

Managing reputation: Evidence from biographies of corporate directors

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Abstract

We examine how corporate directors manage reputation through disclosure choices and the consequences of these choices. We focus on disclosure of other directorships in director biographies in proxy statements filed with the SEC. We find that a directorship is more likely to be omitted when the associated firm experienced an adverse event such as accounting restatements, securities litigation, or bankruptcy during the director's tenure. Withholding such information is associated with a more favorable stock price reaction to a director's appointment and loss of fewer subsequent directorships. Non-disclosure of directorships is significantly reduced following changes to SEC rules, with the greatest change being for adverse-event directorships. These findings suggest that reputation concerns of corporate directors lead to strategic disclosure choices that have real consequences in capital and labor markets.

Keywords: Director monitoring; reputational concerns; strategic disclosure

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We examine how corporate directors manage reputation through disclosure choices and the consequences of these choices. We focus on disclosure of other directorships in director biographies in proxy statements filed with the SEC. We find that a directorship is more likely to be omitted when the associated firm experienced an adverse event such as accounting restatements, securities litigation, or bankruptcy during the director's tenure. Withholding such information is associated with a more favorable stock price reaction to a director's appointment and loss of fewer subsequent directorships. Non-disclosure of directorships is significantly reduced following changes to SEC rules, with the greatest change being for adverse-event directorships. These findings suggest that reputation concerns of corporate directors lead to strategic disclosure choices that have real consequences in capital and labor markets.

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1. Introduction

An extensive literature in accounting examines factors that drive disclosure decisions and the effects of disclosure on capital markets (Healy and Palepu 2001). While some studies examine disclosures pertaining to contracts between individuals and firms (e.g., managerial compensation), relatively little research has examined disclosure of information about individuals. The information one decides to show (or not show) affects the perception of the individual with possible capital and labor market consequences. In this study, we provide the first empirical evidence on such disclosures and their economic consequences.

We use biographies of corporate directors in firm proxy statements to examine what drives disclosure choices about individuals. Directors have incentives to build their reputations as expert advisors, since their effectiveness is not easily observable to market participants. Much of the prior literature has focused on showing how performance affects reputation (Coles and Hoi, 2003; Yermack, 2004) and provides support for the hypothesis that reputation is an important mechanism for motivating corporate directors (Fama and Jensen 1983). We focus on another channel through which directors protect their reputations: selective disclosure in biographies. Specifically, we examine strategic disclosure choices about directors' experience on other boards in biographies. Also, we provide new evidence on how such disclosure choices affect the perceptions of market participants.

Director biographies, which are a required element of corporate filings in the United

States, are intended to provide investors with information needed to assess the experience of directors and evaluate whether each director or nominee is adequately qualified to monitor and advise the firm (Securities and Exchange Commission, 2009). However, key elements of director biographies (e.g., past directorships) were relatively unregulated before 2010, giving directors and firms substantial discretion regarding the information disclosed. We provide evidence suggesting that reputation concerns of corporate directors lead to strategic disclosure choices. As choices to disclose or withhold information are presumably made to affect the inferences of market participants, we expect such disclosure choices to have capital and labor market consequences.

A biography in a proxy statement summarizes a director's past experience in a succinct form.¹ Given the extensive business experience of the typical corporate director, there are trade-offs inherent in selecting what is disclosed in a brief biography. In making such trade-offs, it seems plausible that directors highlight aspects of experience (e.g., financial expertise) that are considered to be most relevant to investors. However, it also seems possible that information may be omitted if it reflects unfavorably on a director's skills.²

Our sample includes 159,657 biographies of 12,895 directors collected from DEF 14A and DEF 14C filings lodged with the United States Securities and Exchange Commission (SEC).

¹ The mean (median) number of words in a director biography in our data set is 150 (136) words. Biographies include information on the skills and qualification of the individuals, such as educational background, past managerial experience, and board positions. An example biography is provided in Appendix 1.

² For ease of exposition, here (and throughout the paper) we assume that directors as opposed to firms are making such decisions.

For each biography, we determine whether or not the individual disclosed a directorship she currently holds or held in the past.³

We find evidence of strategic disclosure in director biographies. In particular, we find that a director is less likely to disclose a past or current directorship on another board if the other firm experienced an adverse event such as an accounting restatement, securities litigation, or bankruptcy during the director's tenure.⁴ For example, prior to increased regulation by the SEC in 2010, the probability of non-disclosure of directorships at firms that filed for bankruptcy during the director's tenure is 35% compared to 21% for those held at firm with no such adverse events. Also, the variation in disclosure behavior is explained more by director effects than firm effects. While disclosure choices reflect decisions made both by directors and firms, the finding that disclosure behavior is driven by the directors than the firm is consistent with the incentives of the various parties involved in the drafting process of the biographies.⁵

In 2010, the SEC introduced new rules on the disclosure of director biographies.⁶ Prior to this amendment, which affected SEC filings made after March 1, 2010, directors and nominees were only required to disclose directorships held at the time of filing. Disclosure of past directorships was voluntary and we find that 59% of past directorships were not disclosed prior

³ A comprehensive list of directorships held by individuals is obtained from Equilar, which provides data on directors for essentially all public firms in the US.

⁴ The adverse events we focus on are from drawn prior literature on director reputation. Studies find that directors suffer reputational damages following litigation (Brochet and Srinivasan 2014); restatements (Srinivasan 2005), and bankruptcies (Agarwal and Chen 2011).

⁵ See section 4.6 for details of the drafting process and discussion of the empirical test mentioned here.

⁶ See <https://www.sec.gov/rules/final/2009/33-9089.pdf>.

to the SEC's mandate. As the new rule expanded disclosure of directorships to include all directorships held at any time in the previous five years, disclosure of those directorships moved from a voluntary regime to a mandatory one. We find that the non-disclosure rates of past directorships dropped to approximately 27% following the new SEC rules. More importantly, the decline in the non-disclosure of directorships was greater for directorships at firms that experienced an adverse event than for those at firms with no adverse events, suggesting that the new regulations were effective in curbing strategic disclosure.

Incentives for individuals to engage in strategic disclosure choices regarding other directorships can come from several sources. Having served on boards of problematic companies can affect investors' assessment of one's effectiveness as a board member (Fich and Shivdasani, 2007). This may have capital market consequences (DeFond et al., 2005). It may also have consequences for a director's career, e.g., limiting employment opportunities, causing loss of directorships, and creating broader reputational costs (Grundfest, 1993; Desai et al., 2006; Jiang, Wan and Zhao, 2015; Masulis and Mobbs, 2015). Nonetheless, in principle, it is possible for investors to identify all directorships held by individual directors from other sources.⁷ Thus, in the absence of existence of frictions (e.g., search costs), non-disclosure of directorships may have no material impact on the capital and labor markets.

We examine whether non-disclosure is associated with real consequences in the capital and labor markets. We first examine capital market consequences. We find that the average stock

⁷ For example, investors could comb through the SEC filings of all public firms in the US and compile a list of directors.

market reaction to director appointments is 1.4 percent higher when directors do not disclose adverse-event directorships than when they do disclose such directorships. This is consistent with investors viewing appointment of a director associated with an adverse-event firm as negatively affecting firm value and with the existence of frictions such as search costs preventing investors from obtaining this information from elsewhere.

We also find that disclosure choices have labor market consequences for directors. Directors who withhold information about adverse-event directorships lose fewer current directorships in the two years after the filing relative to the directors who disclose, but no impact on a director's ability to obtain new board seats, presumably because the extensive vetting process uncovers all directorships regardless of disclosure choices in proxy statements. We find no evidence that non-disclosure leads to different shareholder voting outcomes. Neither shareholder votes nor voting recommendations of the leading proxy advisors are associated with disclosure choices regarding adverse directorships.

This paper makes several contributions to the literature. First, we contribute to research on reputation management by corporate directors. Several studies have shown that directors' reputations are tarnished by a variety of events such as supporting managerial actions that are against shareholder interests (Harford, 2003) or serving on boards of firms subject to financial fraud lawsuits (Fich and Shivdasani, 2007), accounting restatements (Srinivasan, 2005), or financial distress (Gilson, 1990). Given the evidence on the costs to directors of being associated with troubled firms, it seems natural to ask whether these directors engage in reputation

management by withholding negative information. Our setting provides evidence of such behavior using biographies of corporate directors.

Second, we contribute to the extensive literature on corporate disclosure by providing evidence in a setting where we can observe withholding of information directly. In most research settings, a researcher is, like market participants, unable to discern whether information is being withheld. One can only infer withholding of information based on the absence of disclosure when firms have greater incentives not to disclose (Aboody and Kasnik, 2000; Nagar et al., 2003). Relatively few papers have examined settings where greater insight into the underlying disclosure choices exist. For example, Berger and Hann (2007) use the retroactive application of new segment reporting rules caused by the move to SFAS No. 131 to draw stronger inferences about disclosure incentives than can be drawn in more conventional settings. Our setting facilitates stronger inferences regarding consequences of disclosure, as our direct measure of disclosure allows us to compare outcomes when information is disclosed with cases when it is withheld.

Third, we contribute to the literature on corporate governance by examining the role of disclosure related to corporate directors. Our evidence is consistent with the existence of frictions such as search costs preventing investors from obtaining information from elsewhere. The existence of such frictions provides a rationale for the SEC's tightening of disclosure requirements for filings made on or after March 1, 2010. We also provide evidence on the effect of director background on market perceptions of firm value (DeFond et al., 2005). Specifically,

we provide evidence consistent with investors viewing appointment of a director associated with an adverse-event firm (e.g., one subject to accounting restatements, bankruptcy, or shareholder litigation) as negatively affecting firm value.

Finally, we contribute to the recent literature that relies on biographies to infer the backgrounds and networks of individuals (Benmelech and Frydman, 2015; Bird et al., 2015; deHaan et al., 2015). Much of this disclosure relied on these papers is voluntary and often filtered by firms and individuals. To the extent that reporting biases in biographies like those we document holds in other settings, researchers may need to allow for the possibility that affiliations with failed companies or other unfavorable information may be omitted.

2. Hypothesis development and institutional setting

2.1 Reputation of corporate directors

An extensive literature explores the hypothesis of Fama and Jensen (1983, p. 315) “that outside directors have incentives to develop reputations as experts in decision control” and that “the value of their human capital depends primarily on their performance as internal decision managers in other organizations.” Most studies have focused on examining how good performance and decision-making of directors help build their reputations. Studies have shown that favorable career outcomes follow “good” performance, such as rescission of takeover defenses (Coles and Hoi 2003), high takeover premiums (Harford 2003), and general firm

performance (Yermack, 2004). Similarly, other studies show how poor performance such as shareholder lawsuits (Fich and Shivdasani, 2007) and proxy contest nominations (Fos and Tsoutsoura, 2014) lead to fewer opportunities in the director labor market.

More recently, papers have examined actions that directors take to shape their reputations. For example, Jiang et al. (2015) examine the reputational effects of director dissension in board decisions and find evidence that dissension is a credible signal of alignment with shareholder interests. There are also more opportunistic ways in which directors can manage their reputations. For example, Fahlenbrach et al. (2014) argue that directors, in order to protect their reputations, resign from boards when they anticipate that the firm will perform poorly in the future. Our paper contributes to this literature by providing the first evidence on another channel through which directors shape their reputation, namely director biographies, an important channel for investors to access information about the skills and qualifications of directors (SEC, 2009).

In the context of director biographies, we focus on the implications of non-disclosure of current or past directorships. We predict that directors will strategically withhold information about adverse-event directorships. We also hypothesize that selective disclosure of past experience will lead to real economic outcomes.⁸ Having served on boards of firms which

⁸ Studies in labor economics suggest that disclosures in resumes, which are relatively succinct biographies of prospective employees, have real labor market consequences. For example, resumes with traditional names are substantially more likely to lead to job interviews than distinctively minority-sounding names (Jowell and Prescott-Clarke, 1970; Hubbick and Carter, 1980; Brown and Gay, 1985; Bertrand and Mullainathan, 2003; Kang et al., 2016). Other studies find that job resumes elicit different response rates based on the applicant's ethnic group

suffered adverse events may convey negative information about the ability of the individual to advise and monitor the company. Hence, disclosure of past experience at problematic companies may lead to lower chances of obtaining future directorships. While in principle it is straightforward for an investor to identify all the directorships held by an individual, search costs may prevent market participants from obtaining information about undisclosed directorships from other sources. However, to the extent that professional search firms, shareholder proxy advisors, and others provide investors with such information, it is possible that selective disclosure has no real market consequences.

