

The Effect of Chief Accounting Officers on Financial Reporting Quality

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Abstract

I examine the effect of Chief Accounting Officers (CAOs) on financial reporting quality. I proxy for financial reporting quality using severe and non-severe restatements, abnormal accruals, just meeting or beating analyst forecasts, and internal control weaknesses (ICWs). I find that firms with CAOs have lower rates of severe restatements, just meet-or-beats, and ICWs. These results are consistent with the CAO improving financial reporting quality. I further structure tests that control for the firm's endogenous choice to appoint a CAO, results are generally consistent. I also test financial reporting quality by examining earnings management around seasoned equity offerings. I find that accruals earnings management is mitigated in CAO firms. Next, I check CAO, CEO, and CFO compensation and career concerns to determine if differences in incentives drive these findings. CAO turnover occurs in the years around restatements and ICWs. I also find that CAO tenure is negatively associated with severe restatements, abnormal accruals, just meet-or-beats, and ICWs. Overall, these results suggest that having a designated CAO is associated with various improvements in financial reporting quality and that these improvements are related to the CAO's tenure within the firm.

I thank my dissertation committee, Maureen McNichols, Ron Kasznik, and Brandon Gipper, the other faculty members at Stanford University, and my peers in the Ph.D. program at Stanford University for their guidance, comments, and suggestions.

I. Introduction

Financial statements provide information to market participants, such as investors, creditors, and regulators. Research has theorized and shown that executives can influence financial statements to smooth earnings or hit compensation-based thresholds (Healy, 1985; Bergstresser and Philippon, 2006). Previous studies have examined the effects of CEOs and CFOs on earnings and financial statement quality (e.g., Jiang, Petroni, and Wang, 2010). These executives are a natural choice for study because of their responsibility for financial reporting. Recently professionals have debated the role of the CFO, with many arguing that the function has shifted away from accounting and financial reporting and toward operational strategy and investor relations.¹ As CFOs focus less on accounting, the responsibility for financial reporting falls more on the chief accounting officer (hereafter CAO). However, few studies have examined the CAO's role in financial reporting. The CAO and her influence over financial reporting are important to investigate because she is the lead accountant in the firm. In this study, I investigate to what extent the presence of a CAO affects financial reporting quality and what characteristics of the CAO may lead to incremental effects relative to the CFO and CEO.

Using data collected from the signatures page of 10-K filings, I compare the financial reporting quality of firms that have a CAO to the financial reporting quality of firms that do not.² I proxy for financial reporting quality using five measures: non-severe restatements, severe restatements (measured by the presence of an 8-K filing), absolute Dechow-Dichev accruals (Dechow and Dichev, 2002), just meeting or beating analyst forecasts (hereafter just meet-or-beat), and internal control weaknesses (ICW). I find that firms with a CAO are less likely to have

¹Sources of these claims are found in practitioner articles, see McCann (2016), Wimberley (2016), and Fisher (2016). This topic is a source of debate, however, as shown by arguments in Sisco (2016)

²Sarbanes Oxley requires the firm to designate a Principal Accounting Officer in the signature section of the 10-K. Non-CAO firms are those that have the CFO sign the 10-K as both the CFO and CAO.

a severe restatement, meet-or-beat, or ICW. However, since firms select whether to have a CAO, the CAO measure doesn't capture only the CAO's impact on financial statements but also firm characteristics relevant to this selection. To address this concern, I use a matched sample of firms and again estimate the effects of the CAO on financial reporting quality. Using the matched sample, I find results similar to those of the pooled sample: that firms that designate a CAO are associated with lower rates of severe restatements, just meet-or-beats, and ICWs relative to otherwise similar firms. These results are consistent with CAOs improving the financial reporting quality of the firm.

Next, I examine the effects of CAOs on firms that issue seasoned equity offerings (hereafter SEO), a setting where the literature has found an increase in earnings management (e.g., Rangan, 1998; Teoh et al., 1998; Shivakumar, 2000; Cohen and Zarowin, 2010). Following the literature, I also find an increase in discretionary accruals in years of SEOs. I test to see if there is a difference in earnings management for firms that employ a CAO and I find that the increase in discretionary accruals is mitigated for CAO firms. This result is consistent with CAOs improving financial quality. In their study, Cohen and Zarowin (2010) test for real earnings management around SEOs. As the CAO is not involved in operational decisions, I would not expect her to have an impact on real earnings management, so as a counterfactual, I test for differences in real earnings management between firms with a CAO and firms without one. Overall, I find strong results of accruals earnings management around SEOs, which is mitigated in CAO firms. I find mixed evidence of real earnings management around SEOs as well as possible mitigation of real earnings management in CAO firms.

Next, I consider two channels that may explain the CAO's effect on financial reporting: incentives and relative power. I consider two types of incentives: equity-based compensation and

career concerns in the form of termination. Following the literature (Coles et al. 2006; Armstrong et al. 2013), I use delta and vega to measure equity-based incentives. My results do not find an association between the equity compensation of CAOs and financial reporting quality. I test career concerns by examining turnover around financial reporting failures, such as restatements and ICW. I estimate the effect of restatements and ICWs on CAO, CFO, and CEO turnover. The results show a positive correlation between turnover and specific years around the restatement period and ICW period. Overall, these results are consistent with CAO career concerns incentivizing high-quality financial reporting, but these results are also consistent with the reverse story, that turnover in executives leads to financial reporting failures. Given this strong alternative story, career concern results warrant further testing.

The second channel I examine is CAO power relative to the CEO and CFO. When the CFO or CEO have incentives to manage earnings for personal gains, the CAO may fill the role of a monitor. At these times, relatively powerful CAOs will more effectively fulfill the role of a monitor and be able to secure higher financial reporting quality. In other words, more powerful CAOs should be better able to prevent earnings management and improve financial reporting quality, while the inverse will be true of less powerful CAOs. I use tenure as a proxy for CAO, CEO, and CFO power.³ I estimate the effect on financial reporting quality using tenure as a continuous variable, and the results show that higher-tenure CAOs are associated with lower absolute levels of Dechow-Dichev accruals as well as lower rates of severe restatements, meet-or-beats, and ICWs. CFO tenure is negatively correlated with non-severe restatements and ICWs, while CEO tenure is positively associated with meet-or-beats. These results are consistent with CAO power being tied to firm financial reporting quality.

³I also use interim CAOs, CFOs, and CEOs as a setting for changes to power, but I do not find results that interim executives are associated with any changes in financial reporting quality.

Overall, my results indicate that firms with a CAO have higher financial reporting quality compared to firms that do not have a CAO. This result holds in settings of accruals earnings management, which implies the CAO may serve as an effective monitor of managers who have incentives to misreport. Further testing provides results that are consistent with firms incentivizing CAOs through turnover to prioritize financial reporting quality. Lastly, I find that among firms that designate a CAO, more powerful CAOs are associated with better financial reporting quality.

This study contributes to the literature in several ways. First, it contributes to the managerial and financial accounting literature on how managers affect firm outcomes. Various studies in the literature showed the effect of different managers on the firm. For example, Bertrand and Schoar (2003) showed an association between firm outcomes and manager-level effects. Ge et al. (2011) showed that accounting practices and policies vary systematically across CFOs. Dyreng et al. (2010) documented results consistent with executives having significant effects on tax avoidance. Armstrong et al. (2012) linked tax expense reported in the financial statement specifically to the tax director's compensation. As the firm's highest-level accountant and one of the three managers required to sign the 10-K, the CAO is a key individual. The CAO's foremost duty is over the financial statements, and understanding her role can improve our understanding of financial reporting.⁴

As far as I am aware, Rhodes and Russomanno (working paper 2017) is the only other study that examines CAOs and financial reporting quality, and their research focuses on accounting executives in top management teams and their effects on reporting. While my study

⁴The logic of using the manager's defined responsibility to justify a potential impact follows Jiang et al. (2010) which that the CFO likely has a more significant effect on earnings management than the CEO because of her duty, and also Armstrong et al. (2012) who used a similar reason to investigate the tax manager.

also examines CAOs and financial reporting, I extend my contribution by also providing evidence of differences in earnings management across firms, specifically that earnings management around SEOs is mitigated in firms with a CAO. Furthermore, my study attempts to provide evidence of the channel(s) by which the CAO affects financial reporting quality.

