Does the SEC's Enforcement Vary Depending on Boards' Gender Composition?[†]

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Abstract

The SEC has limited resources that it can dedicate to investigating firms. Which type of firm is the SEC more likely to suspect of potential wrongdoing? We show that firms receiving a "red flag" for misconduct (e.g. comment letters, restatements, whistleblower reports) are less likely to experience an SEC investigation if they have a large fraction of women directors. These firm are also less likely to experience enforcement by the SEC. We address endogeneity by showing that these results are particularly pronounced when the US government changes to a Democratic administration (which we show is more focused on board gender diversity) from a Republican administration. Results are particularly large among smaller firms for which public information is more limited, and thus, the potential for bias is larger. Our findings imply that regulators' decisions on whether to open an investigation, and the outcomes of these investigations, are influenced by regulators' biases and beliefs on how each gender (of directors) carries out its role.

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1. Introduction

Individuals use stereotypes to help them navigate the world (Hilton and Von Hippel, 1996). Stereotypes are used in a variety of situations. For example, they can lead individuals to believe that a certain race or gender is more likely to commit a crime (Steffensmeier, Ulmer, and Kramer, 1998). Studies from the enforcement and judicial spheres have documented that women are less likely to be perceived as being guilty.¹ Consequently, women receive lighter punishments in court, for example, in receiving shorter prison sentences and smaller bail amounts.²

The corporate world may also be affected by gender-stereotypes. Regulators and judges are required to decide whether corporations are potentially, or are actually, engaging in wrongdoing such as fraud. In this paper we focus on the question of whether the gender composition of a board relates to the likelihood that the SEC will decide to open an investigation into a company—and if so, ultimately find the company guilty of wrongdoing. Our broader goal is to understand whether regulators' decisions are biased by their beliefs of how each gender (of directors) carries out its role.

We focus on the decision of the Securities and Exchange Commission (SEC) to open an investigation against a company. As described in the Accounting and Auditing Enforcement Releases (AAER), such an investigation is one of the major enforcement mechanisms of the SEC. However, the SEC has limited resources and cannot open an investigation against all or even the

¹ Masculinity significantly influences people's perception of whether suspects are guilty (Ward, Flowe, and Humphries, 2012). Additionally, police officers have more trouble in detecting lies by female suspects (Engel, 2003; Mann, Vrij and Bull 2004).

² In criminal court cases, prior research shows that female suspects are sentenced with significantly shorter time in prison comparing to their male peers (Starr, 2012; Cohen and Yang, 2019; Philippe, 2019). Male suspects also experience higher bail amounts (Turner and Johnson, 2006). In civil cases, Fisher, Kricheli-Katz, Rosen-Zvi, and Eisenberg (2016) show that male plaintiffs who lose their cases are significantly more likely to receive court orders to pay for female defendants' legal fees (compared to female plaintiffs who lose to male defendants).

majority of the firms for which there is a "red flag" that may indicate that the firm may be involved in a misconduct. Thus, the SEC's employees must use their judgment on which firms are "worthy" of an investigation and which are not. Prior studies have shown that non-financial considerations (e.g., political connections) affect the likelihood that an SEC investigation is opened.³ However, prior studies have not investigated whether gender plays a role in any way with respect to the SEC's decision to open an investigation, and the results of that investigation. Our paper seeks to address this gap in the literature.

Prior literature has documented that female directors have certain strengths, or certain areas they tend to specialize in, relative to male directors. For example, women directors and executives focus on monitoring in particular (Adams and Ferreira, 2009), and decreasing firm risk (Faccio, Marchica, and Mura, 2016; Huang and Kisgen, 2013).⁴ These studies, and perhaps also life experiences, can establish the perception that women specialize and strengthen firm monitoring. Accordingly, we hypothesize that given the limited resources of the SEC, it will choose to target companies that are perceives to be more prone to wrongdoing—companies with few women on their boards of directors.

To examine this issue, we obtain the SEC's undisclosed investigation records through a Freedom of Information Act (FOIA) request, and link undisclosed investigations to firms' fiscal year

³ For example, Heese (2019) shows that the interaction between political activities and firm employee base can alternate the SEC enforcement risk. Similarly, Correia (2014) shows that political connections can alternate SEC enforcement risk.

⁴ Faccio, Marchica, and Mura (2016) find that firms run by female CEOs are less leveraged, have less volatile earnings, and are more likely to remain in operation than firms run by male CEOs. Huang and Kisgen (2013) find similar results. Francis, Hasan, Park, and Wu, (2015) find that female CFOs are more conservative in their financial reporting. Finally, Adhikari, Agrawal, and Malm (2019) find that companies that have more women in power face fewer operations-related lawsuits.

characteristics (following Solomon and Soltes, 2019; Blackburne, Kepler, Quinn, and Taylor, 2021).

Our first main finding is that, conditional on having a red flag, the likelihood of a firm being targeted by the SEC decreases when its board is gender diverse. Specifically, conditional on the company receiving a red flag, firms that have at least 30% female directors are 50-70% less likely to be targeted by an SEC investigation compared to the average frequency companies are targeted with an SEC investigation. The SEC has significant discretion to decide whether to investigate a particular firm, and it appears that gender is taken into account in this decision, whether it is deliberate or inadvertent. We note that if the SEC does not open an investigation into a firm, it will generally not be a target of enforcement.

Additionally, we find that the SEC's propensity to investigate firms at different rates results in reduced rates of AAERs for gender-diverse firms. Specifically, increasing board gender diversity by one standard deviation decreases the likelihood that the firm face an AAER enforcement action by 30%.

To address endogeneity concerns, as an exogenous shock we use the 2008 U.S. government elections which resulted in a change in U.S. President (from Bush to Obama) and administration from Republican to Democratic. Consequently, most senior SEC leadership was replaced. We show that the results described above (e.g., SEC being less likely to target boards with many women) are particularly pronounced during the years of a Democratic administration, which is historically more supportive of women's equality issues.⁷ Thus, SEC leadership would generally

⁷ See, for example, <u>https://www.pewresearch.org/social-trends/2017/10/18/wide-partisan-gaps-in-u-s-over-how-far-the-country-has-come-on-gender-equality/</u>.

be more likely to assume that boards with more women should not be investigated or are less likely to have engaged in misconduct.

Our results suggest that the SEC's uses the above noted gender-related heuristic particularly when there is limited information available for it to make more informed decisions. Specifically, the implicit gender-related heuristic rules used are more likely to be used by the SEC with respect to small firms—i.e., firms for which limited data is prevalent, and firms physically distant from the SEC—i.e., firms for which it is more challenging for the SEC to collect data.

Additionally, we show the influence of the gender-related values of the SEC leadership (chair and commissioners) on enforcement decisions.⁸ Using web scraped data, we analyze the content of public speeches of SEC leaders. We find that when SEC leadership emphasizes the importance of gender diversity through their public speeches, enforcement staff is less likely to investigate firms with more female directors. The marginal effect of the interaction is large: When controlling for firm and year fixed effects, the marginal effect is an approximately 37% reduction in the likelihood of experiencing an SEC investigation. We hand collect the SEC's regional directors' genders, and our results are consistent with homophily: When the SEC's regional director is female, a one standard deviation increase in female directors on a board leads to a 21% reduction in SEC investigation.

Finally, given that previous literature finds that female directors demonstrate improved monitoring, we study monitoring outcomes for firms with gender-diverse boards. We find that the female

⁸ Our results are arguably consistent with enforcement staff having an unconscious bias. More broadly, we recognize that there is evidence of enforcement decisions being driven by politicians' electoral considerations (Mehta and Zhao, 2020), political partisanship (Engelberg, Henriksson, Manela, and Williams, 2021), promotion incentives (Kalmenovitz, 2021), and country-level political relationships (Fisch and Gu, 2022).

directors are more likely to mitigate the consequences following apparent misconduct. Genderdiverse firms are associated with investigations that last about one year less, and are more prompt in correcting apparent filing errors by restating faster. Additionally, when sued by shareholders in class actions, these firms' lawsuits are more likely to be dismissed and their lawsuits usually span a shorter window. Thus, these results support the conclusion that women directors are particularly beneficial when close monitoring is needed.

Taken together, our findings suggest that firms with gender-diverse boards benefit from the reduced SEC regulation risk. Such a reduction is brought up largely by the SEC's choice with respect to which firms to investigate (and subsequently pursue enforcement actions).

In conclusion, our paper shows that SEC enforcement is not random, and that it is affected by gender biases. Firms with more women on their boards are less likely to experience investigations for apparent misconduct. Our findings may encourage firms to appoint women directors, but may also encourage the SEC to define more clear criteria on when an investigation is opened and when enforcement actions are taken.

2. Literature

Our study contributes to the literature of corporate regulation and enforcement. Many papers have studied regulators' behavior towards enforcement cases (Kedia and Rajgopal, 2011; Agarwal, Lucca, Seru, and Trebbi, 2014; Correia, 2014; Mehta and Zhao, 2020; Heese, 2019; Fisch and Gu, 2022; Heese, 2022). However, a paucity of studies have documented the effects of gender disparity on corporate regulation and enforcement actions.¹⁰ Our paper builds on Cumming, Leung and Rui

¹⁰ Recent studies have used SEC comment letters: Baugh, Kim, and Lee (2022) show the role of comment letter reviews' idiosyncratic styles on filing review outcomes. Similarly, Do and Zhang (2022) examine the effects of SEC staff members' personal characteristics.

(2015), who use Chinese data to show that gender diversity leads to less securities fraud. Whereas the broader securities fraud literature finds it challenging to explicitly address whether the regulator treats potential fraud differently for gender diverse firms, we attempt to examine this issue. We also note that the literature has not reached a conclusion regarding the effect of gender diversity on regulation and enforcement actions in the world's most important capital market — the United States.

Adhikari, Agrawal and Malm (2019) is also closely related to our work. They find that diverse firms face less operation-related litigation risk. Our paper deviates from the litigation aspect to investigate the role of regulatory scrutiny. In general, our study complements these related papers by highlighting the role of the SEC's investigation decisions, which ultimately affects their enforcement actions. The existing literature of SEC regulation and enforcement does not control for the sample selection bias brought up by the SEC's investigation decision. This has implications for studies that examine the determinants of AAER enforcement actions. By using data from the SEC's undisclosed investigation records, we shed new light on this issue.

Other studies have also used the SEC's private investigation data. Solomon and Soltes (2019) focus on the consequences of voluntary disclosure of SEC investigations, and show that firms that choose to disclose SEC investigations suffer from significant underperformance. Blackburne, Kepler, Quinn and Taylor (2021) show that if a firm locates in a state under the jurisdiction of a busy SEC regional office, it is less likely to experience SEC investigations. Our contribution is in line with their study, albeit from a different perspective.

Our paper also contributes to our understanding of board gender disparity as well as the influence of board gender diversity on firms' policies. As mentioned earlier, the legal literature provides evidence that gender disparity exists in legal enforcement and the judicial process (Engel, 2003; Starr, 2012; Ward, Flowe, and Humphries, 2012; Cohen and Yang 2019; Phillippe 2019, etc.). Yet, the joint literature in finance and accounting provides little study into the effect of gender disparity in the regulation and enforcement processes.

Many studies have debated the value of gender diversity on boards.¹¹ With respect to monitoring, Adams and Ferreira (2009) and Schwartz-Ziv (2017) provide evidence consistent with superior monitoring for firms with greater gender diversity. Conversely, some studies suggest that appointments of female directors are "token" appointments made for symbolic value (Chang, Milkman, Chugh, Akinola, 2019; Knippen, Shen, and Zhu 2014). Field, Souther and Yore (2020) find that although board gender diversity has improved in recent years, female directors are less likely to serve in leadership positions despite female directors having apparently stronger qualifications than male directors.

3. Empirical Design

In this section, we describe our empirical design. We first describe the null hypotheses that we test and make predictions regarding the effect of board gender diversity on SEC enforcement. For each hypothesis, we introduce our testing strategy. Finally, we describe our sample construction.

3.1. Predictions, Null Hypotheses, and Tests

The legal literature documents evidence of gender disparity in legal and judicial settings. Most of the studies (though not all) find that female suspects in criminal cases or females in civil lawsuits face lighter sentences or reduced consequences. For example, Starr (2012), Cohen and Yang (2019), and Philippe (2019), among others, show that female suspects are more likely to be

¹¹ With respect to firm value, see for example Ahern and Dittmar (2012), Eckbo, Nygaard, and Thorburn (2022), and Schmid and Urban (2022).

sentenced with shorter time in prison, whereas Turner and Johnson (2016) show that male suspects face higher pretrial bail amounts. Additionally, Ward, Flowe, and Humphries (2012) show that masculinity significantly influences people's judgement regarding whether a suspect is guilty. These studies would be consistent with a hypothesis that some gender disparity would exist in the regulation and enforcement of financial fraud. Therefore, we first posit a null hypothesis that gender diversity does not change firms' SEC investigation risk.

