.009 (0.008)	0.008 (0.013)
<i>sec_exp</i>	-0.015 (0.011)	0.0009 (0.016)
Observations	66	66
R-squared	0.107	0.051

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Panel B: Comment Letter Contents											
Variable	(1) λ_{topic}	(2) λ_{emp_acdis}	(3) λ_{emp_intcon}	(4) λ_{emp_mda}	(5) λ_{emp_regfil}	(6) λ_{emp_risk}	(7) λ_{emp_other}	(8) $\lambda_{emp_acccore}$	(9) λ_{emp_accnon}	(10) $\lambda_{emp_accclass}$	(11) λ_{emp_accfv}
<i>female</i>	-0.064 (0.134)	-0.044 (0.058)	-0.013 (0.008)	0.046 (0.030)	-0.013 (0.031)	-0.006 (0.016)	0.031 (0.035)	0.035 (0.084)	-0.030 (0.045)	0.005 (0.055)	-0.032 (0.032)
<i>cpa</i>	0.300** (0.126)	0.216*** (0.054)	0.0003 (0.008)	-0.016 (0.028)	-0.080** (0.030)	-0.042*** (0.015)	-0.078** (0.033)	0.160** (0.079)	0.123*** (0.043)	-0.020 (0.052)	0.059* (0.031)
<i>mba</i>	0.206 (0.422)	-0.012 (0.182)	0.019 (0.025)	0.025 (0.093)	-0.023 (0.099)	0.005 (0.050)	-0.014 (0.111)	-0.157 (0.263)	0.019 (0.142)	0.019 (0.173)	0.009 (0.102)
<i>age</i>	0.0004 (0.010)	-0.007 (0.004)	-0.0001 (0.0006)	0.001 (0.002)	0.002 (0.002)	-0.0006 (0.001)	0.004 (0.003)	-0.0005 (0.006)	-0.005 (0.003)	-0.002 (0.004)	-0.005* (0.002)
<i>sec_exp</i>	0.002 (0.013)	0.008 (0.006)	0.0008 (0.0008)	-0.005* (0.003)	-0.0002 (0.003)	0.001 (0.002)	-0.005 (0.003)	-0.005 (0.008)	0.009** (0.004)	0.004 (0.005)	0.0004 (0.003)
Observations	66	66	66	66	66	66	66	66	66	66	66
R-squared	0.139	0.337	0.067	0.107	0.184	0.166	0.203	0.101	0.256	0.018	0.223

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Panel C: Financial Reporting Quality				
Variable	(1) $\lambda_{dacc\ t+1}$	(2) $\lambda_{fscore\ t+1}$	(3) λ_{file_size}	(4) λ_{fog_index}
<i>female</i>	-0.001 (0.030)	0.010 (0.168)	0.278 (0.219)	0.136 (0.915)
<i>cpa</i>	-0.015 (0.029)	-0.373** (0.184)	0.302 (0.206)	0.016 (0.862)
<i>mba</i>	0.018 (0.096)	-0.057 (0.617)	-0.409 (0.690)	0.190 (2.885)
<i>age</i>	-0.002 (0.002)	0.007 (0.015)	0.014 (0.016)	-0.041 (0.068)
<i>sec_exp</i>	0.004 (0.003)	-0.011 (0.019)	-0.049** (0.021)	0.072 (0.087)
Observations	66	66	66	66
R-squared	0.038	0.158	0.151	0.020

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1