Additionally, by defining the role of the CAO, I extend the literature by providing further empirical analyses of management incentives and of the relationship among high-level managers, specifically the CAO, CEO, and CFO. Previous studies have empirically and theoretically examined the relationship of managers with each other as well as with the Board of Directors (Friedman 2014, Feng et al. 2011). Jiang et al. (2010) even investigated whether the CEO or CFO had more influence over earnings management, while Wang et al. (2012) investigated who reveals more private information. I extend the literature by focusing on the CAO as a potential backstop to misreporting when other managers are incentivized to manipulate earnings. The literature has investigated how managers respond to different incentives. For example, Efendi et al. (2007) and Burns and Kedia (2006) show that equity-based compensation incentivizes managers to misreport. My paper contributes to this area of the literature by showing that another possible method firms employ to prevent misreporting is segregating duties by appointing a CAO. Thus, the role of the CAO is a possible mechanism for improving the firm information environment, corporate governance and decision making.

To summarize: the CAO influences accounting policies, earnings management, and financial reporting while interacting with the CEO and CFO. Therefore, better understanding the CAO and her interactions with other executives can help inform academics, boards, regulators and investors.

This paper proceeds as follows: Section II details the role of the CAO and the literature related to this project; Section III describes the data and the research design; Section IV describes the results; Section V outlines the future work for this project; Section VI concludes.

II. Institutional Details and Related Literature

2.1 Role of the Chief Accounting Officer

The exact duties of a chief accounting officer vary from firm to firm,⁵ but the primary responsibility consistent for all CAOs is overseeing all accounting functions and be the critical manager for financial reporting. The CAO will manage accounting transactions and the General Ledger, ensuring compliance with accounting regulations. As a part of this duty, the CAO implements internal controls over financial reporting; she is, therefore, responsible for control deficiencies identified by the external or internal auditor. Related to oversight of financial reporting, the CAO often has the responsibility to generate reports and forecasts for future periods and can serve as an advisor to the CFO regarding tax and other accounting effects of material business decisions.

In testing the effects of the CAO on financial reporting quality, I assume that the responsibilities over financial reporting and compliance with accounting regulation are a driving factor for the CAO. This assumption seems valid, as agency theory would indicate that job-related performance should determine incentives (Holmstrom 1979). This assumption also means the CAO's incentives should be focused on her primary responsibility: financial reporting quality. While a portion of her compensation may still be related to performance via equity-based compensation, I expect this type of pay to be a smaller percentage of their compensation

⁵Even the title varies from firm to firm. What I label chief accounting officer is often holds a different title, including principal accounting officer and corporate controller.

relative to the CEO and CFO who have much greater roles over the firm's performance. And indeed, in untabulated results, I see that CAOs, on average, have a larger portion of their total pay in salary and less in options.⁶ These result matches findings in the literature that show a positive relation between stock-based compensation and accounting restatements (Efendi et al., 2007; Burns and Kedia, 2006). Similar motivation has driven questions of whether compensation can be changed to mitigate misreporting, for example, by using clawback provisions (Dehaan et al., 2013).

2.2. Relevant Literature and Hypothesis Development

Existing literature provides evidence consistent with top managers—the CEO and CFO—influencing firm investment and reporting (e.g., Bamber, Jiang, and Wang 2010; Ge, Matsumoto, and Zhang, 2011). This study examines the influence of the chief accounting officer on financial reports, due to her role as the top accountant in a firm who oversees financial reporting processes. Unlike the CEO and CFO, whose roles encompass operating, investing, and finance policies, the CAO's role does not include operational responsibilities and focuses on oversight of the accounting process. Her ability to influence the financial reports will be wholly due to choices related to accounting policy, estimates, controls, but typically not operational activities. Given that the CAO reports to the CFO and CEO, if the CEO and CFO have incentives tied to accounting outcomes, it may override the CAO's ability to influence financial reporting quality. Yet the potential impact of the CAOs in financial reporting is supported anecdotally Accounting

⁶As data on pay is not available for my whole sample of CAOs, I calculated this difference using Execucomp data. CAOs appearing in Execucomp must be a named executive officer, meaning these CAOs have higher salaries relative to those not in Execucomp. Being higher paid, these Execucomp CAOs are the most likely to resemble the CEO and CFO in compensation. Therefore finding differences in pay for these CAOs provides reasonable basis for assuming similar differences exist for CAOs not in Execucomp

and Auditing Enforcement Releases (AAER) naming CAOs. For example, on release names Richard A. Causey, the CAO of Enron, and charges him with fraudulently manipulating Enron's financial statements (AAER, 2004).

Despite the importance of the CAO, many firms choose not to employ one, opting instead to have a single individual fulfill both the CFO and the CAO duties. Historically, the focus on financial reporting made sense as a duty of the CFO, but as noted by practitioners, firms have recently "bifurcated the top finance and accounting functions" (Fisher, 2016). This bifurcation occurs because CFOs are focusing more on their duties that deal with non-financial reporting issues such as M&A decisions, raising capital, and managing investor relations. This change has led some practitioners to argue that the desired CFO skillset has shifted away from accounting, resulting in the CAO rising in importance (Wimberley, 2016). Furthermore, since the CFO's duties have increased, the combination of the CFO and CAO in one individual produces greater concerns regarding the segregation of duties, especially considering incentive compensation used to motivate the CFO. Alternatively, the increase in duties for the CFO could restrict her time to focus on financial reporting, resulting in lower oversight regarding the generation of financial statements. Either case motivates my first prediction that firms which employ an individual CAO separate from the CFO have better accounting quality. I state this prediction formally as hypothesis H1 stated in alternative form as follows:

H1: Firms with a designated CAO have better financial reporting quality than firms with the CFO fulfilling the CAO role.

I further investigate the effect of the CAO on financial reporting by investigating firms that issue seasoned equity offerings. The literature has documented that firms conduct accruals earnings management (Rangan, 1998; Teoh et al., 1998; Shivakumar, 2000) and real earnings

management (Cohen and Zarowin, 2010) around SEOs. As the motivation for earnings management around SEOs is related to capital generation, which is outside the CAO's duties, I predict that CAOs will prevent or mitigate earnings management related to accounting policies, such as accruals earnings management. This reasoning leads to hypothesis H2, stated as follows:

H2a: Firms with a CAO should experience less accruals earnings management around SEOs than firms without a CAO.

Since the CAO doesn't bear responsibility regarding operations, the SEO setting provides a counterfactual test. Cohen and Zarowin (2010) find evidence of real earnings management around SEOs. Yet, I would not expect the CAO to mitigate or prevent real earnings management. So if the CAO drives the reduction in accruals earnings management and not other characteristics of the firm that the CAO variable captures, I would expect that real earnings management should still occur in firms that designate a CAO. I formalize this prediction as hypothesis H2b stated as follows:

H2b: Firms with a CAO should have similar levels of real earnings management around SEOs as firms without a CAO.

Next, I hypothesize two possible channels to explain why CAOs influence financial reporting quality. The first plausible explanation for why a CAO would improve financial reporting quality is because the firm incentivizes her to. While the literature debates whether equity-based compensation incentivizes managers to manipulate financial reports (e.g., compare Cheng and Warfield, 2005; Bergstresser and Philippon, 2006; and Armstrong, Jagolinzer and Larker 2010), Armstrong et al. (2013) attempts to reconcile the debate and finds evidence that vega drives managerial misreporting. That CAOs have larger portions of their total pay in salary and less in equity, relative to CEOs and CFOs, implies that firms structure CAO compensation

with less incentive to manipulate relative to the CEO and CFO. If so, then financial reporting quality would then be correlated with CAO equity incentives, and I expect to see financial reporting quality vary with differences in CAO vega. I formally state this prediction as hypothesis H3a in alternative form:

H3a: CAO equity-based compensation is negatively associated with financial reporting quality.