We obtain the SEC's undisclosed investigation records through a FOIA request to examine this selection issue. First, we study whether gender diversity reduces firms' SEC investigation risk. We hypothesize that gender diversity does not influence the SEC's decision to investigate:

Hypothesis I: Gender diversity does not influence the SEC's decision to investigate.

To test this hypothesis, we apply both OLS regressions including board gender diversity ratios as our main independent variable of interest and the common control variables in the SEC enforcement literature as described in Table 1. The gender diversity ratio is calculated as the percentage of directors that are female. Specifically, we test Hypothesis I with an OLS regression as below. We focus on the coefficient of *Gender Diversity Ratio*, β_1 in the following regression:

 $Investigation_{it}(0 \text{ or } 1) = \beta_0 + \beta_1 Gender \text{ Diversity Ratio}_{it} + Control_{it} \cdot \gamma + \varepsilon_{it}.$

We control for the common financial quality variables, board governance, fixed effects of the SEC's regional jurisdiction, i.e., SEC regional directors, and fixed effects of SEC chairs. Throughout the paper, we report significance with standard errors clustered at the firm level.

In Table 2, we report results with a sample limited to firm-years with "red flag" events, i.e., receiving comment letters relating to firms' 10-Ks, being a defendant in class action litigation, and having income reducing restatements. Throughout our paper, we use this "conditional" sample

when we have concerns whether the SEC should react differently to certain firms. In contrast, we focus on the full sample of firms when we test settings that do not hinge on the SEC's decision to investigate. In Appendix Table A1, we provide our results with the full sample. Our results are generally consistent with Table 2.

We then test how the SEC reacts to common signals of financial fraud. We consider four widely documented signals of potential fraud: 10-K comment letters, income-reducing restatements, high share turnover, and whistleblower reports. We hypothesize that SEC investigations are not influenced by board gender diversity if firms show any of the common investigation triggers.

Hypothesis II: The SEC reacts to signals of financial fraud regardless of board gender diversity.

Our variable of interests is the interaction term between the signal and gender diversity ratio, indicating the marginal effect of gender diversity conditional on the corresponding signal. Our regression model is:

SEC Investigation_{it} (0 or 1)

 $= \beta_0 + \beta_1 \text{ Gender Diversity Ratio} + \beta_2 \text{Event}_{it}$ $+ \beta_3 \text{Gender Diversity Ratio}_{it} \times \text{Event}_{it} + \textbf{Control}_{it} \cdot \boldsymbol{\gamma} + \varepsilon_{it}.$

Next, we consider the role of the SEC's leadership. The SEC has limited attention and resources, and is under the leadership of its commissioners. Therefore, when SEC leadership publicly emphasizes the importance of gender diversity on financial quality, their enforcement teams could take this as a sign to focus their investigations on firms with fewer female directors.¹² Meanwhile,

¹² For example, Commissioner Aguilar (2013) noted that studies "found that there is a connection between greater board diversity and improved corporate governance and financial performance" and that "we need to shatter the glass ceiling that keeps women out, not merely put cracks in it." Similarly, Chair White (2014) said that "the data is stark – it shows that there are still far too few women participating on the boards of public companies."

we also consider the interaction between gender-diverse firms and the SEC regional director's gender. We hypothesize (in null form) that the SEC leadership's focus on gender diversity and the SEC regional directors' gender do not influence the SEC's investigation decisions.

Hypothesis III: The SEC leadership's purported views on gender diversity do not influence the SEC's decision of which firms to investigate.

We collect the text of SEC speeches through web scraping and calculate the percentage of the SEC's public speeches that mention gender keywords as our measure of the SEC leadership's attention. We hand collect the data of the SEC regional directors' information. We test our hypothesis through the following OLS regression focusing on the firms with red flags. Our regression models are as follows:

SEC Investigation_{it} (0 or 1)

 $= \beta_0 + \beta_1 \text{ Gender Diversity Ratio}_{it}$ $+ \beta_2 \% \text{ SEC Speeches Mentioning Gender Diversity}_t$ $+ \beta_3 \text{Gender Diversity Ratio}_{it}$ $\times \% \text{ SEC Speeches Mentioning Gender Diversity}_t + \textbf{Control}_{it} \cdot \boldsymbol{\gamma} + \varepsilon_{it}.$

SEC Investigation_{it} (0 or 1)

 $= \beta_0 + \beta_1 \text{ Gender Diversity Ratio}_{it} + \beta_2 \text{ Female SEC Regional Director}_{it}$ $+ \beta_3 \text{Gender Diversity Ratio}_{it} \times \text{Female SEC Regional Director}_{it}$ $+ \textbf{Control}_{it} \cdot \boldsymbol{\gamma} + \varepsilon_{it}.$

Our focus is β_3 , the marginal effect of board gender diversity conditional on the SEC leadership's focus on gender diversity and the SEC regional director's gender, respectively.

We are interested in why the SEC investigates diverse boards less frequently, and we seek to provide a holistic view on whether board gender diversity improves monitoring results. The literature documents several benefits associated with female directors and top executives. For example, female directors are more active in monitoring (Adams and Ferreira, 2009; Schwartz-Ziv, 2017), and board or audit committee gender diversity is associated with less risky financial policies or more intense monitoring (Benile, Bhagwat, and Yonker, 2018; Lai, Srinidhi, Gul, and Tsui, 2017). Therefore, it is plausible that the SEC has the view that firms with more female directors exhibit superior accounting quality and monitoring integrity, and that it then applies this belief in its investigation decision. In other words, reverse causality could lead to reduced investigation intensity of firms with gender diverse boards.

Hypothesis IV: Gender diversity does not change monitoring.

To evaluate this conjecture, we hypothesize that board gender diversity does not change the frequency of firms' monitoring outcomes. We examine the role unmaterialized monitoring results, i.e., measures reflecting board monitoring that are not represented in the financial statements. We calculate the duration of the SEC investigations, delays in disclosing earnings restatements, restatement size, restatement length, class action duration, and the likelihood of class action lawsuit dismissal. We regress these variables against the gender diversity ratio and other control variables:

Unmarterialized Monitoring Result

 $= \beta_0 + \beta_1 Gender Diversity Ratio_{it} + Control_{it} \cdot \gamma + \varepsilon_{it}.$

Our interpretation focuses on β_1 , the marginal effect of board gender diversity on firm's changes in unmaterialized monitoring results.

In our Appendix, we also report the test on materialized financial abnormalities, i.e., firm quality change that is directly observable in statements and market performance. Following the literature, we predict that the hypothesis will be rejected and that firms with more female directors are associated with superior financial and accounting quality. We consider several financial abnormalities and litigation variables, including Benford's law, 10-K related comment letters, class action lawsuits, income reducing restatements, and share turnover as the response variables for our tests. We focus on β_1 for each of the abnormalities. We predict that $\beta_1 < 0$, thus rejecting the null hypothesis.

Abnormality (0 or 1) =
$$\beta_0 + \beta_1$$
 Gender Diversity Ratio + **Control**_{it} · γ + ε_{it} .

Our focus is β_1 , the marginal effect of board gender diversity on firm accounting abnormalities.

Hypothesis V: Gender diversity does not change firm level SEC enforcement risk.

The SEC investigation is an important step prior to AAER enforcement. Because firm gender diversity can alter the likelihood of the SEC opening an investigation, it is possible that the SEC enforcement risk is also lower among gender-diverse firms. Specifically, we fit the following model in ordinary least square (OLS) regressions:

$AAER_{it}(0 \text{ or } 1) = \beta_0 + \beta_1 Gender Diversity Ratio_{it} + Control_{it} \cdot \gamma + \varepsilon_{it}.$

 β_1 is the main coefficient of interest, which indicates the marginal effect of gender diversity on the SEC's AAER enforcement actions. We also augment our main regressions using the audit committee's gender diversity, since the literature has shown that diverse audit committees are more likely to adopt conservative accounting policies (Lai, Srinidhi, Gul, and Tsui, 2017).

The existing literature of SEC regulation and enforcement focuses on AAER actions without addressing the decision to investigate a potential fraud. If a potential case is not investigated, the case will not be recorded as an AAER event. In other words, there is a sample selection effect through the SEC's decision to investigate.

In unreported results, we conduct a Heckman model to test whether firms with more female directors experience reduced AAER enforcement risk conditional on being investigated. Our Heckman model demonstrates the potential censoring effect due to the SEC's investigation decisions. We specify our Heckman model as follows:

First Stage: *SEC Investigation*_{it} (0 or 1)

 $= \beta_0 + \beta_1$ Gender Diversity Ratio + Control_{it} · $\gamma + \varepsilon_{it}$,

Second Stage: AAER_{it} (0 or 1)

 $= \beta_0 + \beta_1 \text{ Gender Diversity Ratio} + \beta_2 \text{Estimated SEC Investigation}_{it}$ $+ \beta_3 \text{Gender Diversity Ratio}_{it} \times \text{Estimated SEC Investigation}_{it}$ $+ \textbf{Control}_{it} \cdot \textbf{\gamma} + \varepsilon_{it}.$

The interpretation of the second step is important. Our focus is the interaction term, *not* standalone gender diversity, which describes the marginal effect of gender diversity conditional on being investigated by the SEC. Our hypothesis suggests that this coefficient is zero, meaning that gender diversity does not affect AAER enforcement (conditional on being investigated by the SEC).

If female directors influence firms' accounting quality and financial soundness, we would observe an interaction effect between the SEC's investigation decision and board gender diversity in the second stage of the Heckman model. If our prediction is true and we observe such an interaction effect, this could be a sign of reverse causality.

3.2. Data

Our main independent variable is the female director ratio. In calculating our measure, we use BoardEx and ISS, and include both sources to obtain the most comprehensive firm-year coverage– using BoardEx when the data is unavailable in ISS. Due to BoardEx data availability, we start our sample from 2000.

We obtain the SEC's private investigation records from 1994-2017 through a Freedom of Information Act (FOIA) request. Because of the limited number of observations and data limitations with BoardEx, we use only the time window from 2000-2016.¹³ One caveat of the SEC investigation data is that our sample only includes "closed" cases (rather than open investigations, due to SEC data availability policies). Using a file of scanned SEC investigation records, we apply OCR to convert to text. We then fuzzy match firm names to Compustat and keep the top 20 matches. Next, we manually select the best matches. We merge SEC investigation records to fiscal years using dates of the cases opening, and lag the date by three months for fiscal periods' filings to be mapped to associated trigger events (see Karpoff, Koester, Lee, and Martin, 2017). Our AAER records are provided by University of Southern California (Dechow, Ge, Larson, and Sloan, 2011).

We include several major control variables, including total assets, Tobin's q, stock information and governance. These variables are primarily obtained from or created based on Compustat and CRSP. We also include restatement information and comment letter information from Audit Analytics. We join the comment letter data to fiscal periods with a lag of three months. We focus

¹³ Due to data availability, our whistleblower data covers 2000-2010.

on the 10-K comment letters and only count one comment letter for a fiscal period. Class action records are from Stanford Law School. Table 1 provides our sample statistics.

4. Gender Disparity in SEC Investigations

We study whether gender diversity has negative effects on the SEC's investigation decision in Table 2 (for Hypothesis I). Given our focus on whether the SEC investigates following potential signs of misconduct, we restrict our sample to firm-years with red flags: 10-K related comment letters, class action lawsuits, and income-reducing restatements. We find that the marginal effect of female director percentage on the SEC's decision to investigate is 7-10%. A firm with 30% or more female directors or at least three female directors can experience a 2-3% reduction in its SEC investigation risk, an approximately 70% decline compared to the average investigation risk.

In Appendix Table A1, we use the full sample; when controlling for industry and year fixed effects, the marginal effect is a reduction of 2-3% in the likelihood of receiving SEC investigation. Firms with 30% or more female directors will experience a 1% decline in SEC investigation occurrence, a 25% reduction of investigation risk compared to an average firm.

In Panel A of Appendix Table A2, we explore the effects of various threshold levels of board gender diversity. We show that the influence of the gender diversity is not linear for the full sample. In particular, we show that the influence of gender diversity on SEC investigation occurrence is concentrated among firms with 30%-40% female directors (we recognize the power issue for the larger proportions). Conversely, in Panel B of Appendix Table A2, we show that the driving force of gender diversity in the conditional sample is linear.

4.1. Does the SEC consciously favor firms with gender-diverse boards?

We test Hypothesis II by exploring the SEC's investigation decision conditional on common fraud signals, including 10-K comment letters, income-reducing restatements, high share turnover, and whistleblower reports. We include comment letters because the Division of Corporation Finance (the issuer of these letters) often recommends investigation cases to the enforcement teams at the regional offices (DeFond, Francis, and Hallman, 2018). The latter variables are known signals of financial fraud.

Table 3 reports our findings. Panels A-D show the results for comment letters, income-reducing restatements, high share turnover, and whistleblower reports, respectively. Conditional on these signal variables, our results indicate that the SEC still investigates gender diverse firms less frequently, and thus we reject Hypothesis II. If a firm receives a 10-K comment letter, files an income-reducing restatement, or faces high share turnover, the marginal effect of board gender diversity conditional on the signal variable increases to 4%, 30%, and 2% respectively. Similarly, a firm with a board composed of 30% or more females or at least three female directors experiences a reduction in investigation risk of 17-24% conditional on experiencing a whistleblower report. The size of these marginal effects is large, considering that only about 4% of sample firm-year observations receive SEC investigations.