2.2 Strategic disclosure

An extensive literature spanning economics, finance, and accounting research has examined discretionary disclosure from a theoretical perspective. Much of this literature has focused on truthful, voluntary disclosures of information related to firm value. A key result in this literature is that under a fairly general set of assumptions, non-disclosure will lead to adverse inferences, resulting in an “unraveling” in which all types disclose (Grossman and Hart, 1980; Milgrom, 1981). Subsequent work identifies circumstances in which this unraveling will not occur, such as when there are proprietary costs associated with disclosure (Verrecchia 1983) or uncertainty about whether the disclosing manager possesses the information to disclose (Dye 1985; Jung and Kwon 1987). In the standard paradigm, firms choose whether to disclose and,

(Oreopoulos, 2011), educational backgrounds (Deming et al., 2016), and gender (Arceo-Gomez, 2014). Our paper relates to these studies which show that information in personal resumes affects labor market outcomes.

upon observing disclosure (or the failure to disclose), market participants update their beliefs accordingly.

A number of features distinguish our setting from other settings examined in prior research. First, disclosure in our setting is arguably close to costless. A director presumably knows what boards she has served on and can provide that information to the disclosing firm without significant effort. Thus it is not clear that notions of cost of the act of disclosure itself is a significant motivating factor in our setting.⁹

Second, it is possible to determine “truth” with seemingly modest cost. By using comprehensive data on public company directorships from Equilar, we are able to identify cases where directors are withholding information. In general, researchers studying disclosures such as corporate earnings forecasts do not have access to such data. As market participants collectively have access to the same or similar information that we have, non-disclosure of directorships is presumably based on the existence of frictions that prevent market participants from obtaining information about undisclosed directorships from other sources in a timely fashion.¹⁰ To the extent that search costs prevent investors from obtaining full information from other sources, investors will rationally view the omission of a firm from director’s biography as implying that either that this director does not (or did not) serve on the board of that firm or, that the director

⁹ It is difficult to see significant “proprietary costs” from disclosure (i.e., costs other than those related to adverse capital market inferences) in our setting.

¹⁰ Whether such frictions exist is not essential, so long as the disclosing party believes such frictions exist. The existence of such frictions is arguably evidenced by the fact that the SEC now requires firms to disclose many of the directorships that directors were not disclosing.

does (or did) serve on that board, but chose not to disclose this information.¹¹

Thus this setting is analogous to that examined in Dye (1985) and Jung and Kwon (1988) and the inability of investors to distinguish between these two possible explanations for non-disclosure could support a partial disclosure equilibrium like that in those papers.¹² In such equilibria, directors with worse news would be less inclined to disclose. We posit that a plausible case of bad news in our setting is directorships held on other boards where adverse events were experienced during a given director's tenure.

Prior literature suggests several candidate adverse events about which directors might like to withhold information due to the reputational costs they pose to directors. Srinivasan (2005) finds that directors of firms where a restatement occurs experience significant labor market penalties, including loss of directorships at the restating firm and on other boards. He finds that this loss is greater for more severe restatements. Chakravarthy et al. (2014) argue that the drop in firm value following a restatement reflects an impairment of a firm's reputational capital. Given such consequences, directors will have incentives not to disclose directorships at

¹¹ Other disclosures that have been the subject of recent regulatory attention plausibly support similar inferences when non-disclosure occurs. For example, in the United States, Accounting Standard Codification (ASC) 850 regulates disclosure of related party transactions. If such disclosures were voluntary, non-disclosure could be interpreted as either the withholding of information about related party transactions (presumably bad news) or the absence of such transactions (presumably good news). Similarly, in 2006, the SEC adopted rules requiring more complete disclosure of executive retirement benefits. Prior to 2006, such earnings "were required to be disclosed only to the extent of any portion that was 'above-market or preferential' ... [permitting] companies to avoid disclosure of substantial compensation." In this case, non-disclosure could be interpreted as the existence of compensation arrangements that firms did not wish to disclose, or the absence of such arrangements.

¹² Note that the sheer number of firms for which a typical director has never been associated with implies that the director never having served on the board of any given other firm is overwhelmingly the most likely explanation for any given non-disclosure.

firms that reported restatements during their tenure.

Studies also find that directors suffer reputational damage following class action lawsuits. Fich and Shivdasani (2007) find that following a lawsuit in firms where they are directors, directors experience a subsequent decline in other board seats. Similarly, Brochet and Srinivasan (2014) document a higher likelihood of removal from current board seats following a lawsuit. Thus, if a firm experienced a lawsuit during a director's tenure, this may increase the likelihood of non-disclosure of such directorships in the directors' biographies.

Bankruptcy is another natural candidate. Agarwal and Chen (2011) suggest that directors who stay with a firm that goes bankrupt are more likely to be named as defendants in subsequent class action lawsuits compared to those who have already left. Gilson (1990) finds that directors who have served on boards of companies that experience financial distress have fewer subsequent board seats. Such career consequences may be severe enough that individuals decide to resign from boards in anticipation of adverse events (Fahlenbrach et al., 2014). Given the evidence of significant reputational and career consequences associated with having served on boards of bankrupt companies, we expect non-disclosure to be greater for firms that filed for bankruptcy.¹³

While these adverse events may lead to less disclosure of directorships held at such firms,

¹³ Other adverse events may also lead to strategic disclosure behavior, but these have received less attention in prior research presumably because they are less severe (e.g., losses relative to bankruptcy) or require the researcher to specify a threshold for poor performance (e.g., stock returns). In untabulated tests, we examine other less severe measures (e.g., reporting losses) and find evidence of strategic non-disclosure, albeit with smaller economic magnitude than documented in our main tests.

there may also be costs to withholding such information. While there is little evidence of direct costs imposed by the SEC for non-compliance, if non-disclosure is detected there might be reputational damage and increased regulatory oversight.¹⁴ Our prediction of less frequent disclosure held at adverse event firms assumes that the cost of withholding information does not exceed the benefits for some directors.¹⁵

2.3 Institutional setting

Firms are required to disclose backgrounds of their directors in proxy filings, otherwise known as Form DEF 14A. Form DEF 14A is filed with the SEC before firms send out proxy statements to shareholders and contains information related to topics such as the company's voting procedures, executive compensation, audit committee, and qualifications of director nominees.

The SEC set forth disclosure requirements relating to the background of key executives as early as 1973 following an investigation of the hot issues market in 1971. However, these

¹⁴ Anecdotal evidence of reputational cost can be found in SEC comment letters regarding director biographies. Ching Chuen Chan, a director of Harbin Electric, faced inquiries from the SEC regarding non-disclosure of his directorship with Rotoblock, Inc. in Harbin filings. In its response to the SEC, Harbin stated that Mr. Chan had apologized for the mistake and claimed that it had completely slipped his mind that he was a director of Rotoblock. Rotoblock had faced many issues, including resignation of the CEO, CFO, and auditor, and issuance of going concern opinion. In Feb 2011, shortly after the comment letter, Chan resigned from the board of Rotoblock.

¹⁵ To better understand these costs, we read through the SEC comment letters related to director biographies. We find only a handful of comment letters related to withholding information, most of which were issued after the mandatory regulation. The SEC issued comment letters more frequently after the new regulation (see section 2.3).

requirements were descriptive and limited only to company executives.¹⁶ Subsequently, the SEC added more substantive disclosure requirements related to the experience of both executives and directors.¹⁷ In 2003, in connection with Section 407 of the Sarbanes-Oxley Act, the SEC added disclosure requirements calling for firms to provide information about financial experts serving on their audit committees. However, other than information on the financial expertise, there was limited disclosure required about the qualifications of individual directors. Hence, directors and firms had substantial discretion in choosing what information was provided to investors.

On December 16, 2009, the SEC adopted amendments (effective from March 1, 2010) to Regulation S-K Item 401, which governs disclosures of director backgrounds. The amendments were part of a larger package of disclosure rules aimed at improving the overall quality of information in proxy statements. Under the new rules, a public company is required to provide investors with information on each nominee to its board of directors, including particular qualifications, attributes, skills or experience that led the board to conclude that the nominee should serve as a director. While the objective of the new rules was to help investors to better determine whether a director nominee was an appropriate choice for a particular company, critics raised concerns about its usefulness to investors, arguing that the information required to be

¹⁶ The requirements were adopted from the provisions in Schedule A of the Securities Act calling for a brief description of their business experience of the principal executive officers for the last five years. (SEC 2013, Report on Review of Disclosure Requirements in Regulation S-K, <https://www.sec.gov/news/studies/2013/reg-sk-disclosure-requirements-review.pdf>).

¹⁷ For example, in 1982, a requirement was added to disclose whether the executives and directors had been employed at an entity that is a parent, subsidiary or affiliate of the registrant. Also, in 1984, the SEC added a requirement to disclose any involvement in legal proceedings by the executives and directors.

disclosed was inherently subjective.

Nonetheless, there were specific areas where the new disclosure rules provided clear guidelines. Directors are required to disclose all directorships of public companies¹⁸ and registered investment companies that the director or nominee currently holds or held at any time in the previous five years.¹⁹ This is in contrast to the previous rules, which only required directors to disclose current directorships. The new rules applied to all director nominees and incumbent directors, including those not up for reelection in a particular year. The new requirement reflected the SEC's view of the importance of having information for the entire board to evaluate the quality of each individual. Along with the tightening of the rules, there was a large increase in SEC comment letters pertaining to director biographies, from fewer than 10 annual cases prior to 2009 to more than 40 cases in 2010, suggesting greater regulatory scrutiny and increased enforcement effort.

We expect these changes to have a number of effects on disclosure behavior. First, disclosure of many past directorships became mandatory rather than voluntary, we predict non-disclosure, both strategic and nonstrategic, to decrease on average. Second, we expect that the

¹⁸ Defined as any company with a class of securities registered pursuant to section 12 of the Securities Exchange Act of 1934 or required to file under Section 15(d) of the 1934 act. Foreign private issuers are exempt from Section 12(g) registration, so directorships of such issuers are not required to be disclosed.

¹⁹ The amendment also expanded disclosure obligations regarding legal proceedings against nominees; the length of time of disclosure was increased from five years to ten years and the kinds of legal proceeding requiring disclosure was expanded. The following additional legal proceedings were added as requiring disclosure: Any judicial or administrative proceedings resulting from involvement in mail or wire fraud or fraud in connection with any business entity; any judicial or administrative proceedings based on violations of federal or state securities, commodities, banking or insurance laws and regulations, or any settlement to such actions; and any disciplinary sanctions or orders imposed by a stock, commodities or derivatives exchange or other self-regulatory organization.

increased cost of non-disclosure will lead to a greater reduction in strategic non-disclosure.²⁰ We predict that there will be less withholding of information, especially for directorships held at adverse-event firms.

3. Data

We use Equilar as our source of canonical data on directorships at public US firms.²¹ Equilar provides us with data on directors for essentially all firms filing on Form 10-K and providing proxy disclosures from 2002 to 2013. Equilar also provides an individual identifier that allows us to map directors across firms and over time. Having identified directors, we then identified proxy filings associated with directors. With the assistance of a team of research assistants, we “tagged” director biographies by highlighting the relevant text of proxy filings for each director in place (see Appendix 1 for an example of this tagging).

Each observation in our sample represents a director who serves on the board of the disclosing firm and who currently sits, or has sat, on another board (the “other board”). As such, the sample is limited to directors who served on the board (currently or in the past) or at least one other public firm. Because we collect biographical data from proxy filings which generally relate to a given fiscal year, an observation in our sample is a director-disclosing firm-fiscal year-other board.

²⁰ This prediction is based on the notion that non-strategic disclosure is likely due to unintentional omissions, which are plausibly less affected by increased costs, while strategic disclosure by definition is driven by comparison of costs and benefits and thus is more sensitive to increases in costs.