Compensation is a common method of measuring incentives, but an alternative way to incentivize managers is through termination when the manager fails to fulfill her duties. For example, several studies in the literature have shown that CEO turnover increases when firms fail to meet expected performance (Puffer and Weintrop, 1991; Farnell and Whidbee, 2003; Dikolli et al., 2014). However, I do not expect this CAO to be correlated with firm performance. Instead, the CAO's differences in responsibilities mean firm financial reporting failures, not firm performance, should be a determination of turnover. Therefore, I hypothesize that the CAOs will experience more turnover when reporting quality is low. I formally state assertion as H3b in alternative form.

H3b: CAOs turnover is positively associated with financial reporting failures such as restatements and internal control weaknesses.

The next explanation has to do with the relative 'power' of the executives. Power is often discussed in the organizational behavior literature and defined as "the ability of one individual to exert her will" (Haleblian and Finkelstein 1993). The CAO serves as a monitor of financial statement quality, yet sometimes other managers have incentives to manipulate earnings or the financial reports. The CAO is an effective monitor over potential earnings management only if she is powerful enough (relative to manipulating party) to prevent manipulations. In this study, I

consider the CEO and CFO as potential manipulating managers; while perhaps not all intentional manipulations come from the individuals in these roles, they serve as a good scale of the CAO's power to other managers in the firm. Friedman (2014) models this power dynamic between two managers, one of whom serves as a monitor of the other. I formalize these predictions into an empirical hypothesis H4, stated as follows in the alternative form:

H4: Financial reporting quality improves as CAO power increases (relative to the CEO and CFO).

III. Research Design

I collected data on executives from 51,014⁷ firm-years from 7,390 firms for the period 2004-2015. I gathered the identity of the CAO, CFO, and CEO from the signatures page of the 10-K. While the CEO and CFO are identifiable in other locations, this is the only comprehensive source that indicates the name of the CAO. I gather data on firm characteristics from COMPUSTAT, and while all 51,014 firm-years are in COMPUSTAT, 4,864 firm-year observations drop out due to missing at least one control variable, leaving 46,150 firm-year observations made up of 6,694 unique firms and 25,623 unique executives. Table 1 Panel A gives a detailed breakdown of the number of firm-years, firms, and executives in the sample.

I also gather data on restatements from Audit Analytics, analyst forecasts from I/B/E/S, executive equity portfolios from Thompson Reuters, and seasoned equity offerings from the Securities Data Company (SDC) New Issue database. I present descriptive statistics in Table 2 Panel A and correlations in Panel B.

⁷The number 51,014 does not represent all firm-years in COMPUSTAT in the time period, I first matched the universe of COMPUSTAT to firm filings and collected those that I was able to successfully match to an SEC filing. Comparing all of COMPUSTAT my sample by year or pooled across the period did not reveal any significant differences in firm characteristics.

To test H1, I separate firms into those that have a CAO and those that do not. I do so by using the signature section of firm 10-K's, which requires the signature of a "Principal Accounting Officer." Of the 46,150 firm-years, 14,923 (32.3%) of them have a designated CAO; the remaining 31,227 (67.7%) firm-years do not. I estimate the following specification:

$$FRQI_{it} = \alpha + \beta_1 CAO_{it} + Controls_{it} + \varepsilon_{it} \quad (1)$$

Where *FRQI* stands for *Financial Reporting Quality Issues* and includes non-severe restatements, severe restatements (measured by the filing of an 8-K), absolute Dechow-Dichev accruals, meeting or beating analyst forecast consensus, and internal control weaknesses. *CAO* is an indicator variable equal to 1 if the firm has a single individual in the role of CAO. I base control variables on concerns of omitted variables, which include proxies of complexity. Complexity is important as firms that are more complex face both a higher risk of error in the financial statements and an increased need for a CAO separate from the CFO. I include firm size, growth, industry, year, number of business segments, leverage, and firm age as controls for firm complexity.

I then estimate the regression first for the pooled sample. This research design is limited, however, because firms self-select whether to employ a separate CAO or to have the CFO also fulfill CAO duties. To mitigate concerns regarding this endogeneity, I generate a propensity score of the likelihood that a firm has a CAO based on firm characteristics, then match firms via this propensity score. While this does not eliminate the self-selection concern, it does help mitigate the possibility that firm characteristics that may drive self-selection are also driving the results. I predict that β_1 should be significantly negative, indicating the presence of a dedicated

CAO is negatively associated with accruals, restatements, meet-or-beats, and ICWs. Such results would be consistent with H1.

To test H2a, I use the SDC data to generate an indicator of whether there was an SEO in the firm-year. I estimate the following equation:

$$DD Acc_{it} = \alpha + \beta_1 CAO_{it} + \beta_2 SEO_{it} + \beta_3 CAO_{it} * SEO_{it} + Controls_{it} + \varepsilon_{it} \quad (2a)$$

Where $DD Acc_{it}$ is the Dechow Dichev accrual, CAO_{it} is an indicator of the presence of a CAO, and SEO_{it} is an indicator of an SEO, all for firm i in year t . Controls again include the same controls for firm complexity. I estimate that the coefficient β_2 on SEO_{it} will be positive matching the literature, and coefficient β_3 on the interaction of SEO_{it} and CAO_{it} will be negative, indicating that firms with a CAO do not have an increase (or at least a smaller increase) in accruals around SEOs.

For H2b, I use abnormal production costs and abnormal discretionary accruals, as calculated in Cohen and Zarowin (2010). I then estimate a similar equation:

$$Real EM_{it} = \alpha + \beta_1 CAO_{it} + \beta_2 SEO_{it} + \beta_3 CAO_{it} * SEO_{it} + Controls_{it} + \varepsilon_{it} \quad (2b)$$

I estimate (2b) three times, once each for abnormal cash flows, abnormal production costs, and abnormal discretionary expenses for firm i in year t . Following the literature, I predict that β_2 will be positive for production costs and negative for cash flows and discretionary accruals. I also predict that β_3 will not be significantly different from 0, indicating that the firms

with CAOs are not statistically different from those without CAOs regarding real earnings management.

Next, I begin to evaluate two mechanisms that may explain the results of H1, or stated another way, why CAOs affect financial reporting quality: incentives and power.

Incentives

To test H3a, I follow the literature that uses portfolio delta and portfolio vega to capture the effect of equity-based compensation on incentives. I calculate delta and vega for every CAO's compensation portfolio (Core and Guay, 2002; Coles, Daniel, and Naveen 2006; Armstrong et al. 2013). Following H3a, I expect that if the CAO has higher vega, she has more to gain from manipulations, and firms that give CAOs a higher portfolio vega should see a decrease in financial reporting quality. To test this, I estimate the following equation:

$$FRQI_{it} = \alpha + \beta_1 CAO_Vega_{it} + Controls_{it} + \varepsilon_{it} \quad (3)$$

While *FRQI* would be the same, *Controls* would include CFO vega, CEO vega, and the portfolio delta for all three managers. I predict that β_1 will be significantly positive, indicating *CAO_Vega* is positively correlated with lower financial reporting quality. Results along these lines would be consistent with H3b.