5. Potential Mechanism: Leadership's Attention, Female SEC Regional Directors, and Monitoring Results

In this section, we analyze the potential mechanisms that lead to our observations. We analyze both sides of the regulation, i.e., the SEC and the firms. We examine the SEC's motivation for certain investigation decisions; we consider two particular motivations, the SEC's leadership priorities and homophily between regional directors and firms. Then, we test if female directors

lead to better firm level monitoring results in both the materialized (such as earnings restatements) and unmaterialized results (such as firm responsiveness to negative events).

5.1. SEC Leadership

Given the importance of the SEC's centralized leadership, we investigate the role of leadership's purported views. Although enforcement decisions mostly occur in regional offices, their decisions are guided by the commission's leadership. It is plausible that SEC enforcement teams will more intensively scrutinize firms with less female directors when SEC leadership emphasizes the importance of board gender diversity.

To measure the SEC leadership's attention to gender diversity, we construct a data set based on web-scraped SEC leadership speeches. We search for gender related keywords in speeches by SEC leadership and use the following keywords: "gender", "female leader", "female director", "female as director", and "women as directors". We calculate the percentage of speeches that mention gender keywords and study the interaction of gender diversity conditional on our proxy for SEC leadership's discussion of gender issues in their speeches.

Our empirical results suggest that SEC enforcement teams will change their focus around the time period in which SEC leadership is especially focused on gender diversity. Our tests in Table 4 suggest that board gender diversity has a marginal effect of at least a 55-72% reduction in the likelihood of board gender diversity conditional on the SEC leadership's attention to gender diversity.

5.2. SEC Regional Director Homophily

Next, we examine the interaction between board gender diversity and female SEC regional directors. We collect the SEC regional directors' gender data and interact it with board gender

diversity. Table 5 reports our results. Conditional on red flags, firms with diverse boards are 8% marginally less likely to receive SEC investigations if the SEC regional director is female. For firms with at least three female directors, the reduction in investigation risk is about 5%. Our results in Tables 4 and 5 thus lead us to reject Hypothesis III, and we conclude that SEC leadership has influence on firm-level investigation risk.

5.3. Reverse Causality: The Monitoring Results

We conjecture that the SEC has noted that board gender diversity leads to superior monitoring. We construct a set of variables that represents the unmaterialized accounting quality and test Hypothesis IV in Table 6-8. First, we measure SEC investigation duration in years, and examine how investigation duration is affected by board gender diversity. Our results in Table 6 support the hypothesis that board gender diversity can lead to SEC investigations closing more quickly; this signals the reduced complexity and severity of investigations related to diverse boards.

We also report that the diverse boards are more proactive in correcting their accounting errors. We measure restatement duration as the years between the erroneous report and the restatement. We also measure restatement size as the log cumulative earning change. Table 7 reports the results. Despite the restatement size being insignificantly different between firms with gender-diverse boards and firms without gender diverse boards, a one standard deviation increase in board gender diversity reduces the time for a firm to restate its earnings by 8% (about one month).

Next, we calculate class action lawsuit duration and whether a case ends in court dismissal. We report the result in Table 8. We find that a one standard deviation increase in female director board representation is associated with lawsuit duration declining by approximately one month and court dismissal increasing by 2%. As class actions are driven by the financial objectives of the plaintiffs

and their lawyers, it is efficient and unlikely to be driven by other preferences. Therefore, the results from class action lawsuits can be related to case complexity and severity. Consequently, these results imply that board gender diversity is associated with reduced complexity and severity of cases that induce class actions.

We also examine the materialized accounting quality difference. We test whether female directors are associated with superior accounting quality as proxied by Benford's law, the likelihood of receiving comment letters, the likelihood of being sued in securities class actions, earnings restatements, and share turnover. In Table A3, we report the results. In general, we do not find any differences attributable to firms with higher levels of board gender diversity. In other words, the monitoring improvement of having more female directors is concentrated in the unmaterialized results—instead of the more explicit accounting and financial quality measures.

Collectively, we conclude that board gender diversity can be associated with superior outcomes around negative events. Therefore, negative events associated with these firms can be less complex and less severe, reflecting the superior effectiveness of monitoring at these firms. However, we note that we do not find any evidence that these firms are less likely to commit corporate fraud or have superior accounting quality.

6. Gender Disparity in SEC Enforcement: AAER Enforcement Actions

In this section, we test Hypothesis V and examine whether gender diversity influences SEC's enforcement — as a result of a *de facto* sample selection process due to investigation. When analyzing the SEC's AAER enforcement actions, the extant literature often falls short in accounting for this sample selection issue (largely due to data availability issues, although the literature generally recognizes this limitation).

Table 9 reports the AAER results. The OLS regressions indicate that diverse boards are indeed less likely to experience AAER enforcement actions. In unreported results, we use a Heckman model to account for the selection bias in our conclusion of AAER enforcement actions. Conditional on the SEC initiating an investigation, we do not find any difference in AAER enforcement between firms with and without gender-diverse boards. In additional unreported results, we specify two separate tests using OLS regressions for the influence of board gender diversity limited to observations with SEC investigations and limited to observations with red flag events, respectively. Our results are consistent. In short, we find that gender-diversity does not appear to lead to fewer AAER events once the SEC *includes all firms with potential fraud*, which leads to concerns about the SEC making a type II error.

7. Conclusion

Although the finance and accounting literature has documented many potential determinants that can influence the risks of firms experiencing SEC enforcement, prior research provides limited insight into enforcement from the perspective of the SEC's decision to investigate potential targets. At the same time, there is an extensive legal literature showing gender disparity in legal enforcement and the judicial processes (Starr, 2012; Fisher, Kricheli-Katz, Rosen-Zvi, and Eisenberg, 2016; Cohen and Yang, 2019; Philippe, 2019, etc.). In our study, we bring together these two streams of the literature by investigating the role of gender disparity on the SEC's enforcement decisions. Specifically, conditional on "red flags", we show that the percentage of female directors on boards leads to a 7-10% marginal reduction in the likelihood of experiencing an SEC investigation, meaning that a one standard deviation increase in the percentage of female directors leads to 1% reduction in the SEC investigation risk. A firm with 30% or more female

directors would experience a 2-3% reduction in the investigation risk, which is an approximately 50-70% reduction relative to the average SEC investigation risk.

Further analyses collectively provide support for the notion that the SEC's sample selection of investigation targets is a crucial channel that leads to less AAER enforcement. The SEC is less likely to investigate firms with gender-diverse boards, and this preference does not change even if the agency is presented with particular leads, such as 10-K comment letters, income reducing restatements, high share turnover, and whistleblower reports. It is difficult to argue that the SEC does not consciously make its decision conditional on these common fraud signals. Therefore, our findings suggest that the SEC could be making type II errors in its investigation decisions. Conditional on a firm experiencing an SEC investigation, we do not find an effect of gender diversity on AAER actions.

Since the literature shows benefits of including female directors on boards, we initially conjecture that the SEC's decision is based on the financial quality improvement associated with board gender diversity. We document that female directors indeed improve the monitoring results related to the negative events. Our analyses show that gender-diverse firms are associated with faster speed for closing SEC investigations or class actions. In class action lawsuits, firms with diverse boards are associated with higher likelihoods of receiving court dismissal. These firms also react to statement errors more proactively through significantly faster restatement. However, using a list of financial abnormalities, we do not find evidence of changes in explicit financial quality attributable to board gender diversity. We also do not find any evidence that supports our initial conjecture that diverse boards lead to less corporate misconduct.

We explore the SEC's apparent motivation in more detail. We examine the SEC leadership's interests in board gender diversity issues, as well as homophily with SEC regional directors. We

find that when SEC leadership demonstrates attention to these issues in its public speeches, enforcement teams are more likely to investigate firms with fewer female directors—resulting in more favorable treatment to firms with gender-diverse boards. Our results on the interaction between the female SEC regional directors and the board gender diversity further indicates that the role of homophily for female SEC regional directors.

Our results suggest that the selection issue is an important determinant of whether a given firm experiences an AAER. The analysis confirms this conjecture. More broadly, our study shows the importance for research into the determinants of SEC enforcement decisions recognizing the crucial role of the SEC's decision to initiate investigations.

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Figure 1

This table reports the estimated likelihood that a board with a certain fraction of women directors will be investigated by the SEC. The X-axis displays the minimum fraction of women on the board (e.g. the left bar indicates the board had at least 10% women on the board). The Y-axis demonstrates the marginal reduction in the likelihood that the SEC investigate the firm, conditional on the firm's board composition. The latter likelihood was estimated by running separately, for each of the board gender-thresholds reported in the graph, a specification that includes a dummy for whether the board included at least X% of women on the board, where X is indicated by each point in the chart. The specification includes all control which we include in our regression analysis.



Table 1 Variables and Summary Statistics

The table below shows the variable description and the summary statistics of our sample. The sample covers 2000-2016. Our variable of interest female director percentage includes the board director information from BoardEx and RiskMetrics. SEC investigation is from the undisclosed SEC investigation records obtained through FOIA from SEC. Annual Share Turnover is the number of share turnover in the fiscal year at the firm level. Annual Stock Volatility is the fiscal year stock return volatility calculated as annualized monthly volatility. Annual Market Adjusted Return is the holding return difference benchmarked against CRSP value-weighted market. To exclude potential collinearity problem, we use lag 1 Tobin's Q. The discretionary accrual is calculated using modified Jones method, and we include the absolute value of the accrual in our models. Income Reducing Restatement is from Audit Analytics. Fortune 500 is a dummy variable indicating Fortune 500 companies. Incorporated in Delaware is also a dummy variable indicating whether a firm incorporates in the state of Delaware. All the variables are matched to fiscal year. Panel A presents the variable descriptions, and Panel B presents the summary statistics.

Panel A: Variable Description					
Short Description	Long Description				
AAER	1 if the firm-year is in SEC's Accounting and Auditing Enforcement Records; 0 otherwise				
Investigation	1 if the firm-year is under SEC's undisclosed investigation; 0 otherwise				
Pct of Females on Board	% of female board directors				
Pct of Females on Audit Committee	% of female board directors on audit committee				
Pct of Females on Non-Audit Committee	% of female board directors on non-audit committee				
Board Independence	% of independent board directors				
Board Size	Number of board directors				
Female CEO	1 if CEO is female; 0 otherwise				
Female CFO	1 if CFO is female; 0 otherwise				
Annual Share Turnover	Aggregated daily share turnover at the fiscal year level				
Annual Mkt. Adj. Stock Return	Difference between fiscal period holding return and the CRSP value-weight market holding return				
Ln (Sale)	Log scale Sales from Compustat				
Leverage (ltd/at)	Ratio between long term debt and total assets				
Cash (che/at)	Ratio between cash holding and total assets				
Tobin Q (t-1)	Tobin's Q from the last fiscal year				
Discretionary Accrual (Modified Jones					
Absolute Value)	Absolute value of the discretionary accrual calculated using modified Jones definition				
Ln (Firm Age)	Log scale firm age in years				
Ln (SEC Distance)	geographic coordinates				
Ln (Distinct Analyst)	Log sale of the number of equity research analysts covering the firm				
Ln (Total Lobby)	Log scale sum of lobby expenditure based on OpenSecret website				
Ln (Product Seg)	Log scale number of product segments from Compustat				
Income-reducing Restatement	1 if the fiscal period is associated with an income reducing restatement in Audit Analytics; 0 otherwise				
Fortune 500	1 if the firm is a fortune 500 company; 0 otherwise				
Incorporated in Delaware	1 if the firm is incorporated in the state of Delaware: 0 otherwise				

Table 1 (Continued)

Panel B: Summary Statistics			
	Mean	Median	S.D.
AAER	0.011	0.000	0.105
SEC Private Investigation	0.042	0.000	0.200
Female Board Ratio	0.098	0.100	0.103
At Least 30% Female Board Ratio	0.044	0.000	0.205
At Least 35% Female Board Ratio	0.018	0.000	0.135
At Least 3 Female Board Members	0.057	0.000	0.232
Audit Committee Female Board Ratio	0.106	0.000	0.153
Non-Audit Committee Female Board Ratio	0.060	0.000	0.176
Board Independence	0.762	0.778	0.185
Female CEO	0.030	0.000	0.170
Female CFO	0.087	0.000	0.282
Female SEC Regional Director	0.408	0.000	0.492
Board Size	8.488	8.000	2.274
Annual Stock Turnover	0.768	0.832	0.217
Annual Mkt. Adj. Stock Return	0.060	-0.014	0.505
Ln (Sale)	6.388	6.497	2.085
Leverage (ltd/at)	0.187	0.139	0.200
Cash (che/at)	0.206	0.122	0.220
Tobin's Q	2.084	1.543	1.540
Discretionary Accrual	0.069	0.043	0.081
Ln (Firm Age)	2.860	2.833	0.750
Ln (SEC Distance)	4.264	4.868	1.658
Ln (Distinct Analyst)	2.351	2.398	0.807
Ln (Total Lobby)	0.241	0.000	1.624
Ln (Product Seg)	1.115	1.099	0.866
Income Reducing Flag	0.138	0.000	0.357
Fortune 500	0.121	0.000	0.326
Incorporated in Delaware	0.727	1.000	0.520

Table 2 Gender Disparity and SEC Private Investigation

The table below reports the conditional sample main results. We are concerned that the full sample cannot reflect the SEC's reaction because the agency has no reason to go after a good firm. Therefore, we focus on the firms with "red flags", including 10K-related comment letters, class action lawsuits, and income-reducing restatement. We regress the SEC private investigation, a dummy variable, on female board director percentage and control variables in panel A. We also provide results with a dummy on whether female board members are 30% or more and whether a firm has at least three female board directors in Panel B and C. We control for different fixed effect combinations in column 1-3. *. **, and *** denote significance at the 10 %, 5% and 1% level, respectively.

