Are New Independent Directors Penalized for Past Malfeasance? Evidence from Stock Option Backdating

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December 2016

Abstract

We examine whether directors face penalties for severe malfeasance that occurs prior to their board tenure. Focusing on directors who joined boards after stock option backdating ceased, but before the scandal broke, we compare director career outcomes at firms that issued a backdating restatement with directors at firms that revealed either non-material backdating or an internal investigation that did not uncover backdating. We find that directors at firms that restated faced rates of turnover and votes withheld around 6% and 7% higher than directors at firms that did not. Also, we find no difference in rates of turnover and votes withheld between directors joining boards of restating firms after backdating ceased and directors on the board at the time backdating occurred. Further, these penalties do not vary if the director served on the audit or compensation committee or the CEO turned over as the firm responded to the crisis, suggesting that the penalties are not attributable to the directors' management of the crisis. Overall, results suggest that in the case of severe malfeasance, shareholders prefer to "clean the slate" and penalize directors regardless of culpability.

I. INTRODUCTION

Are directors held responsible for malfeasance even if it predates their tenure on the board? On one hand, prior literature indicates that penalties levied on directors at firms that reveal malfeasance are increasing in the culpability of the director.[1] Therefore, directors might avoid adverse outcomes if the behavior occurred prior to their tenure and if penalties follow a pattern of "calibrated culpability." Alternatively, shareholders could prefer to "clean the slate" after a crisis and punish even board members not directly responsible. After all, even if the new directors were not directly involved, they were hired by directors and executives who were. Whether independent directors face penalties for misbehavior that predates their service on the board is a novel and important question, because investigating and disclosing firm misconduct is a key responsibility for directors, and levying penalties in such a manner may chill directors' incentives to fulfill this role.

To address this question, we focus on the stock options backdating scandal, as it has two important features. First, it was a high profile scandal that lead to serious consequences for directors at backdating firms. Second, the scandal provides an ideal setting to examine gradations of director culpability. Option backdating largely ceased after a rule change in 2002 (Heron & Lie, 2007), but the widespread practice was not publicly discovered until November of 2005. This three-year gap allows us to identify a sample of directors who joined the board in the interim. We refer to these individuals as "new directors" throughout the manuscript. As these directors were not on the board during the backdating, they were less culpable for the backdating than directors who were. Even within these new directors, those who served on the audit or

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[1] For example, independent directors face penalties when either the firm misreports (Srinivasan, 2005; Brochet & Srinivasan, 2014), or faces a securities class action lawsuit (Fich & Shivdasani, 2007) and penalties are higher for those directors who sat on the audit committee. As another example, independent directors faced penalties when firms were implicated in backdating, and the penalties are greatest for directors who sat on the compensation committee during the backdating period (Ertimur, Ferri, & Maber, 2012; Bereskin & Smith, 2014).

compensation committees had a heightened responsibility for managing firms' responses to the unfolding scandal.

As indications of director penalties, we analyze two outcomes in our main tests. First, we examine whether the director was removed from the board after the backdating scandal unfolded (post 2007). This is the most serious penalty a director can face as it leads to a reputation loss. Therefore, it is a powerful motivator and likely shapes director behavior. Second, we measure the change in votes withheld for the individual director between the last director election before the scandal broke (pre 11/11/2005) and the first election after the backdating scandal broke (post 6/14/2007).

We first examine the penalties facing new directors (those joining the board after backdating largely ceased) at firms that issued a backdating restatement, as these reflect the most egregious cases of backdating. Accordingly, these are the cases where we are most likely to find evidence of shareholders cleaning the slate, if penalties are levied in this manner. We find that new directors at restating firms were 5.9% more likely to lose their board seats (an increase of 50% relative to the mean), and received 4% more votes withheld (an increase of 78%) relative to directors at firms that do not issue any public response to the backdating crisis. These differences are similar comparing new directors at restating firms with new directors at either firms that issue a charge or firms announcing a clean investigation. This evidence points to sharp penalties in the most egregious cases of backdating, even if the backdating predated the directors' tenure on the board.

Given that new directors at restating firms faced penalties relative to new directors at other firms, we next test whether penalties levied on directors at restating firms vary between new and early directors. If shareholders clean the slate in the case of severe malfeasance, we

would expect that the directors' individual accountability in the malfeasance is likely unrelated to the penalties shareholders levy. To test whether penalties follow culpability among directors at restating firms, we compare penalties levied on the new directors with penalties levied on those that sat on the board during the backdating period ("early directors"). While we find that penalties levied on both early and new directors at restating firms are statistically and economically significant relative to all other directors, we find no difference in penalties levied on these early and new directors at firms that issued a restatement. These results suggest that, in the case of material backdating errors leading to a restatement, penalties do not distinguish among the culpability of the director.