To test H3b, I use the research design from Choi and Gipper (working paper), which estimates employee turnover before, during, and after periods of fraud. I adjust the Choi and Gipper design to instead estimate turnover before, during, and after periods of restatements and internal control weaknesses. Specifically, I estimate equations (4a) and (4b) below:

$$Turnover_{it} = \alpha + \beta_1 CAO_{it} + \beta_{2,p} \sum_{p=1,2,3} Pre(\tau - p)_{i,t} + \beta_{3,p} \sum_{p=1,2,3} Restate(\tau - p)_{i,t} + \beta_{4,p} \sum_{p=1,2,3} Post(\tau - p)_{i,t} + Controls_{it} + \varepsilon_{it} \quad (4a)$$

$$Turnover_{it} = \alpha + \beta_1 CAO_{it} + \beta_{2,p} \sum_{p=1,2,3} Pre(\tau - p)_{i,t} + \beta_{3,p} \sum_{p=1,2,3} ICW(\tau - p)_{i,t} + \beta_{4,p} \sum_{p=1,2,3} Post(\tau - p)_{i,t} + Controls_{it} + \varepsilon_{it} \quad (4b)$$

Where $Turnover_{it}$ represents the turnover of the executive in year t for firm i . $Pre(\tau - p)_{i,t}$ is an indicator equal to 1 if year t is 1, 2, or 3 years before the restatement (ICW) period, $Restate(\tau - p)_{i,t}$ and $\sum_{p=1,2,3} ICW(\tau - p)_{i,t}$ are indicators equal to one if year t is in the restatement (ICW) period,⁸ and $Post(\tau - p)_{i,t}$ is an indicator equal to 1 if year t is 1, 2, or 3 years after the restatement (ICW) period. I estimate (4a) and (4b) three times each, once for the CAO, CFO, and CEO. I predict that if turnover is used to incentivize high financial reporting quality then $\beta_{2,p}$ and $\beta_{3,p}$ should be significantly positive, signaling punitive termination of the executive when restatements or ICW occur.

Power

To test H4, I also estimate the effect of CAO power on financial reporting quality using tenure as a measure of power:

$$FRQI_{it} = \alpha + \beta_1 CAO Tenure_{it} + Controls_{it} + \varepsilon_{it} \quad (5)$$

⁸Note years 4+ of restatements that last longer than 3 years are coded as the 3rd year of the restatement. Similarly the 4+ consecutive years of ICWs are coded as the 3rd year of the ICW.

I use the same proxies for financial reporting quality as in the estimation of equation (1). I measure tenure as the length of time the executive has been in the position, as such I have to drop executives that were already in the position when the firm first appears in the sample, as I otherwise do not have an accurate measure of when that individual first took the role. I include controls for firm characteristics and control for the power of the CFO and CEO, again by using tenure. I predict that β_1 is negative, indicating that CAO tenure is positively associated with financial reporting quality.

IV. Results

Financial Reporting Quality

Table 3 Panel A presents the results of the pooled regression of equation (1). I predicted negative coefficients on CAO and as seen in the table, that is the case for severe restatements, just meet-or-beat, and ICW. The results are consistent with CAOs improving financial reporting quality and are statistically significant with meaningful magnitudes, as shown by the odds ratios. Specifically, I find that, all else equal, a firm with a CAO is 25% less likely to have a severe restatement, 10% less likely to have a just meet-or-beat, and 18% less likely to have a ICW. These results are calculated with one-way clustered standard errors using industry-year clusters, but are robust to using firm and industry-year 2-way clustered standard errors.

Table 3 Panel B presents the results of estimating equation (1) with the matched sample. Again I predict that β_1 will be negative and find that holds at the rates of severe restatements, meet-or-beats, and ICWs are still statistically lower in firms with a CAO. The odds ratio shows that, all else equal in the matched sample, firms with a CAO are 16% less likely to have a severe restatement, 10% less likely to just meet-or-beat, and 15% less likely to have an ICW. These

results are again consistent with hypothesis H1 that CAOs provide firms with better accounting processes that improve financial reporting. An alternative explanation not ruled out by these results is that firms that focus on financial reporting quality take many actions to improve it, including hiring a CAO. Therefore, my variable CAO may just be capturing the firm characteristics regarding board proclivity to focus on higher quality financial reporting. Further testing is needed to differentiate between these competing stories.

Earnings Management

Table 4 presents the result of estimating equations (2a) and (2b). Column 1 shows the results of estimating (2a) using industry fixed effects. The results in this column show a significant increase in Dechow-Dichev accruals in the year of a seasoned equity offering with a magnitude of 0.0045. This result lines up with that shown in the previous literature (Rangan, 1998; Teoh et al., 1998; Shivakumar, 2000; Cohen and Zarowin, 2010). I predicted that β_3 , the coefficient on the interaction term $SEO \times CAO$, would be significantly negative. This prediction would mean that firms with a CAO mitigate accruals earnings management around SEOs. That is what I find, with statistically significant coefficients of -0.0033. This result is consistent with H2a.

Next, I examine real earnings management. Table 4 columns 3, 5, and 7 show the results of estimating (2b) for abnormal cash flows from operations, abnormal production costs, and abnormal discretionary expenses, respectively, using industry and year fixed effects. From Cohen and Zarowin (2010),⁹ I expect β_2 to be negative for abnormal cash flows from operations

⁹Note that my research design differs from Cohen and Zarowin (2010) because I believe this research design better fits the question in my paper. But in untabulated results I follow their table 2 results and calculate the median values of the earnings management measures in the years around SEOs. I get the similar results as them in that I find

and abnormal discretionary accruals, and expect β_2 to be positive for abnormal production. My prediction then is that β_3 will **not** be significantly positive for cash flows or discretionary expenses, nor significantly negative for production costs. I do find that β_2 is negative for abnormal cash flows and positive for abnormal production. Surprisingly, I find that β_2 is positive for abnormal discretionary accruals, this result makes it difficult to interpret β_3 , for discretionary accruals, but I note that β_3 is significantly negative. And opposite of my prediction, I do find that β_3 is significant and of the opposite sign of β_2 . This would suggest either the CAO does influence non-accrual earnings management, or that I am instead capturing some firm characteristics.

As the alternative story is that the CAO variable is about other firm characteristics, I further test real earnings management by adding firm fixed effects instead of industry fixed effects. While firm fixed effects won't perfectly capture all other firm characteristics, it does help to do so and mitigates concerns by reducing the characteristics that the CAO variable could be capturing. In other words, if I find similar results with firm fixed effects as with industry fixed effects it is still unclear if it is because of an endogenous firm characteristic or because the CAO actually affects real earnings management as well. Alternatively, if I find the predicted effect while using firm fixed effects, it would point towards the original story. These results are shown in columns 2, 4, 6, and 8. For accruals (column 2), again β_2 is significantly positive (0.0039), and β_3 is significantly negative (-0.0031), which again is consistent with the CAO mitigating earnings management in SEO years.

For real earnings management, β_2 is marginally significant for cash flows (column 4), indicating real earnings management, and this time β_3 is insignificant consistent with hypothesis H2b, signally no statistically significant difference between CAO and non-CAO firms for real

positive median discretionary accruals, negative median abnormal cashflows from operations, positive median abnormal production costs, and negative median abnormal discretionary accruals in the year of an SEO.

earnings management. Interestingly, β_2 is insignificant for production costs (column 6), but this is true for both CAO and non-CAO firms, as β_3 is also insignificant. Lastly, β_2 is again positive for discretionary expenses (column 8), which makes discretionary expenses hard to interpret, but β_3 is the opposite sign and marginally significant. Overall, I have robust results off accruals earnings management around SEOs and mitigation of that result in firms with a CAO. I have results of some real earnings management around SEOs, and mixed results on whether this is different for CAO firms.

Incentives

Table 5 presents the results of estimating equation (3), which tests the effect of CAO equity compensation on financial reporting quality. The results are not consistent with H3a and fail to reject the null that CAO equity incentives are correlated with any of the measures of financial reporting quality. Interestingly, I do not find the results documented in Armstrong et al. (2013) that CFO and CEO vega is correlated with misreporting. This difference could be due to a later sample period being used. That is, perhaps in recent years compensation committees have mitigated the incentives to manipulate by adjusting compensation contracts. For example, this change would match the result in Dehaan et al. (2013) that shows clawback provisions are associated with improvement in financial reporting quality. But these results bear closer investigation.