Panel A: Female %						
	(1)	(2)	(3)			
Female Board Ratio	-0.068***	-0.070***	-0.107**			
	(-3.29)	(-3.38)	(-2.47)			
Board Size	-0.001	-0.001	-0.000			
	(-0.60)	(-0.72)	(-0.13)			
Board Independence	0.022*	0.022*	0.031			
	(1.67)	(1.65)	(1.35)			
Ln (Product Seg)	0.006**	0.007**	0.002			
	(2.32)	(2.51)	(0.32)			
Income Reducing Flag	0.037***	0.037***	0.032***			
	(4.83)	(4.80)	(2.88)			
Annual Stock Turnover	0.048***	0.048***	0.102***			
	(3.51)	(3.53)	(4.82)			
Ln (Distinct Analyst)	0.011***	0.011**	0.008			
	(2.59)	(2.49)	(1.09)			
Annual Mkt. Adj. Stock Return	-0.031***	-0.031***	-0.033***			
	(-6.73)	(-6.67)	(-5.97)			
Ln (Sale)	0.012***	0.012***	0.000			
	(5.68)	(5.63)	(0.05)			
Leverage (ltd/at)	0.009	0.013	-0.015			
	(0.78)	(1.12)	(-0.65)			
Cash (che/at)	0.051***	0.050***	0.043			
	(3.27)	(3.17)	(1.46)			
Tobin Q (t-1)	0.004**	0.004**	0.002			
	(2.22)	(2.42)	(0.49)			
Discretionary Accrual	0.039	0.039	0.021			
	(1.53)	(1.54)	(0.63)			
Ln (Firm Age)	0.003	0.002	0.061***			
	(0.92)	(0.66)	(3.47)			
Incorporated in Delaware	-0.007	-0.007	-0.015			
	(-1.36)	(-1.36)	(-0.67)			
Ln (SEC Distance)	-0.004*	-0.004*				
	(-1.77)	(-1.73)				
Ln (Total Lobby)	0.001	0.002	-0.002			
	(1.03)	(1.05)	(-1.06)			
Fortune 500	0.010	0.010	0.008			
	(1.14)	(1.19)	(0.41)			
FE	Ind. / Yr.	Ind # Yr	Firm / Yr			
SEC Chairman/Director FE	Y	Y	Y			
HQ FE	Y	Y	Ν			
Error Cluster	Firm	Firm	Firm			
Ν	14308	14307	13383			
adj. / Pseudo R-sq	0.052	0.055	0.052			

Table 2 (Continued)

Panel B: 30% or More Female Directors					
	(1)	(2)	(3)		
At Least 30% Female Board Ratio	-0.026***	-0.029***	-0.027**		
	(-3.06)	(-3.28)	(-2.13)		
Board Size	-0.001	-0.001	-0.001		
	(-0.94)	(-1.07)	(-0.27)		
Board Independence	0.019	0.019	0.028		
	(1.47)	(1.44)	(1.23)		
Ln (Product Seg)	0.006**	0.007**	0.002		
	(2.27)	(2.46)	(0.35)		
Income Reducing Flag	0.036***	0.037***	0.032***		
	(4.81)	(4.77)	(2.89)		
Annual Stock Turnover	0.048***	0.048***	0.101***		
	(3.52)	(3.53)	(4.79)		
Ln (Distinct Analyst)	0.011**	0.010**	0.008		
	(2.48)	(2.38)	(1.08)		
Annual Mkt. Adj. Stock Return	-0.030***	-0.031***	-0.033***		
	(-6.68)	(-6.62)	(-5.93)		
Ln (Sale)	0.012***	0.012***	0.000		
	(5.56)	(5.52)	(0.00)		
Leverage (ltd/at)	0.008	0.012	-0.016		
	(0.71)	(1.05)	(-0.68)		
Cash (che/at)	0.050***	0.049***	0.042		
	(3.22)	(3.12)	(1.45)		
Tobin Q (t-1)	0.004**	0.004**	0.002		
	(2.17)	(2.37)	(0.51)		
Discretionary Accrual	0.040	0.041	0.022		
	(1.58)	(1.59)	(0.66)		
Ln (Firm Age)	0.003	0.002	0.061***		
	(0.82)	(0.56)	(3.44)		
Incorporated in Delaware	-0.007	-0.007	-0.015		
	(-1.35)	(-1.35)	(-0.69)		
Ln (SEC Distance)	-0.004*	-0.004*	0.000		
	(-1.80)	(-1.77)	(.)		
Ln (Total Lobby)	0.001	0.002	-0.002		
	(1.04)	(1.06)	(-1.10)		
Fortune 500	0.009	0.010	0.008		
	(1.06)	(1.11)	(0.43)		
FE	Ind. / Yr.	Ind # Yr	Firm / Yr		
SEC Chairman/Director FE	Y	Y	Y		
HQ FE	Y	Y	Ν		
Error Cluster	Firm	Firm	Firm		
Ν	14308	14307	13383		
adj. / Pseudo R-sq	0.051	0.055	0.052		

Table 2 (Continued)

Panel C: At Least Three Female Directors						
	(1)	(2)	(3)			
At Least 3 Female Board Members	-0.022**	-0.023**	-0.036***			
	(-2.40)	(-2.47)	(-2.76)			
Board Size	-0.001	-0.001	0.000			
	(-0.52)	(-0.64)	(0.08)			
Board Independence	0.019	0.019	0.029			
-	(1.49)	(1.46)	(1.29)			
Ln (Product Seg)	0.006**	0.007**	0.002			
-	(2.34)	(2.53)	(0.36)			
Income Reducing Flag	0.037***	0.037***	0.032***			
	(4.83)	(4.79)	(2.93)			
Annual Stock Turnover	0.047***	0.048***	0.102***			
	(3.47)	(3.48)	(4.82)			
Ln (Distinct Analyst)	0.011**	0.010**	0.008			
	(2.45)	(2.35)	(1.04)			
Annual Mkt. Adj. Stock Return	-0.030***	-0.031***	-0.033***			
	(-6.68)	(-6.61)	(-5.93)			
Ln (Sale)	0.012***	0.012***	-0.000			
	(5.56)	(5.51)	(-0.04)			
Leverage (ltd/at)	0.008	0.013	-0.016			
	(0.72)	(1.06)	(-0.67)			
Cash (che/at)	0.050***	0.049***	0.043			
	(3.22)	(3.12)	(1.47)			
Tobin Q (t-1)	0.004**	0.004**	0.002			
	(2.21)	(2.40)	(0.52)			
Discretionary Accrual	0.040	0.041	0.022			
	(1.58)	(1.59)	(0.65)			
Ln (Firm Age)	0.003	0.002	0.057***			
	(0.84)	(0.57)	(3.25)			
Incorporated in Delaware	-0.007	-0.007	-0.015			
	(-1.36)	(-1.36)	(-0.69)			
Ln (SEC Distance)	-0.004*	-0.004*	0.000			
	(-1.76)	(-1.72)	(.)			
Ln (Total Lobby)	0.001	0.002	-0.002			
	(1.03)	(1.05)	(-1.08)			
Fortune 500	0.010	0.011	0.010			
	(1.19)	(1.25)	(0.52)			
FE	Ind. / Yr.	Ind # Yr	Firm / Yr			
SEC Chairman/Director FE	Y	Y	Y			
HO FE	Y	Y	Ν			
Error Cluster	Firm	Firm	Firm			
Ν	14308	14307	13383			
adj. / Pseudo R-sq	0.051	0.055	0.052			

Table 3 On the Consciousness of SEC's Investigation Decisions: Interaction with Common Fraud Signals

This table reports the results of SEC investigation choices conditional on common fraud signals. The response variable is SEC investigation. The female independent variables are from board compositions. We are interested in the effect of board gender diversity conditional on the common fraud signals. Panel A-D report the SEC investigation decision as a result of comment letter on 10K filing, income-reducing restatement, high share turnover, and whistleblower flag, respectively. High share turnover is defined as the turnover above the median level. Due to limited availability of whistleblower data, we stop for the whistleblower test in 2010, while the other tests stop in 2016 due to the availability of SEC private investigation. *. **, and *** denote significance at the 10 %, 5% and 1% level, respectively. Standard errors are clustered at the firm level.

	Panel A:	SEC Investig	ation on Fema	ale Directors I	nteracting with	h 10K Comme	ent Letters		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Female Board Ratio	-0.011 (-0.78)	-0.011 (-0.82)	-0.039 (-1.56)						
At Least 30% Female	(()	(0.001	0.000	-0.000			
At Least 3 Female				(0.10)	(0.04)	(-0.02)	0.008	0.007	-0.010
Comment Letter	0.009***	0.009^{***}	0.008^{**}	0.006^{**}	0.006^{**}	0.003	0.006**	0.006**	0.003
Female Board Ratio x	(2.00)	(2.75)	(2.43)	(2.20)	(2.31)	(1.00)	(2.33)	(2.43)	(1.2))
Comment Letter	-0.041* (-1.92)	-0.042* (-1.93)	-0.067*** (-3.00)						
At Least 30% Female x		((/						
Comment Letter				-0.028*** (-3.11)	-0.028*** (-3.06)	-0.031*** (-3.23)			
At Least 3 Female x				. ,		· · · ·			
Comment Letter							-0.024**	-0.024**	-0.029***
							(-2.30)	(-2.34)	(-2.88)
Board Size	-0.000	-0.000	-0.002	-0.000	-0.000	-0.002	-0.000	-0.000	-0.002
	(-0.09)	(-0.08)	(-1.38)	(-0.33)	(-0.32)	(-1.54)	(-0.29)	(-0.27)	(-1.13)
Board Independence	0.005	0.005	0.010	0.004	0.004	0.009	0.003	0.004	0.009
L (Dere herer Gran)	(0.65)	(0.73)	(0.94)	(0.49)	(0.57)	(0.78)	(0.41)	(0.49)	(0.85)
Ln (Product Seg)	0.005***	0.005***	0.002	0.004***	0.005***	0.002	0.004***	0.005***	0.002
In some Deducine Floo	(2.91)	(2.95)	(0.72)	(2.89)	(2.92)	(0.73)	(2.90)	(2.94)	(0.71)
Income Reducing Flag	(5.01)	(4.00)	(2.56)	(4.08)	(4.07)	(2.52)	(4.07)	(4.05)	(2.54)
Appual Stock Turnovar	(3.01)	(4.99)	0.060***	(4.90)	(4.97)	(3.32)	(4.97)	(4.93)	(3.34)
Annual Stock Turnover	(5.14)	(4.94)	(7.20)	(5.16)	(4.95)	(7, 22)	(5.16)	(4.95)	(0.009^{+++})
In (Distinct Analyst)	0.008***	0.008***	0.005	0.008***	0.008***	0.005	0.008***	0.008***	0.005
Lii (Distilict Allaiyst)	(3.44)	(3 36)	(1.35)	(3.38)	(3.30)	(1.35)	(3.34)	(3.26)	(1.35)
Annual Mkt Adi	(3.44)	(3.30)	(1.55)	(3.30)	(3.50)	(1.55)	(3.34)	(3.20)	(1.55)
Stock Return	-0.015***	-0.015***	-0.014***	-0.015***	-0.015***	-0.013***	-0.015***	-0.015***	-0.013***
Storie rectain	(-5.96)	(-5.81)	(-4.74)	(-5.93)	(-5.77)	(-4.69)	(-5.94)	(-5.78)	(-4.69)
Ln (Sale)	0.007***	0.007***	0.003	0.007***	0.007***	0.003	0.007***	0.007***	0.003
	(5.83)	(5.82)	(0.81)	(5.75)	(5.74)	(0.77)	(5.71)	(5.70)	(0.73)
Leverage (ltd/at)	-0.002	-0.001	-0.016	-0.002	-0.001	-0.016	-0.002	-0.001	-0.016
-	(-0.29)	(-0.11)	(-1.40)	(-0.34)	(-0.16)	(-1.39)	(-0.30)	(-0.12)	(-1.41)
Cash (che/at)	0.026***	0.025***	-0.005	0.025***	0.025***	-0.005	0.025***	0.025***	-0.005
	(3.01)	(2.98)	(-0.35)	(2.97)	(2.94)	(-0.35)	(2.96)	(2.94)	(-0.33)
Tobin Q (t-1)	0.002**	0.002**	0.001	0.002**	0.002**	0.001	0.002*	0.002**	0.001
	(2.02)	(2.10)	(0.50)	(1.97)	(2.05)	(0.51)	(1.95)	(2.03)	(0.51)
Discretionary Accrual	0.031**	0.033**	-0.011	0.031**	0.033**	-0.010	0.031**	0.033**	-0.010
	(2.07)	(2.20)	(-0.59)	(2.10)	(2.22)	(-0.58)	(2.11)	(2.23)	(-0.58)
Ln (Firm Age)	0.001	0.001	0.007	0.001	0.000	0.007	0.001	0.000	0.005
L	(0.36)	(0.28)	(0.69)	(0.30)	(0.21)	(0.67)	(0.31)	(0.23)	(0.53)
Incorporated in Delaware	-0.004	-0.004	-0.026*	-0.004	-0.004	-0.026*	-0.004	-0.004	-0.025*
In (SEC Distance)	(-1.50)	(-1.51)	(-1.85)	(-1.28)	(-1.29)	(-1.84)	(-1.27)	(-1.28)	(-1.85)
Lii (SEC Distance)	(1.76)	(1.70)	0.000	(1.77)	(1.72)	0.000	(1.74)	(1.68)	0.000
In (Total Lobby)	0.002*	0.002*	0.001	(-1.77)	(-1.72) 0.002*	0.001	(-1.74)	0.002*	0.001
Ell (Total E000y)	(1.71)	(1.75)	(1.01)	(1.73)	(1.76)	(0.97)	(1.74)	(1.77)	(0.98)
Fortune 500	0.012**	0.013**	0.016	0.012**	0.012**	0.015	0.013**	0.013**	0.016
	(2.08)	(2.09)	(1.22)	(2.00)	(2.01)	(1.20)	(2.09)	(2.10)	(1.28)
FE	Ind. / Yr.	Ind # Yr	Firm / Yr	Ind. / Yr.	Ind # Yr	Firm / Yr	Ind. / Yr.	Ind # Yr	Firm / Yr
SEC Chairman/									
Director FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
HQ FE	Y	Y	Ν	Y	Y	Ν	Y	Y	Ν
N	30218	30218	29671	30218	30218	29671	30218	30218	29671
adj. / Pseudo R-sq	0.031	0.033	0.069	0.031	0.033	0.069	0.031	0.033	0.069