One possible explanation for the penalties facing new directors at restating firms is that they were associated with directors and executives who backdated. Another is that the new directors failed to mitigate the impact of the scandal.[2] Although the new directors were not present when the backdating occurred, they were present when the firm responded to the scandal. Therefore, the penalties levied on new directors at restating firms could be driven by their failure to take more aggressive steps when backdating was uncovered, such as repricing option grants, buttressing internal controls, or even removing the CEO. If this is the case, shareholders could levy penalties on new directors for mishandling the aftermath of the scandal, and not because they are associated with more culpable officers and directors.

We examine this possibility in two separate analyses. First, we separate the new directors at restating firms into two groups: those that sat on the audit committee as the backdating scandal unfolded, and those that did not. Next, we conduct a similar split for the compensation committee. These committees were responsible for determining how the firm would respond in

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[2] As we discuss in Section 2, directors were under considerable pressure to respond aggressively to backdating, at least at companies that were publicly implicated in the scandal.

terms of renegotiating compensation and strengthening internal controls. Therefore, sharper penalties levied on directors on these committees would be consistent with penalizing a poor response to the scandal. However, we find no observable difference in penalties between new directors at restating firms serving on either the audit or compensation committees and new directors at restating firms that do not.

Second, we separate new directors at restating firms into groups depending on whether the CEO was removed. As removing the CEO could be seen as the most proactive approach to dealing with the crisis, this test examines whether new directors at restating firms are penalized for a weak firm response. Again, we find no difference in penalties levied on new directors in firms that removed the CEO and new directors in firms that did not, suggesting that new directors were penalized at restating firms even if the board took the drastic step of removing the CEO. Together, these results imply that the penalties facing new directors are not attributable to the approach they took in dealing with the unfolding crisis.

While the previous tests suggest that new directors at restating firms face penalties at the backdating firm, we find no offsetting benefit for these directors in the external labor market. It could be that directors that appear to be more diligent monitors would be rewarded with more outside board seats, even if they fare poorly at firms where problems are uncovered. However, Ertimur et al. (2012) find that directors at firms that admit to backdating do not lose board seats at other firms. Consistent with this, we find that directors at restating firms did not gain additional seats at non-backdating firms relative to directors at firms that issued a charge. Together with the prior results, this suggests a net penalty for new directors at restating firms.

This net penalty could create incentives to avoid issuing a restatement, if possible. However, penalties could still motivate firms to reveal misreporting if directors believed they

would be penalized even more if the firm backdated, but failed to issue a restatement. Evidence suggests that shareholders did penalize firms based on the appearance of backdating. In fact, "suspicious" firms that granted stock options in patterns consistent with backdating, but did not admit to backdating, had abnormally low returns as the scandal unfolded (Carow, Heron, Lie, & Neal, 2009). This suggests that directors might face penalties if the firm appears to backdate, but fails to issue a restatement. Yet, this would require that shareholders penalize directors without definitive evidence of wrongdoing, which seems unlikely.

We next test whether new directors face penalties when the firm is clouded by the inference of backdating, but does not publicly respond. To do so, we compare penalties levied on new directors at restating firms with penalties levied on new directors at suspicious firms that did not respond by issuing a restatement, recording a charge or announcing a clean investigation.[3] These suspicious firms likely faced pressure to respond to the unfolding crisis, but ultimately did not issue a public statement regarding backdating.[4] Results indicate that new directors at suspicious firms faced lower penalties than new directors at restating firms. Also, the penalties levied on new directors at suspicious firms were not statistically different from new directors at firms that show no evidence of having backdated. While it is not surprising that shareholders do not penalize directors based on the inference of backdating, this suggests that the penalties we examine may not incentivize directors to uncover or reveal malfeasance, even if the firm appears to have misreported.

In summary, we provide evidence consistent with the view that shareholders clean the slate upon the revelation of severe malfeasance. In particular, directors that join firms after

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[3] See appendix 1 for the methodology we employ, following Bizjak et al. (2009), to identify suspicious firms.
[4] Empirical evidence suggests that many backdating firms were able to avoid public implication in the scandal. In fact, Heron and Lie (2009) suggest that thousands of firms did backdate, yet fewer than 300 were ultimately implicated in the scandal (Glass Lewis, 2007).

backdating largely ceased face greater votes withheld and an increased likelihood of turnover, but only if the firm issued a backdating restatement. These penalties do not distinguish between directors who were on the board when the backdating occurred and directors who joined the board later. Further, the penalties do not appear attributable to the directors' response to the crisis, as they do not vary based on the directors' responsibilities during the crisis, or whether the firm removes the CEO. Finally, these penalties are greater than those levied on directors at firms that do not restate, even if the firm appeared to backdate.