Table 6 Panel A presents the results of estimating equation (4a) for executive turnover around a restatement, and Table 6 Panel B presents the results of estimating equation (4b) for turnover around an ICW. CAO turnover is positively correlated with years $t=-2$ (two years before the restatement period), $t=-1$ (the year before the restatement period begins), and year $t=0$

(the year the restatement periods begins). Turnover in these years is consistent with termination being used as a punishment for CAOs that execute their duties poorly. Specifically if a CAO is doing not performing to the expected standard, they are terminated and the new CAO comes in to fix their mistakes, discovering problems with financial reporting that demand restatements. It is worth noting that CFO turnover is positively associated with the same years around a restatement as CAO turnover, and CEO turnover is positive in years $t=-1$ and $t=0$, but negative in period $s=1$.

For ICW, CAO turnover is also positively correlated with year $t=-1$ and $t=0$, but also $t=1$ (the second year of the ICW period, or the 2nd consecutive year with an ICW). Again these results are consistent with termination being used to punish poor performing CAOs. CFO turnover again is significant in the same years as CAO turnover, but also in year $t=-2$. CEO turnover is significantly positive in $t=-2$, $t=-1$, and $t=0$, and significantly negative in the year $t=2$.

Power

Moving on to examining executive power, Table 7 reports the results of estimating equation (5). I predicted that β_1 would be significantly negative, indicating that as CAO tenure is associated with fewer financial reporting issues and better financial reporting quality. This result would be consistent with more powerful CAOs being better able to fulfill their function. And I find that CAO tenure is negatively correlated with severe restatements (16% less likely for year of CAO tenure), just meet-or-beat (4% less likely), ICW (20% less likely), and absolute Dechow-Dichev accruals (coefficient of -0.0003). Interestingly CFO tenure is negatively associated with non-severe restatements and ICW, while CEO tenure is positively associated

with meet-or-beat. Overall, the results are consistent with H4, that more powerful CAOs are associated with better financial reporting quality.

V. Future Steps

While the results above are promising, I plan to pursue further testing to either expand on the role and impact of the CAO or improve the robustness of the current results. One of the major channels I plan to expand on is executive expertise or background. Individual expertise may differ between CAOs and CFOs, who also fill the CAO role. Thus executive expertise may explain the difference in financial reporting quality between firms with and without a CAO. Furthermore, testing for differences in CAO expertise may also explain variation in financial reporting quality within CAO firms. The planned tests are detailed below. I also plan to examine further other potential stories that could explain the results of this paper. Specifically, I plan to investigate further the alternative story that my results are capturing other firm characteristics, rather than a CAO effect. Or that firms that designate a CAO are more focused on financial reporting quality, and they take steps to improve it, including designating a CAO, but my results are simply picking up the other steps they take to improve quality. To better examine this explanation, I plan to investigate corporate governance measures further¹⁰ and add these to robustness tests to determine if the results still hold.

Expertise

¹⁰Note on corporate governance measures, I have run the main results in tables 3 and 4 with an indicator of whether the CEO is also the chairman of the board (a common proxy of board independence from management). The inclusion of this control variable did not change any of my results, but I recognize further testing is needed with more corporate governance mechanisms.

Another channel that may explain why the CAO influences financial reporting quality is the background demographics or expertise of the executive. In future tests, I plan to gather data on executive backgrounds. Following other studies in the literature (e.g., Aier et al. 2005), I will construct a variable *Expertise* as a measure of the executive's experience in a professional accounting career (e.g., auditing experience) perhaps using an index of tenure and other accounting certifications (e.g., CPA, CMA, etc.) Using this variable, I will test for differences in average expertise between CAOs and CFOs who also hold the CAO position. I expect that separate CAO's should have higher accounting expertise on average. Next, I will estimate the following equation:

$$FRQI_{it} = Expertise_{it} + Controls_{it} + \varepsilon_{it} \quad (6)$$

Where *FRQI* would be the same as above, and *Controls* would include an indicator of CFO accounting expertise. I predict that expertise would be positively correlated with financial reporting quality.

VI. Conclusion

In this study, I have examined the effect of the chief accounting officer on financial reporting. As the head accountant in the firm, I expect that the CAO is an important asset to the firm and provides value by improving firm financial reporting and mitigating misreporting or earnings management by other managers. I find results consistent with this story as firms with a CAO are associated with higher financial reporting quality. This result is reinforced by results that indicated decreases in earnings management in firms with a CAO around seasoned equity

offerings, a setting that has been shown to have earnings management. I also find evidence that CAO turnover is associated with failures in reporting quality, and that the relative power of CAO is also correlated with firm financial quality. Despite these results, analysis of real earnings management provided mixed results around seasoned equity offers. Similarly, I did not find results of CAO equity-based compensation being tied to financial reporting. Further testing and work in this area are necessary to eliminate some still plausible alternative explanations, but, overall, these results are promising and provide an important early step in defining the role and importance of the chief accounting officer.

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Appendix Table A: Variable Definitions

Variable	Definition	Data Source
Dependent Variables		
Non-Severe Restatements	Accounting Restatements that do not have an 8-K filing	Audit Analytics
Severe Restatements	Accounting Restatements that have an 8-K filing	Audit Analytics
Dechow-Dichev Accruals	Discretionary Accruals calculated following Dechow-Dichev (2002).	Compustat
Absolute Dechow-Dichev Accruals	Absolute value of Dechow-Dichev Accruals	Compustat
Meet or Beat	Indicator equal to 1 if the firm eps is between 0.00 and 0.05 above analyst consensus.	I/B/E/S
Internal Control Weaknesses (ICW)	Indicator equal to 1 if the firm had a 404 internal control weakness.	Audit Analytics
Independent Variables		
CAO Indicator	Indicator equal to 1 if the firm has a designated CAO who isn't also the CFO or CEO. 0 otherwise.	Hand Collected
Vega	Sensitivity of Option value to change in stock price volatility. Calculated following Core and Guay (2002).	Thompson Reuters
Restate Firm	Indicator equal to 1 if the firm has a restatement within the time period. 0 otherwise.	Audit Analytics
Restatement Year Effects	Series of year variables set equal to 1 for the appropriate year around a restatement. E.g., t-3=1 if and only if it is three years before the start of a restatement.	Audit Analytics
ICW Firm	Indicator equal to 1 if the firm has an ICW within the time period. 0 otherwise.	Audit Analytics
ICW Year Effects	Series of year variables set equal to 1 for the appropriate year around an ICW. E.g., t-3=1 if and only if it is three years before the start of an ICW.	Audit Analytics
Executive Turnover	Change in the designated CAO, CFO, or CEO.	Hand Collected
Executive Tenure	Number of years since the CAO, CFO, or CEO first appeared on the signature page of the 10-K in that position.	Thompson Reuters
Controls		
Size	Natural log of total assets.	Compustat
Net Income Volatility	Standard deviation of earnings calculated using the most recent five years of data.	Compustat
Leverage	Total Liabilities divided by total assets.	Compustat

Asset Growth	Current year assets divided by the previous year's assets.	Compustat
ROA	Income before extraordinary items divided by total assets.	Compustat
MTB	Market value of equity divided by book value of equity.	Compustat
Absolute Accruals	Absolute value of the difference in net income and cash flows from operations.	Compustat
Current Ratio	Current assets divided by total assets.	Compustat
File Lag	Number of days from year-end to filing of 10-K.	Audit Analytics
Loss	Indicator equal to 1 if earnings were negative for the year.	Compustat
December	Indicator equal to 1 if the firm has a December Year-end.	Compustat
Firm Age	Age of the firm (calculated using a firm's first appearance in Compustat).	Compustat
Business Segments	Number of business segments.	Compustat
Foreign Sales	Indicator equal to 1 if firm has foreign sales.	Compustat
Number of Analysts	Number of analysts following firm in a given year.	I/B/E/S
Executive Delta	Sensitivity of Option value to change in stock price. Calculated following following Core and Guay (2002).	Thompson Reuters