²¹ Equilar is an executive compensation and corporate governance data firm.

To illustrate, one observation in our sample relates to Jan Murley, who was a director on the board of 1-800-FLOWERS, Inc. during the fiscal year ending on June 30, 2008.²² As such, Murley’s biography was disclosed on Form DEF 14A filed by 1-800-FLOWERS, Inc. on October 24, 2008. As Murley sat on three other boards at the time of, or prior to, the disclosure on October 24, 2008, we have three observations in our sample related to the combination {director: “Jan Murley”, disclosing firm: “1-800-FLOWERS, Inc.”, fiscal year: June 30, 2008}, including {director: “Jan Murley”, disclosing firm: “1-800-FLOWERS, Inc.”, fiscal year: June 30, 2008, other board: “Qwest Communications”}, {director: “Jan Murley”, disclosing firm: “1-800-FLOWERS, Inc.”, fiscal year: June 30, 2008, other board: “The Clorox Company”}, and {director: “Jan Murley”, disclosing firm: “1-800-FLOWERS, Inc.”, fiscal year: June 30, 2008, other board: “Boyd’s Collection”}.

As detailed in Table 1, we have 262,118 director-disclosing firm-fiscal year-other board observations. This represents 5,144 distinct disclosing firms, 30,800 distinct director-disclosing firm combinations, and 129,066 distinct disclosing firm-director-fiscal years. That we have 262,118 observations implies that the average number of reportable other boards is 2.03 (= 262,118/129,066).²³

For each of the 262,118 observations, we code an indicator variable *Non-Disclosure* equal to one if, for a given observation, the other board is not disclosed in the biography for the

²² Also see Appendix 1 where we use Jan Murley’s biography to illustrate the tagging process.

²³ Note that some of these other directorships will be past directorships not currently held by the director. However, because these are potentially reportable (and some of these are required to be reported after the change in SEC regulation in 2010), these appear in our sample.

director provided in the filing by the disclosing firm for the given fiscal year. Referring again to the example discussed in Appendix 1, for the observation {director: “Jan Murley”, disclosing firm: “1-800-FLOWERS, Inc.”, fiscal year: June 30, 2008, other board: “Qwest Communications”}, we would code *Non-Disclosure* as 1, because Qwest Communication is not disclosed as an other directorship for Jan Murley in 1-800-FLOWERS, Inc.’s filing.²⁴ For the observation {director: “Jan Murley”, disclosing firm: “1-800-FLOWERS, Inc.”, fiscal year: June 30, 2008, other board: “The Clorox Company”}, we would code *Non-Disclosure* as 0, because The Clorox Company is disclosed as an other directorship for Jan Murley in the proxy filing.

There are several challenges we encountered in our data collection process. First, there are cases where an other directorship is disclosed in the proxy filing, but is separate from the primary biographical information that we tagged. With a view to addressing these cases, we double-checked filings that had an unusually high level of apparent non-disclosure for all directors. In most cases, we were able to identify and tag separate information on other directorships.

Second, firms can change names. For example, Kraft Foods became Mondelez

²⁴ We note that in subsequent years (starting 2009), directorship held at Qwest communication was disclosed in Jan Murley’s bios. The omission was only for 2008, which happens to be the first year she was elected to the board of Qwest communication. It is possible that the non-disclosure in 2008 was due to a lag in the reporting process for newly elected directorships. Also, individuals may not disclose directorships in terminal years because he/she has already been scheduled to leave the board. For the first and last year of directorships, what drives non-disclosure may be reporting technicalities rather than strategic motives. To address such concern, we repeat our analyses after excluding both the first and the last year the individuals joined the board from the analysis (untabulated). We find qualitatively similar results.

International in October 2012.²⁵ As this firm is “MONDELEZ INTERNATIONAL, INC.” in Equilar, in the absence of corrective action, we would have false positive values of *Non-Disclosure* for all biographies filed before the name change. To address such issues, we use all names used in SEC filings for a given firm (i.e., CIK identifier) and in addition, as discussed in Appendix 1, we use screens to identify problematic firm names and tag confirmed alternative names as they appear in biographies. Once an alternative firm name is tagged in one director’s biography, it can be used to match firms in the biographies of other directors who have served on the same board.

Third, biographies may refer to firms by slightly different names. The firm names used in biographies are often more colloquial and, therefore, can differ from the official name of the company. For example, Jan Murley from the example above, used “The Clorox Company” when disclosing her directorship at Clorox Co. In contrast, Richard Carmona’s biography as disclosed in a filing for Taser International simply says “Dr. Carmona is a director of Clorox.” We accommodate such minor variations in the company names as used across biographies, for example, by allowing “Company” to be replaced by “Co” or omitted altogether.²⁶

Once we implemented approaches to address these issues, we assessed the accuracy of our classification by taking a random sample where *Non-Disclosure* equals one and manually examining proxy filings to confirm that the other directorship is actually not disclosed and that

²⁵ See <http://www.sec.gov/cgi-bin/browse-edgar?action=getcompany&CIK=0001103982>.

²⁶ Other similar issues we address through use of regular expression matching include: use of curly quotes or apostrophes; omission of spaces or use of multiple spaces; replacement of hyphens with spaces or vice versa; abbreviation of “holdings,” “corporation,” “incorporated,” and omission or inclusion of state of incorporation.

the data from Equilar correctly code the directors as being on the other board at, or prior to, the relevant filing by the disclosing (or non-disclosing) firm. Our final random sample comprises 300 observations of which 277 (92.3%) are correctly classified as non-disclosures. Of the remaining 23 observations, 10 are cases where issues exist in the tagged bio (i.e., the first class of issues identified above) and 13 are cases where the name of the other firm as disclosed differs from any of the names we have in our database for that firm (including variants based on regular expressions). We also examined a number of cases where *Non-Disclosure* equals zero, but found no cases of false negatives.²⁷ Given the scale and difficulty of the task, we view this misclassification rate as acceptable and see no reason why these errors would produce spurious results.²⁸

4. Research design and empirical tests

4.1 Descriptive statistics

Table 1 presents the construction of our sample. From the 262,118 observations discussed earlier, we require financial data from Compustat for both the disclosing firm and the other firm where a directorship was held. We also exclude individuals with missing demographic information (e.g., age and gender). These requirements yield a final sample of 218,795 director-

²⁷ This is to be expected given the nature of the task: it seems unlikely some resembling the name of a firm would be mentioned in a biography except when disclosing some relationship, such as a directorship, with that other firm.

²⁸ In some cases the first class of issues (i.e., are cases where an other directorship is disclosed in the proxy filing, but is separate from the primary biographical information that we tagged) seemed tantamount to non-disclosure, as it was difficult to locate the relevant information in the proxy statement.

disclosing firm-fiscal year-other board observations, of which 94,885 represent past directorships and 123,910 represent current directorships.

We present the frequency of non-disclosures of directorships. Table 2 Panel A reports the number of directorships that are disclosed and undisclosed for each type of adverse event. For example, other directorships held at firms that filed for bankruptcy during the director's tenure are undisclosed 1,424 times in director bios and disclosed 3,608 times. The frequency of non-disclosure for directorships held at firms which filed for bankruptcy is 28.30% ($= 1,424 \div (1,424 + 3,608)$). While the number of disclosed cases is greater than the undisclosed cases, the likelihood of non-disclosure is higher when we compare the likelihood of non-disclosure to directorships held at firms with no such adverse events, i.e., 19.85% ($= 34,561 \div (34,561 + 139,579)$). The difference between 28.30% and 19.85% suggests that directorships held at bankrupt firms are more likely to be undisclosed than directorships held at firms that experienced no adverse events.

Panel B reports the number of undisclosed directorships before and after the new SEC regulation. The figures, for example, show that prior to the SEC's amendments to disclosure regulation, 35.09% ($= 797 \div (797 + 1,474)$) of directorships held at firms that filed for bankruptcy during the director's tenure are undisclosed. In contrast, the frequency of non-disclosure for directorships held at firms with no adverse event is 20.90% ($= 20,146 \div (20,146 + 76,224)$). After the SEC's amendments to disclosure regulation, we find a significant drop in the likelihood of non-disclosure. The likelihood of non-disclosure of directorships held at bankrupt

firms dropped from 35.30% to 22.71%. We interpret this as the new regulation significantly curbing opportunistic reporting in director biographies.

4.2 Determinants of non-disclosure

We examine what factors determine non-disclosure of directorships. Our main interest is in testing whether directorships held at firms that experienced adverse events are less likely to be disclosed. To examine how various adverse events potentially affect the likelihood of a directorship disclosure, we estimate the following logistic regression:

$$\begin{aligned} \Pr(\text{Non-Disclosure}_{ijk}) = & \\ & \alpha_0 + \beta_1 \times \text{Adverse Event Indicator}_{ik} + \beta_{2-8} \times \text{Reporting Firm Controls}_i \\ & + \beta_{9-11} \times \text{Other Firm Controls}_k + \beta_{12-13} \times \text{Pair-Wise Control}_{jk} \\ & + \beta_{14-17} \times \text{Director Controls}_i + \text{IndustryFE}_j + \varepsilon_{ijk} \end{aligned} \quad (1)$$

The unit of observation is a director i of a reporting firm j during fiscal year t with a past or present directorship of firm k .²⁹ The outcome variable, $\text{Non-Disclosure}_{ijk}$, is defined as 1 if the firm where director i holds, or has held, a directorship at firm k (the “other firm” hereinafter) that is not disclosed in the biography of director i at the reporting firm j , and 0 otherwise.

The main independent variable of interest, *Adverse Event Indicator*, is an indicator variable equal to 1 if the firm where the other directorship is held experienced an adverse event during the director’s tenure. We examine three kinds of adverse events: SEC-investigated

²⁹ For brevity, we omit the time t subscript from our displayed regression equations.

restatements, securities litigation proceedings, and bankruptcies.³⁰ More precisely, in the case of the SEC-investigated restatement, the *Adverse Event Indicator* takes a value of 1 if the other firm disclosed a restatement which was followed or accompanied by an SEC investigation, and the director was on the board of the company at least part of the period to which the restatement pertains. The method for defining the adverse event in the case of a security litigation is analogous; the indicator variable is equal to 1 if the director was on the board of the other firm at least part of the period to which the litigation pertains, 0 otherwise. The definition in the case of a bankruptcy differs slightly as there is no clear period during which director might be considered responsible for the circumstances resulting in bankruptcy. As such, we define the adverse event as 1 if the director was on the board of the other firm at the time it filed for bankruptcy protection.³¹

Given the novelty of the setting, prior research offers little guidance regarding factors that may affect the disclosure of directorships. We include various characteristics of the reporting firm, the other firm, and director in our determinants model. For the reporting firm, we include book to market (*Book to Market_j*), leverage (*Leverage_j*), profitability (*ROA_j*), whether the reporting firm is audited by a big four auditor (*Big Four_j*), analyst coverage (*#Analyst_j*) and

³⁰ Restatements can result from earnings management activities as well as from unintentional errors due to complexity in the economic transactions (Hennes, 2008; Srinivasan et al., 2015). We limit our restatement sample to that are accompanied by an SEC investigation to better capture those that are related to intentional accounting irregularities (Dechow et al., 1995), and therefore more likely to damage the reputation of directors.

³¹ In untabulated analysis, we examine adverse events that occurred when the director was not on the board and find no evidence of strategic disclosure for events that happened outside the director's tenure. This suggests that directors make strategic disclosure choices primarily based on events that occurred during their appointment.

institutional ownership (*Institutional Ownership_j*), as potential factors affecting the likelihood of a directorship disclosure. We also include characteristics of the other firm (i.e., the firm at which the other directorship is held) that may affect the likelihood of such directorship being subsequently disclosed: book to market (*Book to Market_k*) and leverage (*Leverage_k*).

We also include several pairwise measures which capture the specific relationship between the other firm and the reporting firm. Disclosure may be more or less likely when both firms operate in the same industry. We include an indicator variable which captures whether both, the reporting and the other firm, are in the same industry (*Same Industry*), where industries are defined at the single-digit SIC level. Similarly, geographical proximity of each firm pair may affect whether the directorship is disclosed. To allow for this possibility, we include an indicator variable (*Same Location*) equal to 1 when both firms are headquartered in the same state. We also include the relative size of the reporting firm to the other firm (*Relative Size*).