The primary contribution of the paper is to recognize that directors can face penalties for misbehavior that occurred prior to their tenure on the board, and that these penalties could create disincentives to uncover and reveal severe malfeasance. The most closely related studies are Ertimur et al. (2012) and Bereskin and Smith (2014), which examine director penalties at all firms publicly implicated in backdating, regardless of the severity of the backdating. Ertimur et al. (2012) find that new directors at firms implicated in backdating face higher votes withheld, but no different rates of turnover, while Bereskin and Smith (2014) detect no penalties among new directors at firms implicated in backdating. Both studies find sharp penalties for directors more responsible for backdating and suggest that penalties follow the culpability of directors. By separating backdating firms according to severity, we can more clearly see that in the case of egregious backdating, shareholders clean the slate regardless of culpability. Our findings also contrast those in studies of director penalties in other settings, which generally find that penalties are increasing in the culpability of directors (e.g. Brochet and Srinivasan, 2012; Fich and Shivdasani, 1999; Srinivasan, 2003).

To be clear, that we find penalties levied on new directors does not necessarily suggest inconsistency or irrationality on the part of those actors levying such penalties. In fact, a desire to

penalize directors by association after a governance failure may be defensible ex post, as even directors not implicated in backdating were still hired by directors and managers who were. Therefore, the new directors may be perceived to act in a similar manner. However, to the extent that directors can anticipate this dynamic, penalties levied in this manner could create an ex ante deterrent to their bringing governance failures to light so long as concealing them is feasible.

One important caveat to our paper is that stock option backdating was a high-profile scandal. We find penalties levied on new directors in this setting, but only in the most severe cases (e.g. when a restatement occurs). We do find some evidence that directors face penalties for events that occur prior to their tenure in more general settings (other restatements and securities class actions). However, the penalties levied on new directors might be limited to the most severe cases of malfeasance. Even if this were the case, though, penalties might create disincentives to reveal misbehavior just when an independent voice is greatest in need (e.g. the most severe cases of malfeasance).

II. BACKGROUND AND HYPOTHESES

Prior literature on director penalties and hypothesis development

Since we examine whether directors are penalized for malfeasance that occurs prior to their tenure, this study is related to those that examine director career outcomes for perceived governance failures. Srinivasan (2005) demonstrates that directors are more likely to lose the board seat when the firm issues a restatement, and turnover rates are greater among directors on the audit committee. Further, Brochet and Srinivasan (2014) show that independent directors named in securities litigation face penalties (loss of board seats, votes withheld and ISS recommendations to withhold votes), and the likelihood of being named in litigation is higher among directors that sit on the audit committee, that sold stock during the class period, and that were on the board during the full class period. Finally, Fich and Shivdasani (2007) present

evidence that directors at firms that face securities litigation are more likely to lose outside board seats, and the penalty is greater for those directors who sat on the audit committee of the sued or interlocking firm. Broadly, this evidence suggests that directors face career penalties when firms reveal governance failures, and that the penalties facing directors are increasing in the responsibility of the director.

Evidence in the backdating setting also suggests that shareholders levy penalties according to the culpability of the director. Ertimur et al. (2012) and Bereskin and Smith (2014) generally detect greater penalties (likelihood of turnover and votes withheld) at firms publicly implicated in backdating, and the penalties are highest among directors who sat on the compensation committee (especially chair) when backdating took place. Ertimur et al. (2012) find that new directors at firms implicated in backdating have lower votes withheld than early directors at firms implicated in backdating, but higher votes withheld than directors at firms not implicated in backdating. Further, neither Ertimur et al. (2012) nor Bereskin and Smith (2014) detect any difference in turnover rates among new directors at firms implicated in backdating. While these studies do not examine penalties levied on new directors at firms that issue a backdating restatement, this evidence also suggests that shareholders levy penalties according to the directors' responsibility for the backdating.

That these studies detect larger penalties for directors with increasing responsibility around the malfeasance suggests that new directors at firms that egregiously backdate might not face penalties. After all, these directors had little direct responsibility for the underlying backdating error. They were not on the board when it took place, suggesting that they likely did not benefit from its occurrence. Further, they had no direct oversight responsibilities as they did not sit on either the audit or compensation committee during the backdating period. While boards

of firms that restated due to backdating were likely influenced by external actors (e.g. auditors, media, analysts) to discover and remediate the error, it is plausible that new directors on those boards would escape penalties for ultimately correcting an error that preceded their tenure on the board, as severe as it may have been. We term this the calibrated penalties hypothesis.