Table 1. Sample Selection**Panel A**

Data	
Observations collected	51,014
Missing Firm Characteristics	(4,864)
	46,150

Panel B

Dependent Variable	DD Accruals	Meet or Beat	Internal Control Weaknesses
Missing	(7,405)	(15,647)	(6,639)
Subtotal	38,745	30,503	39,511

Panel C

Executives	Firm Years	Individuals
CAOs	14,923	4,111
CFOs	45,795	11,946
Not joint CAOs	19,840	5,787
CEOs	45,791	10,898

Unique Firms	6,694
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Panel A presents the observation count, starting with data collected. Data was collected for firms in COMPUSTAT from 2004-2015. Any firms with missing controls are dropped before estimating any regressions. Panel B presents the number of observations dropped from Panel A's 46,150 subtotal due to missing values for the three of the dependent variables. Observations were missing values due to one of three reasons: 1) data needed to calculate the variable was missing (DD Accruals), 2) unable to successfully merge the observation with I/B/E/S (Meet or Beat), or 3) unable to successfully merge the observation with Audit Analytics (ICW). Panel C presents a detailed breakdown on the number of executives and executive-years in the full 46,150 sample.

Table 2. Descriptive Statistics

Panel A						
	N	Mean	Std Dev	P25	Median	P75
<u>Financial Quality Measures</u>						
Restatements	46,150	0.07	0.249	0	0	0
Severe Restatements	46,150	0.04	0.200	0	0	0
DD Accruals	38,745	0.00	0.029	-0.008	0	0.009
Meet or Beat	30,503	0.35	0.476	0	0	1
ICW	39,511	0.08	0.270	0	0	0
<u>Firm Characteristics</u>						
Total Assets	46,150	6913	51630	118	607	2490
Income Volatility	46,150	131	826	4.45	15.7	60.3
Leverage	46,150	0.90	8.79	0.35	0.57	0.82
Asset Growth	46,150	1.28	6.50	0.96	1.05	1.17
ROA	46,150	-0.14	2.27	-0.03	0.02	0.06
MTB	46,150	3.01	57.79	1.0	1.78	3.23
Abs Accruals	46,150	256	1751	4.87	22.9	107
Current Ratio	46,150	0.51	0.27	0.29	0.53	0.74
File Lag	46,150	71.8	27.7	58	70	77
Loss	46,150	0.33	0.47	0	0	1
Number of Business Segments	46,150	2.18	1.79	1	1	3
<u>Executive Characteristics</u>						
CAO Tenure	4,572	2.37	2.32	0	2	4
CFO Tenure	4,572	2.44	2.29	1	2	4
CEO Tenure	4,572	2.60	2.35	1	2	4
CAO Full Tenure	3,544	3.61	2.46	2	3	6
CFO Full Tenure	4,286	3.33	2.32	1	3	5
CAO Full Tenure	5,519	3.63	2.50	2	3	5
CAO Turnover Rate	40,596	0.18	0.39	0	0	0
CFO Turnover Rate	40,596	0.17	0.38	0	0	0
CEO Turnover Rate	40,596	0.12	0.33	0	0	0

Panel A of this table presents the distributions of the dependent variables used to measure financial reporting quality, the firm characteristics used as controls, and the current tenure (or simply called tenure), full tenure, and turnover of the three executives. Tenure is calculated as the number of years since the executive first took the role, while full tenure is the amount of time individuals served in the role before leaving. For example, if executive A, was hired in 2005 and replaced in 2010, her tenure would be 1 in 2006, 2, in 2007, and so on, while her full tenure would be 5, marking approximately five full years in the position before she left. I winsorized all variables at the 1st and 99th percentiles. Tenure captures the current tenure for the executive in the executive-year observation, “Tenure at Turnover” captures the tenure of executives when they leave the position.

Table 2
Panel B - Correlations, Pearson Below Diagonal, Spearman Above

	Non Severe Restate	Severe Restate	DD Accruals	Just Meet-or- Beat	Internal Control Weakness	CAO CAO	CFO Turnover	CEO Turnover	CAO Tenure	CFO Tenure	CEO Tenure	
Non-Severe Restate	1	-0.0556	-0.00634	-0.01469	0.02406	0.05405	0.00268	0.01045	-0.00164	0.01866	-0.01462	0.00501
Severe Restate	-0.0556	1	0.00823	0.00995	0.09782	-0.02926	0.0349	0.03227	0.01842	-0.04988	-0.01382	-0.01782
DD Accruals	-0.00432	0.0074	1	0.01983	-0.01107	-0.00617	-0.01174	-0.01855	-0.02419	0.00847	0.01524	0.02846
Just Meet-or- Beat	-0.01469	0.00995	0.01511	1	-0.03904	-0.0077	-0.02534	-0.03159	-0.03385	-0.00264	0.03699	0.0418
Internal Control Weakness	0.02406	0.09782	-0.01156	-0.03904	1	-0.09362	0.0881	0.10246	0.06172	-0.12559	-0.11223	-0.06808
CAO_Ind	0.05405	-0.02926	-0.00331	-0.0077	-0.09362	1	0.02168	-0.01242	-0.00798	.	.	.
CAO Turnover	0.00268	0.0349	-0.01078	-0.02534	0.0881	0.02168	1	0.59755	0.1473	-0.74979	-0.30933	-0.17907
CFO Turnover	0.01045	0.03227	-0.0193	-0.03159	0.10246	-0.01242	0.59755	1	0.18917	-0.27117	-0.72094	-0.24784
CEO Turnover	-0.00164	0.01842	-0.02803	-0.03385	0.06172	-0.00798	0.1473	0.18917	1	-0.16434	-0.22711	-0.69913
CAO Tenure	0.01181	-0.04498	-0.00602	-0.00726	-0.11147	.	-0.58607	-0.21176	-0.13851	1	0.40628	0.24672
CFO Tenure	-0.01772	-0.00793	0.01013	0.0371	-0.09635	.	-0.25584	-0.56901	-0.19034	0.40175	1	0.35429
CEO Tenure	0.00477	-0.01322	0.02636	0.04267	-0.06258	.	-0.15144	-0.20879	-0.56512	0.23702	0.34695	1

Panel B presents the correlations of the dependent variables (Non-Severe Restatements, Severe Restatements, DD Accruals, Just Meet-or-Beat, and IC Weaknesses) and specific independent variables of interest. Pearson correlations are reported below the diagonal and Spearman correlations are reported above. Any correlation significant at the 5% level is bolded.

Table 3. Financial Reporting Quality and Chief Accounting Officer**Panel A - Pooled Sample**