As director characteristics may influence which directorships are eventually disclosed, we include the following director characteristics in our analyses: director gender in a form of an indicator variable equal to 1 if the director is female and 0 otherwise (*Female Director*), director age (*Director Age*), and director qualifications as proxied by the number of post-graduate degrees and certifications held (*Director Ed Quals*) and the total number of lifetime board seats held at public companies as of the end of the reporting year (*Director Total Board Seats*). Finally, we include an indicator variable for directorships that were held five or more years prior to the date of the director's biographic disclosure (*Old Directorship*).

Regression results are reported in Table 3. In Panel A, we examine a univariate logistic model and, in Panel B, report estimates from the model which includes all control variables. The sign of the main coefficients is consistent across the two specifications. Therefore, we limit our discussion to the results reported in Panel B.

We find evidence that a directorship is more likely to be undisclosed if the firm where the directorship was held experienced any adverse event at the time the directorship was held, whether it is an SEC investigated restatement (coefficient of 0.123, p-value of 0.032), a litigation (coefficient of 0.087, p-value of 0.004), or bankruptcy (coefficient of 0.301, p-value <0.001). If we define the adverse event as taking on a value of 1 if any of the three negative outcomes was experienced by the firm (column 4), the coefficient is 0.105 (p-value <0.001) indicating that a directorship at a firm which experienced an adverse event is more likely to be undisclosed in a director's biography.

Other variables that are associated with non-disclosure include the relative size of the reporting firm to the other firm. The coefficient on *Relative Size* is significant in all four specifications at 1% or better (coefficient of 0.142, p-value <0.001 in column 4). The positive coefficient suggests that there is more non-disclosure when the firm at which the directorship was held is smaller than the reporting firm. Also, reporting firms with larger book to market (coefficient of 0.064, p-value 0.018), lower profitability (−0.358, p-value <0.001), lower analyst coverage (coefficient of −0.018, p-value <0.001) and those not audited by a big four auditor (−0.241, p-value <0.001) are all more likely to have directors whose biographies omit disclosure of

a directorship.

Some of the characteristics of the other firm seem to affect the likelihood of disclosure of the other directorship. Firms with higher book to market (-0.137 , p-value <0.001) and higher leverage (-0.139 , p-value <0.001) are more likely to be disclosed. Similarly, directorships which were held more than five years earlier are significantly more likely to go undisclosed (1.522 , p-value <0.001). Furthermore, being in the same industry (-0.075 , p-value 0.008) or at the same location as the reporting firm (-0.082 , p-value 0.008) increases the likelihood that a directorship will be disclosed. Finally, younger directors (-0.004 , p-value 0.024) and directors who have had more directorships (0.073 , p-value <0.001) are more likely to have undisclosed directorships. The results of the analysis suggest that the decision to not disclose a directorship is related to several factors, including the relevance of such a directorship to the reporting firm (as documented by the significant coefficient on *Relative Size*, *Same Industry* and *Same Location*), the information environment of the reporting firm (*Big Four*, *#_Analysts*), characteristics of the directors (*Director Age*, *Director Total Board Seats*), and the reputation of the other firm (*Adverse Event*).

We next examine whether the tendency to not disclose directorships at firms with adverse events increases with the severity of the event. We limit this analysis to accounting restatements because it is the only adverse event with a well-defined measure of severity. We consider two alternative definitions of severity: the first codes a restatement as severe if the restatement amount has an impact on a firm's equity greater than 1% of total assets. The second definition of

codes a restatement as severe if it involves a revenue line item (Palmrose et al., 2004). We repeat the estimation in equation (1) but now define the adverse event indicator to take a value of one for severe restatements only. We also include a benchmark estimate of the probability of non-disclosure when the adverse event includes non-severe restatements only.

The results of this cross-sectional test is presented in Table 4. Panel A presents the univariate results of the logit regression. In columns (1) and (2), we define severe restatements as restatements that have an equity impact that is greater than 1% of total assets. We find that the likelihood of non-disclosure of directorships is higher when the firm where the directorship was held reported a severe restatement during the director's tenure. In column (2), we find that the coefficient on the adverse event indicator is positive and significant (0.677, p-value <0.001), suggesting higher likelihood of non-disclosure when the directorship was held at firms that reported a severe restatement during the director's tenure. When we examine the effect of having a nonsevere restatement in column (1), we also find a positive effect on the likelihood of non-disclosure (0.150, p-value 0.018), but the estimated coefficient is much smaller than that in column (2) (F-test = 10.96, p-value 0.001).

Similarly, we find that the impact of reporting revenue-related restatements (column 3) is greater than reporting a non-revenue-related restatements (column 4). The F-test shows that the difference in the coefficients are statistically significant (F-test = 2.91, p-value 0.088). Panel B repeat the analysis after including all control variables from Table 3. Our findings are very similar to those in the univariate analysis, yet with lower coefficient estimates. These findings

suggest that the likelihood of non-disclosure of directorships at firms with adverse events increases with the severity of the event.

4.3 Effect of SEC regulation on non-disclosure

Next, we examine how regulation affected the disclosure choices in director biographies. We expand our model in equation (1) by including a *Post Regulation* indicator for proxy statements filed after the SEC's regulation took effect. Specifically, we run the following logistic regression:

$$\begin{aligned} \Pr(\text{Non-Disclosure}_{ijk}) = & \alpha_0 + \beta_1 \times \text{AdverseEvent}_{ik} + \beta_2 \times \text{Post Regulation} \\ & + \beta_3 \times \text{AdverseEvent}_{ik} \times \text{Post Regulation} + \beta_{4-10} \times \text{Reporting Firm Controls}_j \\ (2) & + \beta_{11-13} \times \text{Other Firm Controls}_k + \beta_{14-15} \times \text{Pair-Wise Controls}_{jk} \\ & + \beta_{16-18} \times \text{Director Controls}_i + \text{Industry FE} + \varepsilon_{ijk} \end{aligned}$$

As before, the unit of observations is a directorship held by a director (*i*) of a reporting firm (*j*) in another firm (*k*). The *Post Regulation* indicator takes on value of 1 if the proxy statement which includes the director's biographical information was filed after the regulation took effect on March 1, 2010, zero otherwise.

Table 5 reports the estimated coefficients from the multivariate logit regressions. In all four specifications presented in Table 5, the coefficient on *Post Regulation* is negative and statistically significant, suggesting a decline in the probability of non-disclosure following SEC regulation. In economic terms, the estimated coefficient suggests that following the SEC regulation, the probability of non-disclosure drops from 20.5% to 14.7% based on the model

estimated in column 4 ($= -0.783$, $p\text{-value} < 0.001$).³²

If the SEC regulation makes it more difficult to hide directorships at firms where the director where adverse events had occurred, we would expect that the frequency of non-disclosure of directorships held at such firms would have declined even further compared to the frequency of non-disclosure of other directorships. To explore this possibility, we examine the interaction term *Adverse Event* \times *Post Regulation* and find that the likelihood of non-disclosure of directorships at firms experiencing any of the adverse events declined. In particular, the likelihood of a non-disclosure of a directorship at a firm with a SEC-investigated restatement declines from 24.9% to 17.2% in the post-regulation period ($= -0.168$, $p\text{-value} 0.049$).³³ Similarly, for a directorship at a firm faced with securities litigation, the coefficient is negative (-0.072) and significant at the 10% level ($p\text{-value} 0.085$), while for a directorship at a firm which filed for bankruptcy, the coefficient is negative (-0.477) and significant at the 1% level ($p\text{-value} < 0.001$). The results point to the effectiveness of the regulation in reducing the number of undisclosed directorships, and even greater reduction in non-disclosure of directorships at firms that experienced an adverse event.

4.4 Changes analysis

We examine whether changes in disclosure of directorships are systematically related to

³² We compute the predicted probabilities by evaluating each coefficient at the mean of the sample and calculating the predicted probability as $1/(1+\text{exponent of the negative summed value})$.

³³ We compute the predicted probabilities by evaluating each coefficient at the mean of the sample. For example, prior to SEC's regulation, the summed value of each coefficient at the sample mean for firms with adverse events is -1.10214 and the resulting predicted probability is $1/(1+\exp(1.10214))= 24.9\%$. Similarly, following the SEC regulation, the calculation for the adverse event sample is $1/(1+\exp(1.56888))= 17.2\%$.

whether the other firm experienced an adverse event. Note that the new SEC regulation only requires disclosure of directorships held in the past 5 years. After the 5-year period has lapsed, whether one discloses the directorship becomes voluntary. It is possible that one is more likely to stop disclosing directorships that were held at troubled companies when the required period has lapsed. We examine whether there is a systematic pattern under which directorships are added or dropped in the biographies.

A non-trivial portion (7.83%) of our sample observations change disclosure from one year to the next. Adding (4.73%) is more frequent than dropping, which is 3.10% of the sample. Adding (dropping) may occur from a new (loss of a) directorship but also from less (fewer) space constraints in the bios.³⁴ Adverse event firms account for 42% of the dropped directorships yet only 18% of the additions.

We first start with cases where directors drop disclosure of directorships. As in our main analysis, we only include current directors of the reporting firm in our sample. However, all other directorships (past and current) are included. We limit our sample to observations where there was a disclosure of directorship held at the other firm ($Nondisclosure_{ijk,t-1} = 0$) in the prior year. Using this sample, we repeat the analysis in equation (2) but now use the changes in non-disclosure as the dependent variable, defined as $Nondisclosure_{ijk,t} - Non-disclosure_{ijk,t-1}$. Because the sample is limited to observations where $Nondisclosure_{ijk,t-1}$ equals zero, the dependent

³⁴ Based on our conversation with the securities lawyers involved in the drafting process, firms put emphasis on having a consistent length for the bios across directors. One implication of the space constraint is that directors/firms will be faced with the decision to choose which directorships to report and which ones to drop.

variable takes a value of one where the disclosure of directorship was dropped in the current year, and zero otherwise.

Table 6 Panel A shows the estimated results. We find that firms are more likely to drop disclosure of directorships held at firms that experience a securities litigation or bankruptcy. The estimated coefficient on the *Adverse event* indicator is positive and significant in both columns (2) and (3). Column (4) shows that directorship held at firms that experienced an adverse event (*Any adverse event* = 1) are always more likely to be dropped (= 0.154, p-value <0.001). The estimated coefficient on the *Post regulation* indicator suggests that following SEC regulation, there is a drop in the tendency to stop disclosing directorships (= -1.220, p-value <0.001). More importantly, the tendency to stop disclosing directorships held at adverse event became weaker following SEC regulation (= -0.152, p-value =0.013).

Next, we examine initiation of disclosure of previously undisclosed directorships. This time, we condition our sample to observations where there was a non-disclosure of the directorship held at the other firm in the prior year (t-1) (*Nondisclosure_{ijk,t-1}* = 1). The dependent variable is the changes in non-disclosure defined as *Nondisclosure_{ijk,t}* - *Non-disclosure_{ijk,t-1}* multiplied by negative one. Thus, the changes variable takes a value of one where the disclosure was newly added and zero otherwise.

Table 6, Panel B reports the estimated coefficients from the multivariate logit regressions. In three of the four specifications, the coefficient on *Adverse Event* is negative and statistically significant, suggesting a lower likelihood of new disclosure of previously undisclosed

directorships if the directorship was held at a troubled firm. Not surprisingly, there is an increase in the likelihood of new disclosure after the SEC regulation. The coefficient of the *Post Regulation* indicator is positive in all four specifications. However, the estimated coefficient on the interaction term, *Post Regulation* \times *Adverse Event*, is positive and significant ($=0.581$ p-value <0.001 in column 4), suggesting that for directorships held at adverse event firms, there is a lower likelihood of SEC regulation leading to increased disclosure. The findings suggest that there is there is a systematic pattern under which directorships are dropped in the biographies for adverse event firms, and this pattern of strategic disclosure.