Table 3 (Continued)

	Panel	B: SEC Invest	tigation on Fe	male Director	s Interacting v	vith Restateme	ent		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Female Board Ratio	-0.015	-0.015	-0.027					· /	·
	(-1.40)	(-1.39)	(-1.39)						
At Least 30% Female				-0.010**	-0.010**	-0.008			
				(-2.19)	(-2.22)	(-1.23)			
At Least 3 Feamle							-0.002	-0.002	-0.020***
							(-0.36)	(-0.37)	(-2.77)
Restatement Disclosure	0.144***	0.141***	0.150***	0.115***	0.112***	0.118***	0.116***	0.114***	0.119***
Fomalo Poord Datio v	(8.92)	(8./5)	(8.91)	(10.22)	(10.00)	(10.05)	(10.38)	(10.15)	(10.17)
Restatement Disclosure	-0.286***	-0 280***	-0 308***						
	(-2.94)	(-2.88)	(-3.05)						
At Least 30% Female x	()	(,	(2102)						
Restatement Disclosure				-0.020	-0.017	-0.014			
				(-0.45)	(-0.38)	(-0.30)			
At Least 3 Female x							0.050	0.050	0.040
Restatement Disclosure							-0.053	-0.050	-0.040
Decad Cine	0.000	0.000	0.000	0.000	0.000	0.000	(-1.24)	(-1.14)	(-0.90)
Doard Size	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	-0.000
Board Independence	0.002	0.002	0.008	0.001	0.002	0.007	0.01	0.001	0.00
Board independence	(0.35)	(0.38)	(0.84)	(0.22)	(0.25)	(0.75)	(0.16)	(0.20)	(0.83)
Ln (Product Seg)	0.003**	0.003**	-0.001	0.003**	0.003**	-0.001	0.003**	0.003**	-0.001
En (Froduct Seg)	(2.43)	(2.47)	(-0.28)	(2.41)	(2.45)	(-0.26)	(2, 42)	(2.47)	(-0.24)
Income Reducing Flag	0.013***	0.014***	0.004	0.013***	0.014***	0.004	0.013***	0.014***	0.005
0.0	(3.59)	(3.74)	(0.72)	(3.66)	(3.81)	(0.83)	(3.66)	(3.81)	(0.86)
Annual Stock Turnover	0.037***	0.038***	0.057***	0.037***	0.038***	0.056***	0.037***	0.038***	0.057***
	(6.07)	(6.05)	(7.34)	(6.02)	(5.99)	(7.29)	(6.01)	(5.99)	(7.33)
Ln (Distinct Analyst)	0.007***	0.007***	0.005*	0.007***	0.007***	0.005*	0.007***	0.007***	0.005*
	(3.38)	(3.27)	(1.79)	(3.34)	(3.22)	(1.79)	(3.33)	(3.21)	(1.78)
Annual Mkt. Adj.									
Stock Return	-0.014***	-0.014***	-0.013***	-0.014***	-0.014***	-0.013***	-0.014***	-0.014***	-0.013***
	(-6.50)	(-6.25)	(-5.62)	(-6.51)	(-6.26)	(-5.62)	(-6.49)	(-6.24)	(-5.60)
Ln (Sale)	0.008***	0.008***	0.006*	0.008***	0.008***	0.006*	0.008***	0.008***	0.005*
T (1, 1/ .)	(6.97)	(6.99)	(1.94)	(6.93)	(6.94)	(1.91)	(6.87)	(6.89)	(1.89)
Leverage (Itd/at)	0.004	0.005	-0.003	0.004	0.005	-0.003	0.004	0.005	-0.003
Cash (aba/at)	(0.69)	(0.//)	(-0.34)	(0.67)	(0.75)	(-0.32)	(0./1)	(0.79)	(-0.34)
Cash (che/at)	(2.74)	(2.78)	(1.06)	(2.77)	(2.81)	(1.00)	(2.74)	(2.77)	(1.00)
Tobin $O(t-1)$	(2.74)	(2.78)	0.001	(2.77)	(2.01)	(1.09)	(2.74)	(2.77)	(1.09)
100m Q (t-1)	(3.55)	(3.69)	(1.09)	(3.51)	(3.65)	(1.12)	(3.52)	(3.66)	(1, 13)
Discretionary Accrual	0.040***	0.042***	0.003	0.041***	0.044***	0.004	0.041***	0.044***	0.003
Districtionary Treeraal	(3.01)	(3.18)	(0.17)	(3.11)	(3.27)	(0.23)	(3.12)	(3.28)	(0.22)
Ln (Firm Age)	0.002	0.001	0.013*	0.001	0.001	0.013*	0.001	0.001	0.011
	(0.86)	(0.76)	(1.71)	(0.82)	(0.71)	(1.70)	(0.80)	(0.70)	(1.51)
Incorporated in Delaware	-0.003	-0.003	0.011	-0.003	-0.003	0.011	-0.003	-0.003	0.011
•	(-1.01)	(-1.06)	(1.24)	(-1.07)	(-1.12)	(1.15)	(-1.06)	(-1.11)	(1.16)
Ln (SEC Distance)	-0.002**	-0.002**	0.000	-0.002**	-0.002**	0.000	-0.002**	-0.002*	0.000
	(-2.03)	(-1.96)	(.)	(-2.06)	(-2.00)	(.)	(-2.02)	(-1.95)	(.)
Ln (Total Lobby)	0.001	0.001	0.000	0.001	0.001	0.000	0.001	0.001	0.000
	(1.38)	(1.36)	(0.05)	(1.39)	(1.37)	(0.07)	(1.38)	(1.37)	(0.07)
Fortune 500	0.014***	0.014***	0.016*	0.014***	0.014***	0.017*	0.014***	0.014***	0.017*
	(2.71)	(2.70)	(1.68)	(2.66)	(2.65)	(1.70)	(2.71)	(2.70)	(1.80)
FE	Ind. / Yr.	Ind # Yr	Firm / Yr	Ind. / Yr.	Ind # Yr	Firm / Yr	Ind. / Yr.	Ind # Yr	Firm / Yr
SEC Chairman/			==		==				
Director FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
HQ FE	Y	Y	Ν	Y	Y	Ν	Y	Y	Ν
N	40307	40307	39862	40307	40307	39862	40307	40307	39862
adj. / Pseudo R-sq	0.040	0.041	0.063	0.039	0.040	0.063	0.039	0.040	0.063

Table 3 (Continued)

Panel C: SEC Investigation on Female Directors Interacting with High Stock Turnover									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Female Board Ratio	-0.005	-0.004	-0.021	. ,	5 <i>2</i>	. ,		<u>, , , , , , , , , , , , , , , , , , , </u>	. /
	(-0.40)	(-0.34)	(-1.02)						
At Least 30% Female				-0.001	-0.001	0.002			
				(-0.14)	(-0.14)	(0.20)			
At Least 3 Female							0.010	0.010	-0.012
							(1.24)	(1.25)	(-1.31)
Above Median Stock									
Turnover	0.020***	0.020***	0.021***	0.018***	0.018***	0.019***	0.018***	0.019***	0.020***
	(6.81)	(6.88)	(5.67)	(7.15)	(7.20)	(6.49)	(7.67)	(7.71)	(6.60)
Female Board Ratio x									
Above Median Stock	0.024*	0.025*	0.020						
Turnover	(1.72)	(1.78)	(0.85)						
At Loget 30% Female v	(-1.75)	(-1.78)	(-0.85)						
Above Median Stock									
Turnover				-0.019**	-0.019**	-0.019*			
				(-2.12)	(-2.11)	(-1.77)			
At Least 3 Female x				()	()	()			
Above Median Stock									
Turnover							-0.026***	-0.026***	-0.017
							(-2.63)	(-2.62)	(-1.52)
Board Size	0.000	0.000	-0.000	0.000	-0.000	-0.001	0.000	0.000	-0.000
	(0.30)	(0.18)	(-0.44)	(0.11)	(-0.01)	(-0.52)	(0.18)	(0.06)	(-0.16)
Board Independence	0.005	0.006	0.009	0.005	0.005	0.008	0.004	0.004	0.009
	(0.83)	(0.86)	(0.94)	(0.71)	(0.75)	(0.86)	(0.64)	(0.67)	(0.94)
Ln (Product Seg)	0.003**	0.003**	-0.000	0.003**	0.003**	-0.000	0.003**	0.003**	-0.000
	(2.47)	(2.52)	(-0.20)	(2.46)	(2.51)	(-0.19)	(2.46)	(2.51)	(-0.15)
Income Reducing Flag	0.023***	0.023***	0.017***	0.023***	0.023***	0.017***	0.023***	0.023***	0.017***
	(6.11)	(6.19)	(3.11)	(6.10)	(6.18)	(3.11)	(6.10)	(6.18)	(3.15)
Ln (Distinct Analyst)	0.008***	0.007***	0.007**	0.007***	0.007***	0.007**	0.007***	0.007***	0.007**
	(3.89)	(3.77)	(2.30)	(3.87)	(3.75)	(2.30)	(3.80)	(3.67)	(2.29)
Annual Mkt. Adj.									
Stock Return	-0.014***	-0.014***	-0.013***	-0.014***	-0.014***	-0.013***	-0.014***	-0.014***	-0.013***
	(-6.67)	(-6.44)	(-5.69)	(-6.63)	(-6.41)	(-5.67)	(-6.66)	(-6.43)	(-5.67)
Ln (Sale)	0.008***	0.009***	0.006**	0.008***	0.008^{***}	0.006**	0.008***	0.008***	0.006**
	(7.40)	(7.41)	(2.05)	(7.32)	(7.33)	(2.02)	(7.25)	(7.25)	(2.00)
Leverage (ltd/at)	0.006	0.006	-0.004	0.005	0.006	-0.004	0.005	0.006	-0.005
	(0.93)	(1.01)	(-0.45)	(0.86)	(0.93)	(-0.46)	(0.89)	(0.96)	(-0.47)
Cash (che/at)	0.023***	0.023***	0.015	0.023***	0.023***	0.015	0.022***	0.023***	0.015
	(3.01)	(3.04)	(1.25)	(2.98)	(3.01)	(1.26)	(2.93)	(2.96)	(1.25)
Tobin Q (t-1)	0.003***	0.003***	0.002	0.003***	0.003***	0.002	0.003***	0.003***	0.002
	(3.39)	(3.54)	(1.24)	(3.36)	(3.51)	(1.24)	(3.32)	(3.47)	(1.23)
Discretionary Accrual	0.043***	0.046***	0.007	0.043***	0.046***	0.007	0.043***	0.046***	0.007
	(3.24)	(3.42)	(0.43)	(3.29)	(3.47)	(0.45)	(3.27)	(3.45)	(0.43)
Ln (Firm Age)	0.001	0.001	0.012	0.001	0.001	0.012	0.001	0.001	0.010
	(0.47)	(0.37)	(1.58)	(0.44)	(0.34)	(1.57)	(0.43)	(0.32)	(1.38)
Incorporated in Delaware	-0.004	-0.004*	-0.001	-0.004	-0.004*	-0.001	-0.004	-0.004*	-0.001
	(-1.63)	(-1.67)	(-0.09)	(-1.64)	(-1.68)	(-0.12)	(-1.61)	(-1.65)	(-0.09)
Ln (SEC Distance)	-0.002**	-0.002*	0.000	-0.002**	-0.002*	0.000	-0.002**	-0.002*	0.000
. *	(-1.97)	(-1.91)	(.)	(-2.00)	(-1.94)	(.)	(-1.97)	(-1.91)	(.)
Ln (Total Lobby)	0.001	0.001	0.000	0.001	0.001	0.000	0.001	0.001	0.000
	(1.52)	(1.51)	(0.24)	(1.50)	(1.48)	(0.21)	(1.51)	(1.50)	(0.21)
Fortune 500	0.013**	0.013**	0.016	0.013**	0.013**	0.015	0.013**	0.013**	0.016*
	(2.54)	(2.53)	(1.62)	(2.52)	(2.52)	(1.61)	(2.55)	(2.54)	(1.68)
	(/	()	· · · · · · · · · · · · · · · · · · ·	(/	(/	((/	()	()
FE	Ind. / Yr.	Ind # Yr	Firm / Yr	Ind. / Yr.	Ind # Yr	Firm / Yr	Ind. / Yr.	Ind # Yr	Firm / Yr
SEC Chairman/									
Director FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
HQ FE	Y	Y	Ν	Y	Y	Ν	Y	Y	Ν
N	40307	40307	39862	40307	40307	39862	40307	40307	39862
adi / Pseudo R-sa	0.031	0.033	0.054	0.031	0.033	0.054	0.031	0.033	0.054