Regression: FRQI = CAO_Ind + Controls

	Non-Severe Restatements	Severe Restatements	Absolute DD Accruals*	Just Meet-or- Beat	IC Weakness
Intercept	-3.911*** (-30.46)	-4.831*** (-32.46)	0.649*** (2.75)	-0.446*** (-3.68)	-2.467*** (-8.24)
CAO	0.023	-0.147***	-0.027	-0.051***	-0.102***
Odds-Ratio	1.05	0.75	.	0.90	0.82
T Value	(1.00)	(-4.41)	(-0.97)	(-3.24)	(-3.23)
Log Assets	0.128*** (8.54)	0.083*** (4.39)	-0.125*** -9.72	-0.086*** (-5.28)	-0.264*** (-13.43)
Income Vol	0.000 (-1.29)	0.0002** (-2.26)	0.000 (-1.51)	0.000 (-1.03)	0*** (4.99)
Leverage	0.003** (2.5)	-0.022 (-1.61)	0.032 (0.75)	-0.125* (-1.82)	0.001 (0.5)
Asset Growth	0.002 (1.27)	0.001 (0.64)	-0.013*** (-3.09)	-0.050 (-1.5)	0.000 (-0.08)
ROA	-0.005 (-0.92)	-0.034* (-1.67)	-0.259* (-1.76)	0.363*** (3.12)	-0.04*** (-3.26)
MTB	0.0004*** (2.82)	0.000 (-0.04)	0.000 (0.83)	0.000 (-0.8)	0.002** (2.39)
Abs Accruals	0.000 (-0.96)	0.000 (0.85)	0.00004*** (3.65)	0** (-2.22)	0*** (2.91)
Current Ratio	-0.49*** (-4.74)	-0.093 (-0.75)	1.583*** (17.14)	-0.163** (-1.98)	-0.625*** (-4.67)
File Lag	0.001* (1.78)	0.003*** (5.87)	-0.001 (-0.99)	-0.002*** (-3.29)	0.019*** (9.15)
Loss	0.115*** (4.9)	0.086*** (2.67)	0.366*** (7.91)	-0.351*** (-13.42)	0.388*** (10.73)
Dec	0.043* (1.73)	-0.111*** (-3.64)	0.029 (0.92)	-0.024 (-1.53)	-0.016 (-0.59)
Age	0.001 (0.85)	-0.016*** (-7.11)	0.0022** (2.19)	0.002 (1.44)	-0.017*** (-7.65)
Segment Count	0.027** (2.55)	0.05*** (3.78)	0.003 (0.45)	-0.009 (-1.11)	0.046*** (3.18)
Foreign	0.223*** (6.05)	-0.021 (-0.57)	-0.054 (-1.18)	0.049** (2)	0.053* (1.83)
Analyst N				0.039*** (15.99)	
Fixed Effects	Ind, Year	Ind, Year	Ind, Year	Ind, Year	Ind, Year
Specification	Logit	Logit	OLS	Logit	Logit
N	46,150	46,150	38,745	30,503	39,511
R-Squared	0.028	0.029	0.103	0.079	0.103

This table reports estimates from logistic regression analyses (OLS regression for DD Accruals) estimating equation (1), which estimates the difference in financial reporting quality between firms with a CAO vs. firms without a CAO. T-values are in parentheses and calculated using standard errors clustered one-way by industry-year. Statistical significance at the 10%, 5%, and 1% levels are denoted by *, **, and ***, respectively. Severe restatements are those that have an 8-K filing associated with the restatement, while non-severe restatements do not. Just meet-or-beat is an indicator equal to 1 if the firm eps is above analyst forecast consensus by \$0.00 to \$0.05. To

improve readability, Dechow-Dichev accruals are normalized by increasing the parameter estimates by a factor of 100.

Panel B - Matched Sample

Regression: FRQI = CAO_Ind + Controls

	Non-Severe Restatements	Severe Restatements	Absolute DD Accruals*	Just Meet-or- Beat	IC Weakness
Intercept	-4.834*** (-19.51)	-5.48*** (-18.92)	0.755* (1.95)	-1.131*** (-5.78)	-2.544 (0.00)
CAO_Ind	0.026	-0.09**	0.004	-0.055**	-0.082**
Odds-Ratio	1.05	0.84	.	0.90	0.85
T Value	(0.73)	(-2.04)	(0.15)	(-2.42)	(-2.05)
Log Assets	0.109*** (4.19)	0.06* (1.72)	-0.156*** (-8.73)	-0.067*** (-2.59)	-0.244*** (-6.49)
Income Vol	0.000 (-0.79)	0.000 (-0.29)	0.0001* (1.77)	0.000 (-1.31)	0*** (2.86)
Leverage	0.069.000* (1.65)	0.091** (2.18)	0.136 (1.03)	-0.285** (-2.51)	0.099 (1.58)
Asset Growth	0.017** (2.31)	0.006 (0.86)	-0.001 (-0.62)	-0.115** (-2.07)	-0.002 (-0.24)
ROA	0.065 (0.9)	0.25** (2.16)	-0.299 (-1.48)	0.718*** (2.58)	0.112 (1.49)
MTB	-0.001 (-0.5)	-0.005 (-1.35)	0.000 (0.62)	0.000 (-0.06)	0.000 (0.2)
Abs Accruals	0.000 (-1.5)	0** (-2.05)	0.0001*** (3.07)	0.000 (-1.11)	0.000 (-0.5)
Current Ratio	-0.32.000* (-1.67)	0.399* (1.76)	1.656*** (13.87)	-0.252* (-1.79)	0.100 (0.32)
File Lag	0.001 (0.56)	0.003*** (3.02)	-0.001** (-2.45)	-0.001 (-0.81)	0.013*** (10.19)
Loss	0.142*** (3.27)	0.192*** (3.32)	0.257*** (4.44)	-0.287*** (-6.83)	0.55*** (9.83)
Dec	0.108** (2.47)	-0.112** (-2.1)	0.111*** (2.8)	-0.059** (-2.17)	-0.014 (-0.27)
Age	0.005** (2.22)	-0.014*** (-3.52)	0.000 (-0.02)	0.004*** (2.64)	-0.006* (-1.67)
Segment Count	0.020 (1.11)	0.038 (1.47)	0.007 (0.96)	0.006 (0.51)	0.039 (1.44)
Foreign	0.281*** (4.78)	0.098 (1.28)	0.015 (0.2)	0.087** (2.07)	-0.019 (-0.33)
Analyst N				0.035*** (9.81)	
Fixed Effects Specification	Ind, Year Logit	Ind, Year Logit	Ind, Year OLS	Ind, Year Logit	Ind, Year Logit

Weighted N	24,656	24,656	21,712	18,540	21,532
R-Squared	0.031	0.0319	0.0140	0.0829	0.0651

This table reports estimates from logistic regression analyses (OLS regression for DD Accruals) estimating equation (1), which estimates the difference in financial reporting quality between firms with a CAO vs. firms without a CAO. Panel B uses a matched sample to estimate the equation, where firm-years with a CAO are matched to firm-years without one via a propensity score generated by the likelihood of a firm-year having a CAO. T-values are in parentheses and calculated using standard errors clustered one-way by industry-year. Statistical significance at the 10%, 5%, and 1% levels are denoted by *, **, and ***, respectively. Severe restatements are those that have an 8-K filing associated with the restatement, while non-severe restatements do not. Just meet-or-beat is an indicator equal to 1 if the firm eps is above analyst forecast consensus by \$0.00 to \$0.05. To improve readability, Dechow-Dichev accruals are normalized by increasing the parameter estimates by a factor of 100.

Table 4. Earnings Management around Seasoned Equity Offerings

Regression: EM Proxy = CAO + SEO + CAO x SEO + Controls

Dep. Var	Dechow-Dichev		Abnormal Cash		Abnormal Production		Abnormal Discretionary	
	Accruals		Flows from Operations		Costs		Expenses	
CAO	0.0005 (1.52)	-0.0001 (-0.14)	-0.008 (-1.48)	-0.002 (-0.53)	0.009* (1.91)	0.004 (1.13)	-0.006 (-0.48)	0.005 (0.54)
SEO	0.004*** (5.12)	0.004*** (3.52)	-0.06*** (-5.14)	-0.025* (-1.93)	0.042*** (3.61)	-0.00367 (-0.43)	0.059*** (3.23)	0.042** (2.39)
CAO x SEO	-0.003*** (-3.12)	-0.003** (-2.39)	0.049*** (4.65)	0.015 (1.1)	-0.028** (-2.25)	0.0004 (0.05)	-0.058*** (-3.4)	-0.03* (-1.72)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Ind, Year	Firm, Year	Ind, Year	Firm, Year	Ind, Year	Firm, Year	Ind, Year	Firm, Year
N	38,745	38,729	46,137	45,566	46,142	45,569	46,184	45,614
R-Squared	0.021	0.0469	0.0243	0.2997	0.0161	0.4879	0.0231	0.3093

This table reports estimates equation (2), which estimates earnings management around seasoned equity offerings. I use common earnings management proxies from the literature (see Cohen and Zarowin, 2010). T-values are in parentheses and calculated using two-way clustered standard errors by firm and industry-year. Statistical significance at the 10%, 5%, and 1% levels are denoted by *, **, and ***, respectively. Following Cohen and Zarowin, abnormal cash flows from operations are calculated as the residual of regressing cash flow from operations (less cash flows from extraordinary items) scaled by assets on one over total assets, sales scaled by total assets, and change in sales scaled by total assets. Abnormal Production costs is calculated as the residual of regressing production costs (sum of costs of goods sold and change in inventory) scaled by total assets on one over total assets, sales over total assets, change in sales over total assets, and change in last year's sales over total assets. Abnormal discretionary expenses are defined as the residual of regressing discretionary expenses (sum of advertising expenses, R&D expenses, and SG&A) scaled by total assets on one over total assets and last year's sales over total assets.