4.5 Consequences of non-disclosure

As discussed above, prior research shows that there are reputational consequences to directors who are on the boards of companies that experience adverse events. Such reputational concerns may create incentives to not disclose directorships held at firms with adverse events. We test whether there are real consequences to non-disclosure of past experience in director biographies. We focus on three settings where such consequences might be expected to be observed: (i) the market reaction to director appointments, (ii) the change in the number of directorships held by the director, and (iii) ISS recommendations and subsequent voting outcomes.

A hypothesis of consequences of non-disclosure is based on two elements. First, the information that is could have been disclosed should be relevant to the decision-makers in a

given setting. For market reaction to director appointments, the information should be relevant to assessing the impact that a director will have on firm value. For changes in directorships, the information should be relevant to shareholders and others involved in process of director appointments at firms where a director may be a director or potential nominee. For ISS voting recommendations and voting outcomes, the information should be an input to ISS voting recommendations and a factor in shareholder voting decisions.

A second element of the hypothesis of consequences of nondisclosure is that the information is costly to obtain from other sources. If participants in a given setting have ready access to information regarding adverse-event directorships outside of director biographies, then attempts to “hide” such information by omitting it from director biographies would be ineffective.

Because we are interested in whether there are consequences of *disclosure* of adverse events for directors rather than the consequences of adverse events per se, we focus on observations where directors held adverse-event directorships and compare outcomes when directors disclosed such directorships with those when they did not disclose.

Our first set of tests focuses on the market reaction to appointment of a director who had served or was serving on the board of a firm that had experienced an adverse event during the director’s tenure. One limitation of many director appointments is that they occur around the proxy season which is confounded by the release of other information in the proxy filings. We therefore focus on appointments that are announced by firms using Form 8-K rather than on

proxy filings.³⁵ In our sample, we find 1,582 such appointments, of which 1,314 are the appointments of directors whose negative past experience was disclosed and 268 directors whose such information was withheld.³⁶

The variable of interest is *CAR*, which we calculate as cumulative market-adjusted returns, measured over either a two-day window $(-1, 0)$ or a three-day window $(-1, +1)$ where day 0 is the date of the initial announcement, as filed through a Form 8-K. We first examine differences between the appointment returns of directors whose adverse-event directorship is disclosed in the biography at the announcement time and those whose adverse-event directorships are undisclosed. In the univariate tests presented in Table 7, the market reaction for the subsample of directors with undisclosed prior adverse-event directorships is much more positive (1.6% for the two-day window and 1.4% for the three-day window) and significant at the 1% level ($p\text{-value} < 0.01$), relative to the market reaction for the subsample of directors with disclosed adverse-event directorships.

In the multivariate tests, we control for other director characteristics that may affect market reactions to director appointments. Specifically, we control for financial expertise of the directors (*Financial Expert*), which takes on value of 1 if the reporting firm classifies the director as such, 0 otherwise, director age (*Director Age*), director expertise, as proxied by the number of post-graduate degrees or other certifications (*Director Ed Quals*) and the number of lifetime

³⁵ Firms are required to file form 8-K, section 5.01. within five business days of a director appointment that happens outside of the regular election process.

³⁶ We define a director to be non-disclosing if she fails to disclose all directorships at a firm with adverse events.

directorships held (*Director Total Board Seats*), and director gender (*Female Director*). We also control for the presence of any other material announcements occurring within five days of the appointment announcement (*Other 8Ks*). In our multivariate analysis, the variable of interest is *Non-Disclosure*, which takes on value of 1 if those directorships held by the director which were at a firm or firms which experience adverse events were not disclosed at the appointment time, 0 otherwise. The coefficient on *Non-Disclosure* in the 3-day market test is 0.014 (p-value 0.085), indicating that the market reaction to the directors appointed whose negative past is not disclosed is 1.4% higher relative to the market reaction to the appointment of the directors with disclosed negative past.

The results of our first test suggest that non-disclosure has significant market consequences. This suggests that the information is relevant and material to market assessments of the impact on firm value of a director appointment, and that there are real search costs precluding market participants from obtaining this information in a timely fashion. The magnitude of the market reaction to the information when disclosed (relatively speaking, -1.4% of firm equity value) suggests either that these search costs must be material or that the market underestimates the extent of selective non-disclosure (and thus does not see the need to engage in independent research of directors' backgrounds).³⁷

³⁷ We attempt to differentiate the two interpretations by varying the severity of the adverse event. Less severe adverse events likely to entail higher search costs. Interestingly, we find that while the directors are as likely to withhold directorship information held at firms with less severe restatements, i.e., non-SEC investigated restatements, investors distinguish non-SEC investigated restatements from other more adverse events (not tabulated). When directors disclose directorships at firms with non-SEC investigated restatements, we do not

Our second test focuses on potential labor market consequences. If information on adverse-event directorships from biographies reduces the likelihood of the individuals obtaining future directorships or retaining current ones, individuals will have incentives to withhold such information. To examine this possible consequence, we limit our sample to all directors who held directorships at firms that experienced an adverse event during the director’s tenure, and examine whether the impact on future directorships varies by the choice to disclose or not disclose these negative events.

We run the following regression model using OLS.

$$\Delta Directorships_{ij} = \alpha_0 + \beta_1 \times Non-Disclosure_{ij} + \beta_{2-8} \times Reporting Firm Controls_j + \beta_{9-12} \times Director Controls_i + Industry FE_j + \varepsilon_{ij} \quad (3)$$

The unit of analysis is director (*i*)-reporting firm (*j*) pairs. Our outcome variable is $\Delta Directorships$, which is defined as the number of directorships held in year $t+n$ ($n = 1, 2$) less the number of directorships held in year t , where t is the proxy disclosure reporting year. The variable of interest is *Non-Disclosure*, which was defined earlier. If non-disclosure of negative directorships mitigates the negative consequences potentially experienced in the labor market for directors, then we would expect the coefficient on *Non-Disclosure* to be positive. Indeed, the results presented in Table 8 suggest this to be the case. The coefficient on *Non-Disclosure* is 0.051 (p-value 0.005), suggesting that not disclosing adverse prior directorships results in more directorships being held by the director one year following the filing in which disclosure would

observe the negative returns found in the more severe SEC investigated restatement events, suggesting that investors distinguish by severity of restatements

have been made. Results are similar if we extend the window to two years following the non-disclosure (coefficient of 0.081, p-value 0.017).

We next explore whether these results are driven by non-disclosing directors gaining more new directorships or losing fewer current directorships, or both. Given the extensive vetting of directors that occurs prior to appointment, it seems less likely that non-disclosure in SEC filings would affect the appointment of new directors. The disclosure is more likely to reveal additional information for existing directorships, as the adverse event may occur after the appointment at the reporting firm when the most extensive vetting occurs. But if disclosure of adverse events in biographies causes shareholders and other to discover these, it seems plausible that it is more likely that the director would not be re-nominated to the board or that shareholders would seek to have the director removed.

Our first analysis construct the dependent variable using only pre-existing directorships, i.e., other directorships held by a director at the time of the filing of proxy statement in which we observe the disclosure choice. In results reported in Column (3), the coefficient on *Non-Disclosure* is still positive (0.082, p-value 0.010), indicating that the directors with undisclosed adverse-event directorships in proxy filings lose fewer current directorships in the two years after the filing than directors whose do disclose adverse-event directorships.

Our second analysis constructs the dependent variable using new directorships only. The estimated coefficient on *Non-Disclosure* reported in column (4) is negative (-0.104), but not significant. In contrast to the findings for currently held directorships, we do not find non-

disclosure of directorships held at adverse-event firms leading to additional future directorships. The results in Table 8 suggest that non-disclosure of adverse-event directorships can mitigate the reputational consequences of adverse events but most of the impact appears to be in the retention of existing directorships. This is consistent with the vetting process for new directorships being sufficiently rigorous that nondisclosure would have little impact on obtaining new directorships.

Finally, we examine whether the disclosure of adverse-event directorships affects the voting recommendations made by ISS in director elections or the outcome of director elections themselves. We estimate the following regression model:

$$ISS\ Recommends\ Against_{ij}\ or\ \% \ Vote\ Against_{ij} = \alpha_0 + \beta_1 \times Non-Disclosure_{ij} + \beta_{1-5} \times Director\ Controls_i + Industry\ FE + \varepsilon_{ij} \quad (4)$$

Our variable of interest is *Non-Disclosure*, as defined earlier, and the outcome variable is either *ISS Recommends Against*, which is equal to 1 if the ISS either recommends that the investors vote against or withhold their votes from the named director, and 0 otherwise, or *% Vote Against*, the total number of votes cast against or withheld from a director listed on the ballot divided by the total number of votes cast.. We control for other director characteristics that may influence ISS's recommendation, including the financial expertise of the director (*Financial Expert*), the age of the director (*Director Age*), director's expertise and qualifications, as proxied by the number of post-graduate degrees or certifications (*Director Ed Quals*) and the total lifetime board seats held (*Director Total Board Seats*), and the gender of the director (*Female Director*). Table 9 column (1) presents the results where *ISS Recommends Against* is the

dependent variable. We do not find evidence that ISS's recommendation is affected by the decision to not disclose the past directorships at firms which experienced adverse events during the director's tenure. The coefficient on *Non-Disclosure* is positive (0.119), but not significant (p-value 0.396). Examining the actual voting outcomes yields similar results and leads to similar conclusions. In column (2) of Table 9, where the outcome variable is *% Vote Against*, the coefficient on *Non-Disclosure* is positive (0.006) but not significant (p-value 0.308), indicating the actual voting outcomes for directors who held adverse directorships do not vary by the decision to disclose or not disclose such directorships.

4.6. Additional analysis: Director versus firm effects

In this section, we examine the extent to which the (non-)disclosure decision is driven by directors versus firms. While an implicit assumption underlying our analysis is that the disclosure decision is driven mostly by the directors, it is possible that what content to include in a bio is based on decision made by both directors and firms. Also, our capital market tests suggest that firms may have incentives to behave strategically and promote non-disclosure.³⁸ While it is not necessary for firms to behave strategically for our study, we empirically examine the extent to which the strategic disclosure decision is led by the directors or the firm.

Using a Markov-Chain Monte Carlo Generalized Linear Mixed Model (Hadfield, 2010),

³⁸ We note, however, that it is not necessary for firms to behave strategically to obtain the results we find. Also, there may be reason firms may want to reduce opportunistic disclosure if firms faced additional costs (e.g., increased SEC oversight) from directors withholding information. To the extent firms are aware of these costs, firms may increasingly monitor the disclosure of their directors.

we decompose our main dependent variable, *Non-disclosure*, into components explained by directors, firms, and year effects. We find that the components explained by director, firms, and year random effects have variances of be 5.64, 0.494, and 0.971, respectively. Thus, significantly more variation in our dependent variable is explained by director effects than by firm effects.

The finding that the strategic behavior is driven mostly by directors is consistent with our understanding of the drafting process of the biographies.³⁹ Although the content of a bio is a function of decisions made by both the director and the disclosing firm, firms seem to rely primarily on the inputs from directors in draft the biographies in proxy statements. Thus, once a director withholds information, compliance personnel of the firm may not have the capacity or incentive to detect this omission. On the other hand, the costs of failing to disclose information provided by the director might be perceived to be significant due to likely professional ethical obligations. The incentives of various parties involved in the drafting process is confirmed by our empirical finding that much of the strategic behavior is driven by the directors.⁴⁰

³⁹ The process, based on our conversation of several parties involved in the drafting process, can be summarized as the following. First, periodically and prior to the issuance of the proxy filing, someone in a compliance role (e.g., a corporate secretary) asks directors to provide current biographical information, typically by responding to some kind of structured questionnaire. The directors complete the questionnaire and return it. Finally, someone (or perhaps several people) involved in preparing the proxy filing transcribe information from the completed questionnaire into the form it takes in the proxy filing; this last step is likely overseen by someone in a compliance role (e.g., the general counsel).