Table 3 (Continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Formala Roard Patio	0.022	0.022	0.008	()	(5)	(0)	(/)	(0)	())
remate Board Ratio	-0.025	-0.025	-0.008						
A. L	(-1.51)	(-1.46)	(-0.27)						
At Least 30% Female	-0.013*	-0.013*	0.006						
	(-1./8)	(-1./6)	(0.52)						
At Least 3 Female	-0.009	-0.008	-0.019						
	(-1.08)	(-1.02)	(-1.59)						
Whistleblower	0.110	0.102	0.098	0.101**	0.097**	0.041	0.120**	0.116**	0.059
	(1.45)	(1.33)	(1.12)	(2.13)	(2.04)	(0.79)	(2.35)	(2.26)	(1.05)
Female Board Ratio x	0.1.17	0.100	0.505						
Whistleblower	-0.147	-0.102	-0.507						
A 4 1	(-0.35)	(-0.24)	(-1.02)						
At Least 30% Female x				0 170***	0 1 47***	0.240***			
whistieblower				-0.1/0***	-0.14/***	-0.240***			
				(-3.43)	(-2.92)	(-4.54)			
At Least 5 Female x							0 105***	0 192***	0.216*
whisteblower							-0.193	-0.183	-0.210
Doord Size	0.001	0.001	0.000	0.001	0.001*	0.002	(-3./3)	(-3.47)	(-3.05
Board Size	-0.001	-0.001	-0.002	-0.001	-0.001*	-0.002	-0.001	-0.001	-0.00
D 1 T. 1 1	(-1.37)	(-1.50)	(-1.08)	(-1.58)	(-1./0)	(-1.08)	(-1.33)	(-1.4/)	(-0.88
Board Independence	0.004	0.003	0.019	0.003	0.002	0.018	0.003	0.002	0.019
	(0.40)	(0.36)	(1.31)	(0.30)	(0.27)	(1.29)	(0.31)	(0.28)	(1.33
Ln (Product Seg)	0.004**	0.004**	0.001	0.004^{**}	0.004**	0.001	0.004**	0.004**	0.001
	(2.41)	(2.45)	(0.35)	(2.40)	(2.44)	(0.34)	(2.42)	(2.45)	(0.37)
Income Reducing Flag	0.026***	0.027***	0.013*	0.026***	0.027***	0.013*	0.026***	0.027***	0.013
	(5.71)	(5.78)	(1.73)	(5.69)	(5.76)	(1.71)	(5.69)	(5.76)	(1.71)
Annual Stock Turnover	0.045***	0.047***	0.065***	0.045***	0.047***	0.065***	0.045***	0.047***	0.066*
	(5.63)	(5.72)	(5.94)	(5.66)	(5.75)	(5.92)	(5.62)	(5.71)	(5.96
Ln (Distinct Analyst)	0.008***	0.007**	0.010**	0.008***	0.007**	0.010**	0.007***	0.007**	0.010*
	(2.79)	(2.51)	(2.39)	(2.75)	(2.47)	(2.38)	(2.73)	(2.46)	(2.37)
Annual Mkt. Adj.									
Stock Return	-0.016***	-0.015***	-0.016***	-0.016***	-0.015***	-0.016***	-0.016***	-0.015***	-0.016*
	(-5.81)	(-5.57)	(-5.53)	(-5.80)	(-5.56)	(-5.53)	(-5.80)	(-5.55)	(-5.53
Ln (Sale)	0.010***	0.011***	0.005	0.010***	0.011***	0.005	0.010***	0.011***	0.005
	(6.39)	(6.57)	(1.18)	(6.32)	(6.50)	(1.18)	(6.32)	(6.50)	(1.17
Leverage (ltd/at)	0.008	0.008	0.006	0.008	0.008	0.006	0.008	0.008	0.006
	(0.95)	(0.91)	(0.38)	(0.94)	(0.90)	(0.39)	(0.94)	(0.90)	(0.38
Cash (che/at)	0.026***	0.027***	0.023	0.026***	0.026***	0.023	0.026***	0.026***	0.023
	(2.63)	(2.66)	(1.36)	(2.61)	(2.65)	(1.36)	(2.59)	(2.62)	(1.35
Tobin $O(t-1)$	0.004***	0.005***	0.001	0.004***	0.005***	0.001	0.004***	0.005***	0.001
· ···· · · · · · · · · · · · · · · · ·	(3 34)	(3 56)	(0.44)	(3.29)	(3 51)	(0.45)	(3 32)	(3.54)	(0.45
Discretionary Accrual	0.050***	0.05/***	-0.001	0.050***	0.05/***	-0.001	0.050***	0.054***	_0.00
2.500000001 / 1001uu	(2.83)	(3.02)	(_0.05)	(2.85)	(3.03)	(_0.04)	(2.86)	(3.03)	-0.00
In (Firm Age)	0.002	0.002	0.029***	(2.03)	0.002	0.029***	0.002	0.002	0.027*
En (1 IIII Age)	(1.25)	(1.24)	(2.04)	(1.22)	(1.22)	(2.04)	(1.22)	(1.22)	1.03/*
Incorporated in Delevier-	(1.55)	(1.24)	(2.94)	(1.33)	(1.22)	(2.94)	(1.33)	(1.22)	(2.89
meorporated in Delaware	-0.004	-0.004	0.011	-0.004	-0.004	0.011	-0.004	-0.004	0.011
L = (SEC Distance)	(-1.19)	(-1.23)	(0.99)	(-1.19)	(-1.23)	(0.99)	(-1.19)	(-1.22)	(0.99
Lii (SEC Distance)	-0.002	-0.002	2.089	-0.002	-0.002	2.102	-0.002	-0.002	2.160
	(-1.31)	(-1.24)	(0.53)	(-1.32)	(-1.26)	(0.53)	(-1.30)	(-1.23)	(0.55
Ln (Total Lobby)	0.001	0.001	-0.001	0.001	0.001	-0.001	0.001	0.001	-0.00
	(0.57)	(0.60)	(-0.66)	(0.57)	(0.60)	(-0.68)	(0.56)	(0.59)	(-0.69
Fortune 500	0.013**	0.013*	0.031**	0.013*	0.013*	0.030**	0.013**	0.013*	0.030*
	(1.97)	(1.90)	(2.14)	(1.96)	(1.89)	(2.14)	(1.97)	(1.90)	(2.15)
FE	Ind. / Yr.	Ind # Yr	Firm / Yr	Ind. / Yr.	Ind # Yr	Firm / Yr	Ind. / Yr.	Ind # Yr	Firm /
SEC Chairman/		_	_	_	_	_	_		
Director FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
HQ FE	Y	Y	Ν	Y	Y	Ν	Y	Y	Ν
N	25733	25733	25382	25733	25733	25382	25733	25733	25382
adi / Decudo D. ca	0.033	0.035	0.045	0.033	0.035	0.046	0.033	0.035	0.046

Table 4 SEC Self-Motivation: SEC Leadership's Attention

This table reports the results of SEC leadership's attention under the assumption of limited resources as another self-motivation of SEC's investigation decisions. We use web-scrapped SEC speeches to calculate the percentage of speeches mentioning gender issues as a proxy of SEC leadership's attention. We focus the three months before and the three months after the fiscal period end. The dependent variable is SEC investigation. The tests are conditional on the red flag events and includes only firm years with 10K-related comment letters, class action lawsuits, and income-reducing restatement. *. **, and *** denote significance at the 10 %, 5% and 1% level, respectively.

	(1)	(2)	(3)
Female Board Ratio	-0.043	-0.038	-0.081*
	(-1.57)	(-1.35)	(-1.68)
SEC leader Speech Mention Female (3,3)	0.208*	0.193	0.224
	(1.77)	(1.57)	(1.63)
Female Board Ratio x SEC leader Speech Mention Female Pct. (3,3)	-0.547*	-0.723**	-0.550
	(-1.73)	(-2.11)	(-1.54)
Board Size	-0.001	-0.001	-0.000
Decid Indexed down	(-0.60)	(-0./2)	(-0.13)
Board independence	(1.68)	0.022^{*}	(1.28)
In (Product Seg)	(1.08)	(1.00)	(1.58)
	(2, 33)	(2, 52)	(0.32)
Income Reducing Flag	0.036***	0.037***	0.032***
	(4.80)	(4 77)	(2.87)
Annual Stock Turnover	0.048***	0.049***	0.103***
	(3.55)	(3.56)	(4.88)
Ln (Distinct Analyst)	0.011**	0.011**	0.008
	(2.55)	(2.44)	(1.08)
Annual Mkt. Adj. Stock Return	-0.031***	-0.031***	-0.034***
	(-6.76)	(-6.70)	(-6.01)
Ln (Sale)	0.012***	0.012***	-0.000
	(5.68)	(5.64)	(-0.00)
Leverage (ltd/at)	0.009	0.013	-0.015
	(0.77)	(1.11)	(-0.63)
Cash (che/at)	0.051***	0.050***	0.043
	(3.26)	(3.16)	(1.47)
Tobin Q (t-1)	0.004**	0.004**	0.001
	(2.23)	(2.43)	(0.48)
Discretionary Accrual	0.039	0.039	0.022
	(1.53)	(1.53)	(0.64)
Ln (Firm Age)	0.003	0.002	0.059***
In componented in Deleviero	(0.91)	(0.65)	(3.38)
incorporated in Delaware	-0.007	-0.007	-0.015
In (SEC Distance)	(-1.38)	(-1.37)	(-0.68)
Lin (SEC Distance)	-0.004**	-0.004*	0.000
L.n. (Total Lobby)	0.001	0.002	-0.002
	(1.03)	(1.04)	(-1.05)
Fortune 500	0.010	0.010	0.008
	(1.13)	(1.19)	(0.42)
	()	()	()
FE	Ind. / Yr.	Ind # Yr	Firm / Yr
SEC Chairman/Director FE	Y	Y	Y
HQ FE	Y	Y	Ν
Ν	14308	14307	13383
adj. / Pseudo R-sq	0.052	0.055	0.055

Table 5 Homophily Between SEC Regional Directors and Gender Diverse Boards

This table reports the results of interaction between the firm board gender diversity and the SEC's female regional directors. The response variable is SEC investigation. The tests are conditional on the red flag events and includes only firm years with 10K-related comment letters, class action lawsuits, and income-reducing restatement. *. **, and *** denote significance at the 10 %, 5% and 1% level, respectively.