Table 5. Equity Compensation and Financial Reporting Quality

FRQ = CAO Vega + CFO Vega + CEO Vega + Controls

	Restatements	Severe Restatements	DD Accruals	Meet or Beat	ICW
CAO vega	0.082	0.180	0.000	-0.071	-0.044
T value	(0.33)	(0.65)	(-0.01)	(-0.41)	(-0.09)
CFO vega	-0.200	0.110	0.001	0.054	-0.100
T value	(-1.56)	(0.62)	(0.94)	(0.64)	(-0.57)
CEO vega	0.073	-0.019	-0.001	0.025	-0.035
T value	(1.3)	(-0.19)	(-1.16)	(0.65)	(-0.28)
Controls	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Ind, Year	Ind, Year	Ind, Year	Ind, Year	Ind, Year
N	6,529	6,529	3,981	5,666	6,174
R-Squared	0.0372	0.0434	0.066	0.1063	0.0668

This table reports estimates from logistic regression analyses (OLS regression for DD Accruals) estimating equation (3): Chief Accounting Officer vega on financial reporting quality. CAO, CFO, and CEO delta are included in the controls. Delta and vega were calculated using Thomson Reuters data on insider equity holdings. T-values are in parentheses and calculated using standard errors clustered by industry-year. Statistical significance at the 10%, 5%, and 1% levels are denoted by *, **, and *** respectively. Severe restatements are those that have an 8-K filing associated with the restatement, while non-severe restatements do not. Just meet-or-beat is an indicator equal to 1 if the firm eps is above analyst forecast consensus by \$0.00 to \$0.05. To improve readability Dechow-Dichev accruals are normalized by increasing the parameter estimates by a factor of 100.

Table 6. Executive Turnover around Failures in Reporting
Panel A - Restatements

Regression: Turnover = Restate Firm + Event YE + Restate Firm * Event YE + Controls

	Pooled Sample		
	CAO	CFO	CEO
Restatement Firm	-0.037 (-1.46)	-0.007 (-0.27)	-0.029 (-1.46)
Pre-Restate t=-3	0.074 (1.53)	0.068 (1.35)	-0.018 (-0.37)
Pre-Restate t=-2	0.1** (2.08)	0.084* (1.71)	-0.011 (-0.26)
Pre-Restate t=-1	0.131*** (2.84)	0.155*** (3.44)	0.148*** (4.1)
Restate Period t=0	0.116*** (3.08)	0.135*** (3.67)	0.197*** (5.81)
Restate Period t=1	-0.074 (-0.92)	0.009 (0.11)	-0.059 (-0.75)
Restate Period t=2	0.037 (0.63)	-0.020 (-0.32)	0.018 (0.33)
Post Period s=1	0.001 (0.03)	-0.030 (-0.71)	-0.136*** (-3.278)
Post Period s=2	-0.050 (-1.19)	0.002 (0.06)	-0.037 (-1.06)
Post Period s=3	0.066* (1.68)	-0.031 (-0.69)	-0.020 (-0.56)
Controls	Yes	Yes	Yes
Fixed Effects	Ind, Year	Ind, Year	Ind, Year
N	20,015	20,015	42,024
R-Squared	0.2179	0.2336	0.2753

This table reports estimates from logistic regression analyses estimating equation (4a), which estimates executive turnover in the years around any restatement. T-values are in parentheses and calculated using standard errors clustered by industry-year. Statistical significance at the 10%, 5%, and 1% levels are denoted by *, **, and ***, respectively.

Panel B - Internal Control Weaknesses

Regression: Turnover = ICW Firm + Event YE + ICW Firm * Event YE + Controls

	Pooled Sample		
	CAO	CFO	CEO
ICW Firm	0.027 (1.04)	-0.018 (-0.63)	0.048** (2.12)
Pre-ICW t=-3	0.028 (0.42)	0.049 (0.73)	0.047 (0.74)
Pre-ICW t=-2	-0.060 (-0.94)	0.124* (1.93)	0.118** (2.16)
Pre-ICW t=-1	0.224*** (4.19)	0.291*** (5.57)	0.283*** (6.88)
ICW Period t=0	0.215*** (4.76)	0.273*** (6.25)	0.273*** (7.90)
ICW Period t=1	0.284** (2.37)	0.341*** (2.59)	0.103 (1.04)
ICW Period t=2	-0.138 (-1.29)	-0.123 (-1.17)	-0.148** (-2.03)
Post Period s=1	-0.026 (-0.51)	-0.067 (-1.3)	-0.184*** (-4.25)
Post Period s=2	0.025 (0.44)	-0.045 (-0.83)	-0.042 (-0.98)
Post Period s=3	-0.029 (-0.51)	0.021 (0.38)	-0.075* (-1.84)
Controls	Yes	Yes	Yes
Fixed Effects	Ind, Year	Ind, Year	Ind, Year
N	17,358	17,358	35,878
R-Squared	0.168	0.1832	0.2060

This table reports estimates from logistic regression analyses estimating equation (4b), which estimates executive turnover in the years around an internal control weakness. T-values are in parentheses and calculated using standard errors clustered by industry-year. Statistical significance at the 10%, 5%, and 1% levels are denoted by *, **, and ***, respectively.

Table 7. Executive Tenure and Financial Reporting Quality

Regression: FRQI = CAO Tenure + CFO Tenure + CEO Tenure + Controls

	Non-Severe Restatements	Severe Restatements	DD Accruals*	Just Meet-or-Beat	IC Weakness
CAO Tenure	0.015	-0.181**	-0.033***	-0.04*	-0.227***
	1.02	0.84	.	0.96	0.80
T Value	(0.61)	(-2.46)	(-2.82)	(-1.94)	(-3.29)
CFO Tenure	-0.082***	0.088	0.00005	0.023	-0.166**
T Value	(-2.96)	(1.28)	(0.37)	(1.08)	(-2.33)
CEO Tenure	-0.006	0.028	0.00001	0.032*	-0.002
T Value	(-0.28)	(0.44)	(0.05)	(1.81)	(-0.04)
Controls	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Ind, Year	Ind, Year	Ind, Year	Ind, Year	Ind, Year
Specification	Logit	Logit	OLS	Logit	Logit
N	3,972	3,972	3,729	3,262	3,778
R-Squared	0.0533	0.04	0.1828	0.1023	0.0876

This table reports estimates from logistic regression analyses (OLS regression for DD Accruals) estimating equation (5), which estimates the effect of executive tenure on financial reporting quality. T-values are in parentheses and calculated using two-way clustered standard errors by firm and industry-year. Statistical significance at the 10%, 5%, and 1% levels are denoted by *, **, and ***, respectively. Severe restatements are those that have an 8-K filing associated with the restatement, while non-severe restatements do not. Just meet-or-beat is an indicator equal to 1 if the firm eps is above analyst forecast consensus by \$0.00 to \$0.05. To improve readability, Dechow-Dichev accruals are normalized by increasing the parameter estimates by a factor of 100.