⁴⁰ In untabulated analysis, we explored the variation in our (non)disclosure variable to explore the effect of firm-level policy with the expectation that firms with a strict policy in place will allow for less room for the directors to engage in strategic behavior. We defined firms to have a disclosure policy if the observed disclosure was uniform across all its directors; directors either disclose or do not disclose all past/current directorships. In untabulated results, we find that directors at only the no-policy firms exhibit strategic disclosure behavior. There is no evidence of strategic disclosure for firms with a dictating disclosure policy in place. The findings suggests that while strategic disclosure is driven mostly by the directors, stringent firm-level policy may reduce strategic behavior of directors

5. Conclusion

We examine how directors manage their reputations by strategically disclosing prior experience in their biographies. Using disclosures in the proxy filings with the SEC, we find that some directors are more likely not to disclose directorships held at other firms when those firms experienced adverse events such as accounting restatements, securities litigation, or bankruptcy during their tenure. Prior to changes to SEC rules in 2010, non-disclosure of adverse-event directorships was more likely when these directorships were past directorships at the time of filing, as disclosure of current directorships was required by the SEC. Under new SEC rules, which mandated the disclosure of recent past directorships from March 2010, we find that non-disclosure rates for past adverse-event directorships declined significantly. These results suggest that regulation was effective in precluding individuals from withholding unfavorable information.

Disclosure of directorships held at troubled firms appears to have real consequences. The average stock market reaction to director appointments is more negative when directors disclose directorships at adverse-event companies than when they do not disclose. There are also labor market consequences. Directors that disclose adverse directorships are more likely to lose current directorships in the two years after the filing relative to the directors who do not.

Our results are suggestive of selective disclosure in director biographies. We add to and bring together several strands of literature that examine corporate governance, disclosures and its consequences, and reputation management of individuals. We also innovate beyond prior

disclosure studies by examining a setting where we can directly observe the withholding of information. Our findings should be useful to academics, regulators, and practitioners who wish to better understand the implications of disclosure of director biographies in proxy statements and the existence of search costs in capital and labor market settings.

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Appendix 1: Data collection process

Step 1: For each firm-year, identify directors and obtain relevant SEC filing.

For each firm-year in Equilar, we identify the relevant SEC filing for collection of director biographies as well as the identities of the directors we expect to find in that filing. For purposes of illustration, we focus on 1-800-FLOWERS, Inc. for the fiscal year ended June 30, 2008. The relevant SEC filing was made on Form DEF 14A on October 24, 2008.⁴¹

Step 2: Tag biographies for each director.

From Equilar, we know that the directors on the board at the time of filing the proxy filing for the fiscal year were Lawrence Calcano, James Cannavino, John Conefry, Leonard Elmore, Christopher McCann, James McCann, Jan Murley, and Jeffrey Walker. We hand-collected biographies for each of these eight directors from the SEC filing using a Web-based text annotation interface illustrated below:

⁴¹ See <http://www.sec.gov/Archives/edgar/data/1084869/000108486908000022/proxy.txt> for the original filing.

public accounting firm of Deloitte & Touche, LLP (formerly, Deloitte Haskins & Sells). Mr. Conefry serves on the board of St. Vincent's Services and Wheel Chair Charities, Inc., among others.

Leonard J. Elmore, age 56, has been a Director of the Company since October 2002. Mr. Elmore is currently a Partner with the law firm of Dreier LLP in its New York City headquarters. Prior to his appointment with Dreier LLP in September, 2008, Mr. Elmore served as Senior Counsel with Dewey & LeBoeuf from October 2004 until March 2008. Prior thereto, Mr. Elmore served as the President of Test University, a leading provider of internet-delivered learning solutions for pre-college students, from 2001 to 2003. Mr. Elmore has served on the Board of Directors of Lee Enterprises, Inc. since February, 2007 and is currently a member of their Audit Committee. Mr. Elmore continues to fulfill his commitment to public service as a Trustee on the University of Maryland Board of Trustees, and a Commissioner on the John and James L. Knight Foundation's Knight Commission on Intercollegiate Athletics.

Jan L. Murley, age 57, has been a Director of the Company since February 2007. Ms. Murley is currently serving as Interim President for the Consumer Floral business segment since September 15, 2008. From June 3, 2008 to September 15, 2008, she rendered marketing consulting services to the company.

Murley, Jan

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Ms. Murley has served as a consultant to Kohlberg Kravis Roberts & Co. (KKR) (a private equity firm) from November 2006. From October 2003 to July 2006, Ms. Murley was Chief Executive Officer and a Director of The Boyds Collection, Ltd. (a publicly traded designer and manufacturer of gifts and collectibles), which was majority-owned by KKR. Boyds filed for bankruptcy under Chapter 11 of the US Bankruptcy Code in October 2005 and emerged from Chapter 11 in June 2006 as a private company. Prior to that, she was group Vice President - Marketing of Hallmark Cards, Inc. (a publisher of greeting cards and related gifts) from 1999 to 2002. Previously, Ms. Murley was employed by Procter & Gamble for more than 20 years, with her last position being Vice President for skin care and personal cleansing products. Ms. Murley has been a Director of The Clorox Company since November 2001 and serves as a member of its Audit and Nominating and Governance Committees.

Information about the Board and its Committees

Each of our Directors, other than Messrs. James F. McCann and Christopher G. McCann and Ms. Jan L. Murley, qualifies as an "independent director" as

Step 3: Scan biographies for disclosures of other directorships

For each director, we use Equilar to identify other directorships held by that director, either at or prior to the time of the disclosure. Focusing on Jan Murley as a director 1-800-FLOWERS, Inc. on October 24, 2008, we identified one past directorship (Boyds Collection) and two current directorships (The Clorox Company and Qwest Communications).

For each other directorship, we used the name of the firm and regular expressions to identify matches. In the example here, we find matches for Boyds Collection and The Clorox Company, but no match for Qwest Communications.

Murley, Jan

Board Memberships from Equilar Database

- BOYDS COLLECTION LTD
- CLOROX CO /DE/
- QWEST COMMUNICATIONS INTERNATIONAL INC

Director Biography

Jan L. Murley, age 57, has been a Director of the Company since February 2007. Ms. Murley is currently serving as Interim President for the Company's Consumer Floral business segment since September 15, 2008. From June 30, 2008 to September 15, 2008, she rendered marketing consulting services to the Company.

Ms. Murley has served as a consultant to Kohlberg Kravis Roberts Co. (KKR) (a private equity firm) from November 2006. From October 2003 to July 2006, Ms. Murley was Chief Executive Officer and a Director of The Boyds Collection, Ltd. (a publicly traded designer and manufacturer of gifts and collectibles), which was majority-owned by KKR. Boyds filed for bankruptcy under Chapter 11 of the US Bankruptcy Code in October 2005 and emerged from Chapter 11 in June 2006 as a private company. Prior to that, she was group Vice President - Marketing of Hallmark Cards, Inc. (a publisher of greeting cards and related gifts) from 1999 to 2002. Previously, Ms. Murley was employed by Procter & Gamble for more than 20 years, with her last position being Vice President for skin care and personal cleansing products. Ms. Murley has been a Director of The Clorox Company since November 2001 and serves as a member of its Audit and Nominating and Governance Committees.

Because a given name is written in different ways, our regular expressions are designed to allow for minor variations, e.g., omission of “Inc.” of the state of incorporation (“/DE/” in the example above) or spelling “Corp” as “Corporation” or vice versa. Additionally, we flagged companies with an abnormally high rate of apparent non-disclosure and manually checked the biographies and information on the firm to confirm non-disclosures.

In many such cases, we identified alternative names not captured by our regular expression (for example, in the filing for 1-800-FLOWERS, Inc. for the subsequent fiscal year (i.e., June 30, 2009) there is a disclosure for “Qwest Communications,” which we confirmed is the same firm as Equilar’s “QWEST COMMUNICATIONS INTERNATIONAL INC”; having confirmed and “tagged” this alternative name, we can also search for this name (and variants) whenever Qwest Communications is an other directorship for a given director.

Appendix 2: Variable definitions

Variable	Definition	Source
<i>Non-Disclosure</i>	Indicator variable equal to 1 if a directorship held by a director is not disclosed in the director's biography in the reporting firm's proxy disclosure, 0 otherwise.	Equilar and proxy filings
<i>Post Regulation</i>	Indicator variable equal to 1 if the proxy filing occurred on or after March 1, 2010 and 0 otherwise.	Equilar
<i>Adverse events indicator</i>		
<i>SEC-Investigated Restatement</i>	Indicator variable equal to 1 if the public firm at which the director holds/held a directorship had a restatement which was investigated by the SEC and the director's tenure includes periods to which the restatement pertains, 0 otherwise.	Audit Analytics
<i>Litigation</i>	Indicator variable equal to 1 if the public firm at which the director holds/held a directorship had securities litigation and the period which the litigation pertains to spans, at least partially, director tenure dates, 0 otherwise.	Audit Analytics
<i>Bankruptcy</i>	Indicator variable equal to 1 if the public firm at which the director holds/held a directorship filed for bankruptcy at the time the director was on the board, 0 otherwise.	Audit Analytics
<i>Any Adverse event</i>	Indicator variable equal to 1 if the public firm at which the director holds/held a directorship experience any of the preceding adverse outcomes, 0 otherwise.	Audit Analytics
<i>Consequences</i>		
<i>CAR</i>	Market-adjusted (value-weighted) cumulative abnormal returns calculated over three days (-1 to +1) centered on the date of 8-K disclosure.	CRSP
<i>ΔDirectorships</i>	The number of directorships currently held at public companies at $t + 2$ less the number of directorships held at public firms at t .	BoardEx
<i>ISS Recommends Against</i>	Indicator variable equal to 1 if the ISS either recommends that the investors vote against or withhold votes from the election of the named director, and 0 otherwise.	ISS
<i>%Vote Against</i>	The total number of votes cast against or withheld from a director listed on the ballot divided by the total number of votes cast.	ISS
<i>Control variables</i>		
<i>Relative Size</i>	The log of market value of the reporting firm, measured at the end of the most recent fiscal year, minus log of market value of the other directorship firm, measured at the end of the most recent fiscal year during which the director held the directorship.	Compustat
<i>Book to Market_{Rep}</i>	Book value of equity (at t) divided by market value of equity (csho \times prcf) of the reporting firm, measured at the end of the most recent fiscal year.	Compustat

Appendix 2 (Continued)

Variable	Definition	Source
<i>Leverage_{Rep}</i>	Total long term debt (dlt) + debt in current liabilities (dlcc) divided by the shareholder's equity (ceq) of the reporting firm, measured at the end of the most recent fiscal year.	Compustat
<i>ROA_{Rep}</i>	Income before extraordinary items (ib) divided by total assets (at) of the reporting firm, measured at end of most recent fiscal year.	Compustat
<i>Big Five_{Rep}</i>	Indicator variable equal to 1 if the reporting firm was audited by a big-five auditor in the most recent fiscal year.	Compustat
<i>#_Analysts_{Rep}</i>	The total number of analysts covering the reporting firm at any time during the most recent fiscal year.	IBES
<i>Institutional Ownership_{Rep}</i>	The % of float shares held by institutional investors.	FactSet
<i>Book to Market_{Other}</i>	Book value of equity (at – lt) divided by market value of equity (csho × prcf) of the other directorship firm, measured at end of most recent fiscal year during which the director held directorship.	Compustat
<i>Leverage_{Other}</i>	Total long term debt (dlt) + debt in current liabilities (dlcc) divided by the shareholder's equity (ceq) of the other directorship firm, measured at end of most recent fiscal year during which the director held directorship.	Compustat
<i>Old Directorship_{Other}</i>	Indicator variable equal to 1 if the directorship held at the other firm concluded at least five years prior to the proxy filing date	Equilar
<i>Same Industry</i>	Indicator variable equal to 1 if the reporting firm and the other directorship firm operate in the same 1-digit SIC industry	Compustat
<i>Same Location</i>	Indicator variable equal to 1 if the reporting firm and the other directorship firm are headquartered in the same state	Compustat
<i>Female Director</i>	Indicator variable equal to 1 if the director is female	BoardEx
<i>Director Age</i>	Age of the director at the end of the reporting firm's fiscal year.	BoardEx
<i>Director Ed Quals</i>	Total number of post-graduate degrees and professional licenses held by the director.	BoardEx
<i>Director Total Board Seats</i>	The number of lifetime public company directorships held by the director as of the end of the reporting firm's most recent fiscal year.	BoardEx
<i>Other 8Ks</i>	Indicator variable equal to 1 if there are any other material events disclosed by the firm within the five-day period of the director appointment announcement.	Audit Analytics

Table 1 Sample

Number of distinct disclosing firms	5,144
Number of distinct director-disclosing firm combinations	30,080
Number of director-disclosing firm-fiscal year combinations	129,066
Number of director-disclosing firm-fiscal year-other board combinations	262,118
- Reporting firms without all financial data	(41,628)
- Other directorships without all financial data	(1,013)
- Directors missing demographic information	(682)
Observations meeting data requirements:	218,795
Observations: Past other directorships	94,885
Observations: Current other directorships	123,910
Observations meeting data requirements	218,795

Notes: This table presents the composition of our sample. As discussed in the text, an observation is a combination of a director, a disclosing firm, a fiscal year-end, and another directorship (i.e., directorship on another board).