	(1)	(2)	(3)
Female Board Ratio	-0.037	-0.034	-0.087*
	(-1.38)	(-1.27)	(-1.76)
Female Board Ratio x Female SEC Director	-0.074**	-0.087**	-0.047
	(-1.99)	(-2.32)	(-0.82)
Board Size	-0.001	-0.001	-0.000
	(-0.55)	(-0.67)	(-0.12)
Board Independence	0.022*	0.022*	0.031
	(1.69)	(1.67)	(1.37)
Ln (Product Seg)	0.006**	0.007**	0.002
	(2.33)	(2.52)	(0.32)
Income Reducing Flag	0.037***	0.037***	0.032***
	(4.85)	(4.81)	(2.89)
Annual Stock Turnover	0.048***	0.048***	0.102***
	(3.53)	(3.54)	(4.84)
Ln (Distinct Analyst)	0.011**	0.011**	0.008
	(2.57)	(2.46)	(1.10)
Annual Mkt. Adj. Stock Return	-0.031***	-0.031***	-0.033***
	(-6.73)	(-6.67)	(-5.98)
Ln (Sale)	0.012***	0.012***	0.000
	(5.67)	(5.63)	(0.05)
Leverage (ltd/at)	0.009	0.013	-0.015
	(0.79)	(1.13)	(-0.63)
Cash (che/at)	0.052***	0.051***	0.043
	(3.31)	(3.22)	(1.47)
Tobin Q (t-1)	0.004**	0.004**	0.001
	(2.22)	(2.42)	(0.48)
Discretionary Accrual	0.038	0.039	0.021
	(1.51)	(1.52)	(0.61)
Ln (Firm Age)	0.003	0.002	0.061***
	(0.92)	(0.66)	(3.47)
Incorporated in Delaware	-0.007	-0.007	-0.014
	(-1.37)	(-1.37)	(-0.66)
Ln (SEC Distance)	-0.004*	-0.004*	0.000
	(-1.71)	(-1.67)	(.)
Ln (Total Lobby)	0.001	0.002	-0.002
	(1.03)	(1.05)	(-1.04)
Fortune 500	0.010	0.010	0.008
	(1.13)	(1.19)	(0.41)
FE	Ind. / Yr.	Ind # Yr	Firm / Yr
SEC Chairman/Director FE	Y	Y	Y
HOFE	Ŷ	Ŷ	N
N	14308	14307	13383
adj. / Pseudo R-sq	0.052	0.055	0.055

Table 6 Improvement of Monitoring: Investigation Duration

This table below reports the time span of the SEC investigation duration regressed on the board gender diversity and the control variables. The investigation duration, given the SEC's incentive to tackle the corporate fraud, implies the complexity and the severity of the potential fraudulent conduct. The tests are restricted to the observations with corresponding events. *. **, and *** denote significance at the 10 %, 5% and 1% level, respectively.

	Investigation	n Duration
	(1)	(2)
Female Board Ratio	-1.096*	-1.112*
	(-1.79)	(-1.67)
Board Size	0.086***	0.084**
	(2.79)	(2.44)
Board Independence	0.298	0.472
	(0.88)	(1.29)
Ln (Product Seg)	-0.198***	-0.173**
	(-3.01)	(-2.40)
Income Reducing Flag	0.216	0.237
	(1.51)	(1.53)
Annual Stock Turnover	0.244	0.166
	(0.70)	(0.44)
Ln (Distinct Analyst)	-0.192*	-0.160
	(-1.69)	(-1.28)
Annual Mkt. Adj. Stock Return	-0.124	-0.123
	(-1.16)	(-1.01)
Ln (Sale)	0.109**	0.105**
	(2.35)	(2.14)
Leverage (ltd/at)	0.528*	0.396
	(1.80)	(1.25)
Cash (che/at)	-0.194	-0.215
	(-0.64)	(-0.67)
Tobin Q (t-1)	-0.008	-0.006
	(-0.21)	(-0.13)
Discretionary Accrual	0.195	0.291
	(0.31)	(0.43)
Ln (Firm Age)	-0.102	-0.116
	(-1.18)	(-1.24)
Incorporated in Delaware	-0.038	-0.080
	(-0.37)	(-0.70)
Ln (SEC Distance)	-0.050*	-0.050*
	(-1.86)	(-1.68)
Ln (Total Lobby)	0.058**	0.053**
	(2.40)	(2.06)
Fortune 500	-0.186	-0.192
	(-1.19)	(-1.14)
FE	Ind. / Yr.	Ind.#Yr.
SEC Chairman/Director FE	Y	Y
Error Cluster	Firm	Firm
Ν	1675	1649
adj. R-sq	0.145	0.109

Table 7 Improvement of Monitoring: Statement Errors and Reactions

Table 7 reports the result of the restatement changes. We focus on income-reducing restatement only. Column 1-2 reports for the time between restatement and the erroneous fiscal period regressed on board diversity. We measure the time in years. Column 3-4 reports the tests for the sizes of restatement. *. **, and *** denote significance at the 10 %, 5% and 1% level, respectively.

	Restate Speed		Ln (-Cumulative Earning Change)		
	(1)	(2)	(3)	(4)	
Female Board Ratio	-0.778**	-0.867**	-0.551	-0.439	
	(-2.34)	(-2.53)	(-1.48)	(-1.17)	
Board Size	-0.011	-0.006	0.040*	0.047*	
	(-0.58)	(-0.33)	(1.79)	(1.95)	
Board Independence	-0.182	-0.155	0.266	0.267	
-	(-1.23)	(-1.04)	(1.23)	(1.19)	
Ln (Product Seg)	0.017	-0.003	-0.076*	-0.080*	
	(0.51)	(-0.10)	(-1.77)	(-1.78)	
Annual Stock Turnover	0.401**	0.273	0.228	0.230	
	(2.39)	(1.62)	(0.98)	(0.90)	
Ln (Distinct Analyst)	-0.037	-0.004	0.359***	0.335***	
- /	(-0.75)	(-0.08)	(4.81)	(4.22)	
Annual Mkt. Adj. Stock Return	0.060*	0.062*	-0.189**	-0.203**	
-	(1.70)	(1.73)	(-2.46)	(-2.42)	
Ln (Sale)	0.029	0.025	0.432***	0.420***	
	(1.10)	(0.94)	(11.36)	(10.24)	
Leverage (ltd/at)	-0.331**	-0.319**	0.619***	0.567**	
	(-2.15)	(-2.06)	(2.84)	(2.45)	
Cash (che/at)	-0.337**	-0.301*	0.145	0.127	
	(-2.04)	(-1.80)	(0.55)	(0.46)	
Tobin Q (t-1)	0.046**	0.036	0.061*	0.052	
	(2.16)	(1.63)	(1.67)	(1.38)	
Discretionary Accrual	-0.355	-0.431	0.482	0.529	
-	(-1.34)	(-1.58)	(0.97)	(1.03)	
Ln (Firm Age)	-0.019	0.003	0.091	0.101	
	(-0.30)	(0.05)	(1.51)	(1.58)	
Incorporated in Delaware	-0.084	-0.065	0.051	0.066	
	(-1.21)	(-0.92)	(0.67)	(0.80)	
Ln (SEC Distance)	-0.021	-0.026	0.033	0.043	
	(-1.11)	(-1.44)	(1.34)	(1.55)	
Ln (Total Lobby)	0.010	0.008	-0.007	-0.002	
	(0.59)	(0.48)	(-0.34)	(-0.10)	
Fortune 500	-0.120	-0.114	0.431***	0.460***	
	(-1.00)	(-0.98)	(3.20)	(3.04)	
FE	Ind. / Yr.	Ind.#Yr.	Ind. / Yr.	Ind.#Yr.	
SEC Chairman/Director FE	Y	Y	Y	Y	
Error Cluster	Firm	Firm	Firm	Firm	
Ν	4814	4814	1738	1721	
adi, R-so	0.262	0.277	0.417	0.420	

Table 8 Improvement of Monitoring: Class Actions

We report the class action tests below for the monitoring results. We test class action lawsuit duration, likelihood of settlement, and likelihood of receiving court dismissal on board gender diversity. The lawsuit duration is measured in years. Settlement and dismissal are dummy variables. The tests are conducted in OLS regressions. *. **, and *** denote significance at the 10 %, 5% and 1% level, respectively.

	Length	Settlement	Dismissal
	(1)	(2)	(3)
Female Board Ratio	-0.996**	-0.122	0.237*
	(-2.09)	(-0.96)	(1.73)
Board Size	0.035	-0.009	0.007
	(1.38)	(-1.35)	(0.99)
Board Independence	-0.125	-0.141**	0.017
-	(-0.54)	(-2.10)	(0.25)
Ln (Product Seg)	-0.019	-0.008	0.007
	(-0.21)	(-0.32)	(0.27)
Annual Mkt. Adj. Stock Return	0.108**	-0.022	-0.004
·	(2.52)	(-1.52)	(-0.24)
Ln (Sale)	0.055	-0.009	0.004
	(1.50)	(-0.84)	(0.33)
Leverage (ltd/at)	-0.434*	0.049	-0.082
	(-1.93)	(0.79)	(-1.28)
Cash (che/at)	0.352	-0.065	0.135*
	(1.43)	(-0.92)	(1.72)
Tobin Q (t-1)	-0.048***	-0.008	0.001
	(-3.26)	(-1.46)	(0.27)
Discretionary Accrual	-0.690**	0.030	0.010
	(-2.23)	(0.32)	(0.10)
Ln (Firm Age)	0.162**	0.002	-0.005
	(2.25)	(0.08)	(-0.26)
Incorporated in Delaware	-0.003	0.053*	-0.058**
	(-0.03)	(1.92)	(-2.07)
Ln (SEC Distance)	-0.046	0.005	-0.008
	(-1.55)	(0.69)	(-0.91)
Ln (Total Lobby)	0.002	0.002	-0.005
	(0.09)	(0.25)	(-0.75)
Fortune 500	-0.229	0.013	0.021
	(-1.25)	(0.29)	(0.45)
FE	Ind. / Yr.	Ind. / Yr.	Ind. / Yr.
Error Cluster	Firm	Firm	Firm
Ν	2708	2708	2708
adi. R-sq	0.163	0.187	0.095

Table 9 SEC's AAER Enforcement Actions

Investigation is a forestep of AAER enforcement actions and introduces statistical selection bias for AAER enforcement. If the board gender diversity alters the SEC investigation, the AAER enforcement will get direct influence due to the selection effect. We report the tests on AAER enforcement actions against board gender diversity below. *. ***, and *** denote significance at the 10 %, 5% and 1% level, respectively.

	(1)	(2)
Female Board Ratio	-0.030***	-0.029***
	(-3.20)	(-3.16)
Board Size	0.000	0.000
	(0.67)	(0.69)
Board Independence	-0.009*	-0.009
	(-1.75)	(-1.61)
Ln (Product Seg)	0.000	0.000
	(0.31)	(0.23)
Income Reducing Flag	0.050***	0.050***
	(9.13)	(9.08)
Annual Stock Turnover	0.011**	0.009*
	(2.26)	(1.80)
Ln (Distinct Analyst)	0.001	0.002
	(0.76)	(0.77)
Annual Mkt. Adj. Stock Return	-0.002	-0.001
	(-1.49)	(-1.23)
Ln (Sale)	0.001	0.002
	(1.48)	(1.47)
Leverage (ltd/at)	0.004	0.005
	(0.88)	(1.03)
Cash (che/at)	-0.003	-0.004
	(-0.41)	(-0.59)
Tobin Q (t-1)	0.000	0.000
	(0.73)	(0.64)
Discretionary Accrual	0.020*	0.018*
	(1.89)	(1.66)
Ln (Firm Age)	-0.003*	-0.003*
	(-1.80)	(-1.67)
Incorporated in Delaware	-0.008***	-0.008***
	(-3.03)	(-2.97)
Ln (SEC Distance)	0.001	0.001
	(0.66)	(0.65)
Ln (Total Lobby)	0.000	0.000
	(0.03)	(0.07)
Fortune 500	0.003	0.003
	(0.93)	(0.86)
FE	Ind / Yr	Ind # Yr
SEC Chairman/Director FE	V	Y
HO FE	v V	Ŷ
Fror Cluster	Firm	Firm
N	40307	40307
adi / Deeudo P. sa	0.045	0.045
aaj. / Pseudo K-sq	0.045	0.045

Table A1 Gender Disparity and SEC Private Investigation: Full Sample Results

The table below reports the full sample main results. The setup is the same as Table 2. Instead of conditional sample, we report for the full sample. We regress the SEC private investigation, a dummy variable, on female board director percentage and control variables in panel A. We also provide results with a dummy on whether female board members are 30% or more and whether a firm has at least three female board members in Panels B and C. We control for different fixed effect combinations in column 1-3. *. **, and *** denote significance at the 10 %, 5% and 1% level, respectively.

Panel A: Female %							
	(1)	(2)	(3)				
Female Board Ratio	-0.022**	-0.022**	-0.033*				
	(-2.06)	(-2.03)	(-1.72)				
Board Size	0.000	0.000	-0.000				
	(0.23)	(0.11)	(-0.37)				
Board Independence	0.003	0.004	0.009				
	(0.52)	(0.54)	(0.94)				
Ln (Product Seg)	0.003**	0.003**	-0.001				
	(2.46)	(2.51)	(-0.25)				
Income Reducing Flag	0.023***	0.023***	0.017***				
	(6.12)	(6.21)	(3.13)				
Annual Stock Turnover	0.037***	0.038***	0.056***				
	(5.98)	(6.01)	(7.19)				
Ln (Distinct Analyst)	0.007***	0.007***	0.005				
	(3.24)	(3.09)	(1.64)				
Annual Mkt. Adj. Stock Return	-0.015***	-0.014***	-0.014***				
	(-6.76)	(-6.54)	(-5.92)				
Ln (Sale)	0.008***	0.008***	0.005*				
	(7.25)	(7.27)	(1.89)				
Leverage (ltd/at)	0.006	0.006	-0.004				
	(0.93)	(1.00)	(-0.43)				
Cash (che/at)	0.023***	0.023***	0.014				
	(2.99)	(3.02)	(1.17)				
Tobin Q (t-1)	0.003***	0.003***	0.001				
	(3.36)	(3.53)	(0.96)				
Discretionary Accrual	0.043***	0.046***	0.005				
	(3.25)	(3.44)	(0.34)				
Ln (Firm Age)	0.001	0.001	0.013*				
	(0.56)	(0.45)	(1.75)				
Incorporated in Delaware	-0.004*	-0.004*	-0.001				
	(-1.71)	(-1.75)	(-0.10)				
Ln (SEC Distance)	-0.002**	-0.002**	0.000				
	(-2.03)	(-1.97)	(.)				
Ln (Total Lobby)	0.001	0.001	0.000				
	(1.46)	(1.44)	(0.18)				
Fortune 500	0.013***	0.013**	0.016				
	(2.58)	(2.58)	(1.64)				
FE	Ind. / Yr.	Ind # Yr	Firm / Yr				
SEC Chairman/Director FE	Y	Y	Y				
HQ FE	Y	Y	Ν				
Error Cluster	Firm	Firm	Firm				
Ν	40307	40307	39862				
adj. / Pseudo R-sq	0.031	0.032	0.053				

Table A1 (Continued)

Panel B: 30% or More Female Directors						
	(1)	(2)	(3)			
At Least 30% Female Board Ratio	-0.011**	-0.011**	-0.008			
	(-2.19)	(-2.19)	(-1.21)			
Board Size	0.000	-0.000	-0.001			
	(0.01)	(-0.11)	(-0.48)			
Board Independence	0.002	0.003	0.008			
	(0.38)	(0.40)	(0.85)			
Ln (Product Seg)	0.003**	0.003**	-0.001			
	(2.46)	(2.51)	(-0.23)			
Income Reducing Flag	0.023***	0.023***	0.017***			
	(6.11)	(6.19)	(3.13)			
Annual Stock Turnover	0.037***	0.038***	0.056***			
	(6.00)	(6.02)	(7.17)			
Ln (Distinct Analyst)	0.007***	0.006***	0.005			
	(3.18)	(3.04)	(1.64)			
Annual Mkt. Adj. Stock Return	-0.015***	-0.014***	-0.014***			
	(-6.76)	(-6.54)	(-5.91)			
Ln (Sale)	0.008***	0.008***	0.005*			
	(7.16)	(7.18)	(1.86)			
Leverage (ltd/at)	0.005	0.006	-0.004			
	(0.90)	(0.97)	(-0.42)			
Cash (che/at)	0.023***	0.023***	0.014			
	(2.96)	(2.99)	(1.17)			
Tobin Q (t-1)	0.003***	0.003***	0.001			
	(3.31)	(3.48)	(0.96)			
Discretionary Accrual	0.043***	0.046***	0.006			
	(3.27)	(3.46)	(0.36)			
Ln (Firm Age)	0.001	0.001	0.013*			
	(0.51)	(0.41)	(1.75)			
Incorporated in Delaware	-0.004*	-0.004*	-0.001			
	(-1.70)	(-1.75)	(-0.13)			
Ln (SEC Distance)	-0.002**	-0.002**	0.000			
	(-2.05)	(-1.99)	(.)			
Ln (Total Lobby)	0.001	0.001	0.000			
	(1.45)	(1.44)	(0.17)			
Fortune 500	0.013**	0.013**	0.016			
	(2.56)	(2.55)	(1.63)			
FE	Ind. / Yr.	Ind # Yr	Firm / Yr			
SEC Chairman/Director FE	Y	Y	Y			
HO FE	Ŷ	Ŷ	N			
Error Cluster	Firm	Firm	Firm			
Ν	40307	40307	39862			
adj. / Pseudo R-sq	0.031	0.032	0.053			

Table A1 (Continued)

Panel C: At Least Three Female Directors						
	(1)	(2)	(3)			
At Least 3 Female Board Members	-0.004	-0.004	-0.021***			
	(-0.73)	(-0.71)	(-2.93)			
Board Size	0.000	0.000	-0.000			
	(0.13)	(0.01)	(-0.09)			
Board Independence	0.002	0.002	0.009			
•	(0.33)	(0.35)	(0.93)			
Ln (Product Seg)	0.003**	0.003**	-0.000			
	(2.46)	(2.51)	(-0.21)			
Income Reducing Flag	0.023***	0.023***	0.017***			
	(6.11)	(6.19)	(3.16)			
Annual Stock Turnover	0.037***	0.038***	0.056***			
	(5.99)	(6.01)	(7.21)			
Ln (Distinct Analyst)	0.007***	0.006***	0.005			
• •	(3.18)	(3.03)	(1.64)			
Annual Mkt. Adj. Stock Return	-0.015***	-0.014***	-0.014***			
5	(-6.75)	(-6.53)	(-5.90)			
Ln (Sale)	0.008***	0.008***	0.005*			
	(7.12)	(7.14)	(1.83)			
Leverage (ltd/at)	0.006	0.006	-0.004			
	(0.93)	(1.00)	(-0.43)			
Cash (che/at)	0.022***	0.023***	0.014			
	(2.94)	(2.97)	(1.18)			
Tobin O (t-1)	0.003***	0.003***	0.001			
	(3.32)	(3.48)	(0.96)			
Discretionary Accrual	0.043***	0.046***	0.005			
	(3.29)	(3.47)	(0.34)			
Ln (Firm Age)	0.001	0.001	0.012			
	(0.52)	(0.41)	(1.54)			
Incorporated in Delaware	-0.004*	-0.004*	-0.001			
	(-1.70)	(-1.74)	(-0.11)			
Ln (SEC Distance)	-0.002**	-0.002*	0.000			
	(-2.01)	(-1.95)	(.)			
Ln (Total Lobby)	0.001	0.001	0.000			
	(1.46)	(1.44)	(0.16)			
Fortune 500	0.013***	0.014***	0.016*			
	(2.60)	(2.59)	(1.71)			
FE	Ind. / Yr.	Ind # Yr	Firm / Yr			
SEC Chairman/Director FE	Y	Y	Y			
HQ FE	Y	Y	Ν			
Error Cluster	Firm	Firm	Firm			
Ν	40307	40307	39862			
adj. / Pseudo R-sq	0.031	0.032	0.053			

Table A2 Nonlinear Influence of Female Board Representation on SEC Investigation

In this table, we report the driving percentage of the board gender diversity. We create indicators that indicates whether a firm has more than 5% - 50% female directors increasing by 5%. Each column represents a separate regression. Panel A report for the full sample and Panel B reports for the sample including only firms with 10K-related comment letters, class action lawsuits, and income-reducing restatements. The row of % Firms reports the percentage of firms satisfying the gender diversity indicator. We fit the full models for all the tests including control variables. *. **, and *** denote significance at the 10 %, 5% and 1% level, respectively.

	Panel A: Full Sample Results									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
At Least 5%	-0.005** (-2.13)									
At Least 10%		-0.002 (-1.13)								
At Least 15%			0.000 (0.07)							
At Least 20%				-0.003 (-0.99)						
At Least 25%				· · /	-0.004 (-1.11)					
At Least 30%					()	-0.011** (-2.19)				
At Least 35%						(2.17)	-0.019^{***}			
At Least 40%							(3.02)	-0.018*** (-2.76)		
At Least 45%								(2.70)	-0.004	
At Least 50%									(-0.20)	-0.013 (-1.48)
% Firms	57.83%	47.84%	26.83%	14.22%	9.92%	4.40%	1.85%	1.10%	0.31%	0.25%
Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
FE SEC Chairman/	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.
Director FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ν	40307	40307	40307	40307	40307	40307	40307	40307	40307	40307
adj. R-sq	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031

Table A2 (Continued)

Panel B: Conditional Sample Results										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
At Least 5%	-0.009**									
	(-2.01)									
At Least 10%		-0.008*								
		(-1.73)								
At Least 15%			-0.008							
			(-1.61)							
At Least 20%				-0.015**						
				(-2.46)						
At Least 25%					-0.016**					
					(-2.27)					
At Least 30%						-0.026***				
						(-3.06)				
At Least 35%						. ,	-0.035***			
							(-2.96)			
At Least 40%							. ,	-0.047***		
								(-4.59)		
At Least 45%								(-0.023	
									(-0.95)	
At Least 50%									(-0.038***
										(-3.08)
% Firms	61.40%	50.72%	29.34%	15.42%	10.76%	4.79%	2.03%	1.15%	0.31%	0.24%
Control	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
FE	Ind. /Yr.									
SEC Chairman/										
Director FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ν	14308	14308	14308	14308	14308	14308	14308	14308	14308	14308
adj. R-sq	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051

Table A3 Board Gender Diversity and Financial Quality

This table reports the relation between financial quality and board gender diversity. The response variables include the common financial abnormalities as indicated in the column headers. We also include the public attention measured with analyst coverage. *. **, and *** denote significance at the 10 %, 5% and 1% level, respectively.

	(1)	(2)	(3)	(4)	(5)
	Benford Score	Comment Letter	SCA	Income Reducing	Stock Turnover
Female Board Ratio	-0.639	-0.027	-0.010	0.045	-0.012
	(-1.21)	(-0.93)	(-0.49)	(1.35)	(-0.64)
Board Size	-0.036	0.007***	0.001	-0.006***	-0.008***
	(-1.26)	(4.38)	(1.06)	(-3.32)	(-7.00)
Board Independence	-1.015***	-0.010	0.009	-0.034**	0.119***
	(-3.54)	(-0.54)	(0.89)	(-2.06)	(10.56)
Ln (Product Seg)	-0.158***	0.001	0.004**	-0.002	-0.002
	(-2.61)	(0.25)	(1.97)	(-0.60)	(-0.77)
Income Reducing Flag	-0.024	-0.042***	0.065***		0.020***
	(-0.19)	(-3.87)	(7.79)		(4.66)
Annual Stock Turnover	-0.803***	0.078***	0.127***	0.073***	
	(-2.81)	(5.00)	(12.61)	(4.65)	
Ln (Distinct Analyst)	0.290***	0.025***	0.002	-0.005	0.142***
	(2.85)	(4.56)	(0.58)	(-0.85)	(44.69)
Annual Mkt. Adj. Stock Return	0.108	0.018***	-0.037***	-0.021***	0.030***
	(1.40)	(3.02)	(-11.25)	(-6.15)	(16.02)
Ln (Sale)	-1.210***	0.030***	0.004*	0.004	0.012***
	(-23.15)	(11.44)	(1.94)	(1.29)	(6.34)
Leverage (ltd/at)	-1.123***	0.037**	-0.007	-0.026*	0.064***
	(-3.84)	(2.40)	(-0.62)	(-1.67)	(6.44)
Cash (che/at)	4.795***	-0.007	-0.020	-0.068***	0.123***
	(13.67)	(-0.41)	(-1.44)	(-3.65)	(10.93)
Tobin Q (t-1)	0.151***	0.006***	0.010***	-0.007***	0.008***
	(3.83)	(3.05)	(5.60)	(-3.68)	(6.50)
Discretionary Accrual	1.675***	0.057	0.084***	0.052**	0.206***
	(2.97)	(1.64)	(3.67)	(2.03)	(13.59)
Ln (Firm Age)	-0.277***	-0.012**	-0.015***	0.040***	-0.018***
	(-3.31)	(-2.55)	(-4.74)	(7.42)	(-5.90)
Incorporated in Delaware	-0.269**	-0.018***	-0.003	0.216***	0.014***
	(-2.30)	(-2.78)	(-0.59)	(23.08)	(3.15)
Ln (SEC Distance)	-0.033	-0.008***	-0.004**	0.001	0.000
	(-0.62)	(-2.83)	(-2.24)	(0.41)	(0.04)
Ln (Total Lobby)	-0.009	-0.001	0.001	-0.001	0.003***
	(-0.31)	(-0.43)	(0.99)	(-0.77)	(2.73)
Fortune 500	0.923***	0.015	0.008	-0.059***	-0.048***
	(4.95)	(1.15)	(0.93)	(-4.73)	(-6.56)
FE	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.	Ind. /Yr.
Ν	40302	30218	30218	40307	40307
adj. R-sq	0.192	0.065	0.053	0.158	0.386