Table 2 Frequency of disclosure**Panel A: Number of disclosed and undisclosed directorships: by presence of adverse events**

	Undisclosed	Disclosed	Total
All observations	44,263	174,532	218,795
No adverse events	34,561	139,579	174,140
Any adverse event	9,702	34,953	44,655
By type of adverse event:			
SEC-investigated restatements	1,756	5,652	7,408
Securities litigation	7,663	28,805	36,468
Bankruptcy	1,424	3,608	5,032

Panel B: Number of disclosed and undisclosed directorships: Pre- and post-regulation

	Pre-regulation		Post-regulation	
	Undisclosed	Disclosed	Undisclosed	Disclosed
All observations	25,960	94,982	18,303	79,550
No adverse events	20,146	76,224	14,415	63,355
Any adverse event	5,814	18,758	3,888	16,195
By type of adverse event:				
SEC-investigated restate.	1,026	2,944	730	2,708
Securities litigation	4,677	15,921	2,986	12,884
Bankruptcy	797	1,474	627	2,134

Notes: This table presents the number of disclosed and undisclosed directorships. An observation in our sample is a director-disclosing firm-fiscal year-other board. In Panel A, we present the numbers by directorships held at other firms where there was an adverse event (SEC-investigated restatements, security litigation, or bankruptcy) during the director's tenure and those held at other firms with no such adverse events. Panel B presents the number of disclosed and undisclosed directorships in filings made before and after amendments to disclosure regulations by the SEC that took effect on March 1, 2010.

Table 3 Likelihood of directorship non-disclosure

Panel A Univariate logit regressions

VARIABLES	(1) SEC- investigated restatement	(2) Securities litigation	(3) Bankruptcy	(4) Any adverse event
Adverse Event Indicator	0.211*** [<0.001]	0.058* [0.050]	0.454*** [<0.001]	0.114*** [<0.001]

Panel B Multivariate logit regressions

VARIABLES	(1) SEC- investigated restatement	(2) Securities litigation	(3) Bankruptcy	(4) Any adverse event
Adverse Event Indicator	0.123** [0.032]	0.087*** [0.004]	0.301*** [<0.001]	0.105*** [<0.001]
Relative Size	0.141*** [<0.001]	0.142*** [<0.001]	0.139*** [<0.001]	0.142*** [<0.001]
Book to Market _{Rep}	0.063** [0.020]	0.064** [0.018]	0.061** [0.023]	0.064** [0.018]
Leverage _{Rep}	-0.042 [0.278]	-0.040 [0.297]	-0.045 [0.251]	-0.041 [0.286]
ROA _{Rep}	-0.353*** [<0.001]	-0.358*** [<0.001]	-0.353*** [<0.001]	-0.358*** [<0.001]
Big Four _{Rep}	-0.238*** [<0.001]	-0.242*** [<0.001]	-0.234*** [<0.001]	-0.241*** [<0.001]
#_Analysts _{Rep}	-0.017*** [<0.001]	-0.018*** [<0.001]	-0.017*** [<0.001]	-0.018*** [<0.001]
Institutional Ownership _{Rep}	-0.006 [0.898]	-0.002 [0.971]	-0.011 [0.811]	-0.003 [0.956]
Book to Market _{Other}	-0.135*** [<0.001]	-0.136*** [<0.001]	-0.134*** [<0.001]	-0.137*** [<0.001]
Leverage _{Other}	-0.135*** [<0.001]	-0.137*** [<0.001]	-0.133*** [<0.001]	-0.139*** [<0.001]
Old Directorship _{Other}	1.521*** [<0.001]	1.523*** [<0.001]	1.518*** [<0.001]	1.522*** [<0.001]

Same Industry	-0.076***	-0.075***	-0.076***	-0.075**
	[0.007]	[0.008]	[0.007]	[0.008]
Same Location	-0.082***	-0.083***	-0.080***	-0.082***
	[0.008]	[0.008]	[0.010]	[0.008]
Female Director	0.029	0.029	0.032	0.029
	[0.438]	[0.437]	[0.392]	[0.438]
Director Age	-0.004**	-0.004**	-0.004**	-0.004**
	[0.026]	[0.024]	[0.037]	[0.024]
Director Ed Quals	0.006	0.005	0.007	0.005
	[0.649]	[0.705]	[0.617]	[0.702]
Director Total Board Seats	0.073***	0.073***	0.073***	0.073***
	[<0.001]	[<0.001]	[<0.001]	[<0.001]
Constant	-1.449***	-1.445***	-1.552***	-1.476***
	[<0.001]	[<0.001]	[<0.001]	[<0.001]
Industry FE _{Rep}	Yes	Yes	Yes	Yes
Industry FE _{Other}	Yes	Yes	Yes	Yes
Observations	218,789	218,789	218,789	218,789
r2_p	0.0807	0.0808	0.0809	0.0809

Notes: This table reports the estimation from a logistic regression of equation (1). The dependent variable is *Non-Disclosure*, an indicator variable that takes a value of 1 if the director's directorship at the other firm is not disclosed in the reporting firm's proxy statement, 0 otherwise. The indicator variable (*Adverse Event*) takes on value of 1 if the other firm experienced a negative event during director's tenure. In specification (1), adverse event of interest is an SEC-investigated restatement, while in specifications (2) and (3), it is securities litigation and bankruptcy, respectively. In the last specification (4), the indicator variable *Adverse Event* takes on value of 1 if the other firm experienced any of these three types of events. All other variables are defined in Appendix 2. The specification includes the reporting firm as well as other-firm industry fixed effects. Standard errors are clustered at the firm level. Significance is denoted by ***, **, and * for 1%, 5%, and 10% respectively, using a two-tailed test.

Table 4 Likelihood of directorship non-disclosure and severity of the adverse event

Panel A Univariate logit regressions				
VARIABLES	Severe= Equity impact > 1% of assets		Severe = Revenue-related restatement	
	(1) Non-severe	(2) Severe	(3) Non-severe	(4) Severe
Adverse Event Indicator	0.150** [0.018]	0.677*** [<0.001]	0.130* [0.070]	0.340*** [<0.001]
F-test [p-value]	10.96*** [0.001]		2.91* [0.088]	
Panel B Multivariate logit regressions				
VARIABLES	Severe = Equity impact > 1% of assets		Severe = Revenue-related restatement	
	(1) Non-severe	(2) Severe	(3) Non-severe	(4) Severe
Adverse Event Indicator	0.070 [0.262]	0.519*** [<0.001]	0.070 [0.336]	0.210** [0.028]
F-test [p-value]	8.47*** [0.004]		1.28 [0.257]	
Relative Size	0.141*** [<0.001]	0.141*** [<0.001]	0.141*** [<0.001]	0.140*** [<0.001]
Book to Market _{Rep}	0.063** [0.020]	0.062** [0.021]	0.063** [0.020]	0.063** [0.021]
Leverage _{Rep}	-0.041 [0.285]	-0.043 [0.272]	-0.042 [0.281]	-0.042 [0.281]
ROA _{Rep}	-0.354*** [<0.001]	-0.354*** [<0.001]	-0.354*** [<0.001]	-0.352*** [<0.001]
Big Four _{Rep}	-0.239*** [<0.001]	-0.239*** [<0.001]	-0.239*** [<0.001]	-0.238*** [<0.001]
#_Analysts _{Rep}	-0.017*** [<0.001]	-0.017*** [<0.001]	-0.017*** [<0.001]	-0.017*** [<0.001]
Institutional Ownership _{Rep}	-0.006 [0.896]	-0.006 [0.900]	-0.006 [0.900]	-0.007 [0.877]
Book to Market _{Other}	-0.135*** [<0.001]	-0.133*** [<0.001]	-0.134*** [<0.001]	-0.135*** [<0.001]
Leverage _{Other}	-0.134*** [<0.001]	-0.132*** [<0.001]	-0.134*** [<0.001]	-0.132*** [<0.001]
Old Directorship _{Other}	1.521***	1.521***	1.521***	1.522***

	[<0.001]	[<0.001]	[<0.001]	[<0.001]
Same Industry	-0.076***	-0.076***	-0.076***	-0.077***
	[0.007]	[0.007]	[0.007]	[0.006]
Same Location	-0.083***	-0.082***	-0.083**	-0.082***
	[0.008]	[0.009]	[0.008]	[0.009]
Female Director	0.029	0.030	0.029	0.028
	[0.431]	[0.424]	[0.428]	[0.448]
Director Age	-0.004**	-0.004**	-0.004**	-0.004**
	[0.028]	[0.029]	[0.028]	[0.027]
Director Ed Quals	0.006	0.006	0.006	0.006
	[0.656]	[0.651]	[0.653]	[0.666]
Director Total Board Seats	0.073***	0.073***	0.073***	0.073***
	[<0.001]	[<0.001]	[<0.001]	[<0.001]
Constant	-1.449***	-1.455***	-1.451***	-1.445***
	[<0.001]	[<0.001]	[<0.001]	[<0.001]
Industry FE _{Rep}	Yes	Yes	Yes	Yes
Industry FE _{Other}	Yes	Yes	Yes	Yes
Observations	218,789	218,789	218,789	218,789
Pseudo R ²	0.0807	0.0807	0.0807	0.0808

Notes: This table reports the estimation from a logistic regression of equation (1). The indicator variable (*Adverse Event*) takes on value of 1 if the other firm experienced an SEC-investigated restatement. For columns (1) and (3) the *Adverse Event* indicator is one for all nonsevere restatements. For columns (2) and (4), the indicator is one for only severe restatements. Material restatements is defined as restatements that have an equity impact that is greater than 1% of total assets (in columns (1) and (2)) or those that are revenue related (in columns (3) and (4)). The dependent variable is *Non-Disclosure*, an indicator variable that takes a value of 1 if the director's directorship at the other firm is not disclosed in the reporting firm's proxy statement, 0 otherwise. All other variables are defined in Appendix 2. The specification includes the reporting firm as well as other firm industry fixed effects. Standard errors are clustered at the firm level. Significance is denoted by ***, **, and * for 1%, 5%, and 10% respectively, using a two-tailed test.

Table 5 Impact of SEC regulation on likelihood of directorship non-disclosure

VARIABLES	(1) SEC- Investigated Restatement	(2) Securities Litigation	(3) Bankruptcy	(4) Any adverse events
Adverse Event	0.196*** [0.002]	0.095*** [0.003]	0.594*** [<0.001]	0.148*** [<0.001]
Post Regulation	-0.805*** [<0.001]	-0.798*** [<0.001]	-0.802*** [<0.001]	-0.783*** [<0.001]
Adverse Event × Post Regulation	-0.168** [0.049]	-0.072* [0.085]	-0.477*** [<0.001]	-0.130*** [0.001]
Relative Size	0.146*** [<0.001]	0.147*** [<0.001]	0.144*** [<0.001]	0.147*** [<0.001]
Book to Market _{Rep}	0.092*** [<0.001]	0.094*** [<0.001]	0.090*** [0.001]	0.094*** [<0.001]
Leverage _{Rep}	-0.004 [0.916]	-0.003 [0.944]	-0.007 [0.854]	-0.003 [0.936]
ROA _{Rep}	-0.334*** [<0.001]	-0.336*** [<0.001]	-0.332*** [<0.001]	-0.336*** [<0.001]
Big Four _{Rep}	-0.333*** [<0.001]	-0.336*** [<0.001]	-0.328*** [<0.001]	-0.335*** [<0.001]
# Analysts _{Rep}	-0.014*** [<0.001]	-0.014*** [<0.001]	-0.014*** [<0.001]	-0.014*** [<0.001]
Institutional Ownership _{Rep}	0.064 [0.170]	0.067 [0.152]	0.059 [0.203]	0.067 [0.151]
Book to Market _{Other}	-0.109*** [<0.001]	-0.109*** [<0.001]	-0.105*** [<0.001]	-0.110*** [<0.001]
Leverage _{Other}	-0.104*** [0.002]	-0.104*** [0.002]	-0.098*** [0.004]	-0.106*** [0.002]
Old Directorship _{Other}	1.979*** [<0.001]	1.979*** [<0.001]	1.978*** [<0.001]	1.979*** [<0.001]
Same Industry	-0.052* [0.064]	-0.051* [0.067]	-0.052* [0.063]	-0.051* [0.071]
Same Location	-0.088*** [0.004]	-0.089*** [0.004]	-0.086*** [0.005]	-0.088*** [0.005]
Female Director	0.066* [0.076]	0.066* [0.078]	0.070* [0.062]	0.066* [0.078]
Director Age	0.001 [0.684]	0.001 [0.701]	0.001 [0.587]	0.001 [0.801]
Director Ed Quals	0.004	0.003	0.005	0.003

Director Total Board Seats	[0.756] 0.072***	[0.801] 0.072***	[0.715] 0.072***	[0.801] 0.072***
Constant	[<0.001] -1.440***	[<0.001] -1.441***	[<0.001] -1.607***	[<0.001] -1.481***
	[<0.001]	[<0.001]	[<0.001]	[<0.001]
Industry FE _{Rep}	Yes	Yes	Yes	Yes
Industry FE _{Other}	Yes	Yes	Yes	Yes
Observations	218,789	218,789	218,789	218,789
r ² _p	0.0977	0.0976	0.0982	0.0978

Notes: This table reports the estimation from a logistic regression of equation (2). The indicator variable (*Post Regulation*) is added and it takes on value of 1 if the reporting firm's proxy statement is issued after the effective date of SEC Release No. 33-9089 (i.e., on or after Feb 28, 2010). We also include the interaction term of *Adverse Event * Post Regulation* to examine whether non-disclosure of directorships declined more if the firm target of such disclosure experienced a negative event. In specification (1), adverse event of interest is an SEC-investigated restatement, while in specifications (2) and (3), it is securities litigation and bankruptcy, respectively. In the last specification (4), the indicator variable *Adverse Event* takes on value of 1 if the other firm experienced any of the three types of the negative events. The dependent variable is *Non_Disclosure* is an indicator variable that takes a value of 1 if the director's directorship at the other firm is not disclosed in the reporting firm's proxy statement, 0 otherwise. All other variables are defined in Appendix 2. The specification includes the reporting firm as well as other firm industry fixed effects. Standard errors are clustered at the firm level. Significance is denoted by ***, **, and * for 1%, 5%, and 10% respectively, using a two-tailed test.

Table 6 Likelihood of adding or dropping disclosure of directorships held at adverse-event firms

Panel A Dropping disclosure of directorships

VARIABLES	(1) SEC-Invest. Restatement	(2) Securities Litigation	(3) Bankruptcy	(4) Any Adverse Events
Adverse Event	-0.070 [0.368]	0.132*** [0.000]	0.632*** [0.000]	0.154*** [0.000]
Post Regulation	-1.259*** [0.000]	-1.221*** [0.000]	-1.253*** [0.000]	-1.220*** [0.000]
Adverse Event × Post Regulation	0.044 [0.733]	-0.183*** [0.007]	-0.367** [0.014]	-0.152** [0.013]
Industry FE _{Rep}	Yes	Yes	Yes	Yes
Industry FE _{Other}	Yes	Yes	Yes	Yes
Observations	130,172	130,172	130,172	130,172
Pseudo R ²	0.0622	0.0622	0.0627	0.0623

Panel B Adding disclosure of directorships

VARIABLES	(1) SEC-Invest. Restatement	(2) Securities Litigation	(3) Bankruptcy	(4) Any Adverse Events
Adverse Event	-0.684*** [0.001]	-0.716*** [0.000]	-0.290 [0.184]	-0.663*** [0.000]
Post Regulation	2.000*** [0.000]	1.939*** [0.000]	2.009*** [0.000]	1.913*** [0.000]
Adverse Event × Post Regulation	0.611*** [0.006]	0.565*** [0.000]	0.399 [0.101]	0.581*** [0.000]
Industry FE _{Rep}	Yes	Yes	Yes	Yes
Industry FE _{Other}	Yes	Yes	Yes	Yes
Observations	32,321	32,321	32,321	32,321
Pseudo R ²	0.156	0.158	0.155	0.158

Notes: This table reports the estimation from a logistic regression of equation (2) where the dependent variable an indicator for a change in disclosure of a directorship from the prior period. Panel A included only observations where there was a disclosure of the directorship in the prior year. Hence, the dependent variable takes a value of one if the directorship at the other firm was dropped this year and zero otherwise. Panel B included only observations where there was no disclosure of the directorship in the prior year. The dependent variable takes a value of one if the directorship was newly added at the other firm this year and zero otherwise. The indicator variable (*Post Regulation*) is added and it takes on value of 1 if the reporting firm's proxy statement is issued after the effective date of SEC Release No. 33-9089 (i.e., on or after Feb 28, 2010). We also include the interaction term of *Adverse Event* * *Post Regulation* to examine whether non-disclosure of directorships declined more if the firm target of such disclosure experienced a negative event. In specification (1), adverse event of interest is an SEC-investigated restatement, while in specifications (2) and (3), it is securities litigation and bankruptcy, respectively. In the last specification (4), the indicator variable *Adverse Event* takes on value of 1 if the other firm experienced any of the three types of the negative events. All other variables are defined in Appendix 2. Standard errors are clustered at the firm level. Significance is denoted by ***, **, and * for 1%, 5%, and 10% respectively, using a two-tailed test.

Table 7 Market reaction to appointment of directors with adverse-event directorships
Panel A Short-window returns around appointment of directors with adverse-event directorships

	# of observations	CAR (2 day)	CAR (3 day)
Disclosed	1,314	0.001	0.001
Undisclosed	268	0.017	0.015
Difference		-0.016***	-0.014***
[p-value]		[0.001]	[0.003]

Panel B Multivariate regressions

VARIABLES	(1) CAR (2 day)	(2) CAR (3 day)
Non-Disclosure	0.016** [0.041]	0.014* [0.085]
Financial Expert	0.002 [0.441]	0.002 [0.607]
Director Age	0.000 [0.571]	0.000 [0.701]
Director Ed Quals	-0.002 [0.105]	-0.003** [0.044]
Director Total Board Seats	0.000 [0.715]	0.000 [0.719]
Female Director	-0.001 [0.866]	-0.002 [0.735]
Other 8Ks	0.002 [0.686]	0.000 [0.957]
Constant	-0.043* [0.085]	-0.029 [0.279]
Observations	1,582	1,582
R-squared	0.046	0.040

Notes: This table reports the estimation of the market reaction (CAR) to the appointment of directors who hold/held directorships at a firm with an adverse event and the effect of non-disclosure of such an event on the market reaction. The dependent variable *CAR* is calculated over two (-1, 0) or three day (-1, 1) window surrounding appointment announcement, using market-adjusted (value-weighted) model. *Non_Disclosure* is an indicator variable that takes a value of 1 if the director's directorship at the other firm is not disclosed in the reporting firm's proxy statement, 0 otherwise. All other variables are defined in Appendix 2. Standard errors are clustered at the firm level. Significance is denoted by ***, **, and * for 1%, 5%, and 10% respectively, using a two-tailed test.

Table 8 Labor market consequences of non-disclosure of adverse-event directorships

	All directorships		Pre-existing directorships only	New directorships only
	(1) Δ # Dirs <i>t</i> to <i>t</i> +1	(2) Δ # Dirs <i>t</i> to <i>t</i> +2	(3) Δ # Dirs <i>t</i> to <i>t</i> +2	(4) Δ # Dirs <i>t</i> to <i>t</i> +2
Non-Disclosure	0.051*** [0.005]	0.081** [0.017]	0.082** [0.010]	-0.104 [0.158]
Size _{Rep}	0.000 [0.988]	0.001 [0.935]	0.0197* [0.072]	-0.022 [0.340]
Book to Market _{Rep}	-0.053** [0.014]	-0.056** [0.033]	-0.101*** [0.001]	0.155** [0.014]
Leverage _{Rep}	-0.091*** [<0.001]	-0.120*** [0.001]	-0.155*** [<0.001]	0.069 [0.447]
ROA _{Rep}	0.023 [0.584]	0.049 [0.521]	0.080 [0.343]	-0.205 [0.267]
Big Four _{ep}	0.047** [0.044]	0.102 [0.130]	0.121 [0.315]	0.143 [0.250]
#Analysts _{Rep}	0.003 [0.135]	0.005 [0.117]	0.005 [0.163]	0.004 [0.383]
Institutional Ownership _{Rep}	-0.102 [0.173]	-0.124 [0.249]	-0.174 [0.154]	0.007 [0.948]
Female Director	0.026 [0.352]	0.071 [0.166]	0.116** [0.043]	-0.120 [0.425]
Director Age	-0.003* [0.070]	-0.005* [0.095]	0.014*** [0.009]	-0.065*** [<0.001]
Director Ed Quals	-0.013 [0.175]	-0.025 [0.175]	-0.049* [0.080]	0.091* [0.075]
Director Total	-0.033*** [<0.001]	-0.062*** [<0.001]	-0.112*** [<0.001]	0.125*** [<0.001]
Board Seats	-1.550*** [<0.001]	-1.247*** [<0.001]	-1.331*** [<0.001]	1.402 [0.459]
Constant				
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	18,738	16,523	16,523	16,523
R ²	0.073	0.106	0.248	0.101

Notes: This table reports results from OLS regression, with sample limited to directors with adverse-event directorships. *Non_Disclosure* equals 1 if an adverse-event directorship is undisclosed in the reporting firm's proxy statement, 0 otherwise. The dependent variable is change in the number of directorships held from t to t+1 (column 1), and from t to t+2 (column 2). Column (3) limits directorships to those that were held at time t (excludes new directorships) and column (4) includes only new directorships (excludes existing directorships) in the calculation of the dependent variable. All other variables are defined in Appendix 2. The specification includes reporting firm industry and year fixed effects. Standard errors are clustered at the firm level. Significance is denoted by ***, **, and * for 1%, 5%, and 10% respectively, using a two-tailed test.

Table 9 Shareholder voting and non-disclosure of directorships at adverse-event firms

Dependent variable	ISS Recommends Against	% Vote Against
Non-Disclosure	0.119 [0.396]	0.006 [0.308]
Financial Expert	-0.378** [0.022]	-0.013** [0.038]
Director Age	-0.017** [0.039]	0.000 [0.581]
Director Ed Quals	-0.104 [0.150]	-0.001 [0.632]
Director Total Board Seats	0.108*** [<0.001]	0.003** [0.015]
Female Director	-0.407** [0.045]	0.008 [0.359]
Constant	-1.050* [0.060]	0.163*** [<0.001]
Year FE	Yes	Yes
Observations	5,739	5,672
R-squared	0.033	0.079

Notes: This table reports the estimation of the impact of non-disclosure on the likelihood of receiving an unfavorable recommendation from ISS and the percentage of votes cast against the director, for the subset of directors who hold or held a directorship at a firm with an adverse event. In the first specification estimated using a logistic model (1), *ISS Recommends Against* is an indicator variable equal to 1 if ISS either recommends against election of the director or withholds its recommendation, 0 otherwise. In the second model (2), *% Vote Against* is calculated as the total number of votes cast not in favor of electing the director listed on the ballot divided by the total number of votes cast. *Non_Disclosure* is an indicator variable that takes a value of 1 if the director's directorship at the other firm is not disclosed in the reporting firm's proxy statement, 0 otherwise. All other variables are defined in Appendix 2. The specification includes year fixed effects. Standard errors are clustered at the firm level. Significance is denoted by ***, **, and * for 1%, 5%, and 10% respectively, using a two-tailed test.