On the other hand, new directors at restating firms might face penalties alongside their more culpable counterparts. While new directors were not responsible for the underlying backdating, they were still hired by directors and executives who were. Since they are associated with people who were responsible for the backdating, shareholders may perceive them to be likely to act in a similar manner. Therefore, even though they were not on the board when the backdating occurred, shareholders may believe that they would also have permitted, or even participated in, the backdating themselves. As such, when severe malfeasance is revealed, shareholders might prefer to clean the slate and remove all directors regardless of accountability. We term this the clean slate hypothesis.

Background on stock option backdating

Stock option backdating refers to the process of granting "in the money" stock options (i.e. when the stock price exceeds the strike price), but avoiding the appropriate compensation expense by moving the measurement date to a day when the stock price was lower. This practice generally took place prior to 2002 because the SEC did not require firms to provide immediate notice of an option grant. Instead, the SEC granted 45 calendar days to report stock option grants, which provided opportunities to set the measurement at a prior date when the stock price was lower. Also, accounting standards in effect at the time required companies to record compensation expense equivalent to the intrinsic value of the grant (i.e. the difference between the strike price and the price on the measurement date multiplied by the number of options

granted). As such, if the strike price were set equivalent to the stock price as of the measurement date, no compensation expense was required. Companies that set the measurement date at an earlier date when the stock price was lower effectively granted an in-the-money option while avoiding compensation expense.

The investing public was generally unaware of the practice of stock option backdating until the Wall Street Journal exposed the practice through a series of articles which ultimately received a Pulitzer Prize award. The first, published on November 11, 2005 highlighted research demonstrating that stock prices fell (on average) prior to the issuance of grants, and rose subsequently thereafter, creating a "V" shape with the grant falling at a low price so frequently that the observable patterns could not be attributed to randomness (Maremont, 2005). The Wall Street Journal then published another article, "Perfect Payday", on March 18, 2006 which documented the astronomical odds (e.g. one in three hundred billion) that specific grants at several companies were issued on the day of such a low stock price.

The fact that backdating largely occurred prior to 2002, but was not discovered until late 2005, provides an opportunity to examine whether directors are held accountable for behavior prior to their tenure on the board. We exploit the lag between the rule change in August of 2002 (which largely ceased backdating), and the public unfolding of the scandal via the Wall Street Journal articles around November of 2005, to identify a sample of directors that joined the board in the interim (see appendix 2 for a timeline of events).[5] These new directors were not directly responsible for the backdating that largely occurred prior to their tenure on the board, but oversaw the firm's response.

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[5] While our sample of new directors primarily begins after 2002 (when backdating largely abated), some firms did appear to backdate grants subsequent to this period. To reduce the likelihood of capturing new directors that were directly involved in backdating, we eliminate directors that joined firms after the 2002 rule change, but before the last materially backdated grant we detect.

Role of independent directors in backdating and responding to the unfolding scandal

Backdating is also a useful setting in which to study consequences for directors because boards of directors were involved in both the process of backdating stock options and in crafting firms' responses to the scandal. In terms of the practice of backdating, boards of directors voted to approve options grants, either in full or through the compensation committee, and so bore ultimate responsibility for the integrity of the process. As a result of this role, directors at firms that engaged in options backdating were the targets of shareholder lawsuits and criticism from the U.S. Congress and the SEC, which brought civil actions against some outside directors. Anecdotally, at least some boards were aware of the backdating as it occurred (Sasseen, 2006).

Empirical evidence corroborates the role of directors in the practice of backdating. Bizjak et al. (2009) find that a firm is more likely to start backdating option grants if a director who currently sits on the board also sits on a firm that has previously backdated. This evidence implies that boards not only knew about backdating, but helped propagate the spread of it. Bebchuk et al. (2010) show that independent directors regularly received backdated grants. Overall, these studies suggest that independent directors had knowledge of, and even participated in, backdating.

Independent directors also played an important role in determining how the firm would respond as the scandal unfolded. Empirical evidence suggests that independent directors play a key role in firm disclosure policies more generally.[6] Also, the backdating scandal closely

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[6]For example, Armstrong et al. (2014) examine firms that added independent directors in order to comply with a rule change requiring majority board independence, and find an increase in transparency. Also, their descriptive evidence indicates that the new rule required the mean and median noncompliant firms to add only 1.4 independent directors to comply with the new requirements. This suggests that an individual director (or two) can have a meaningful effect on firm policies. Other evidence suggests that greater board independence is associated with a lower likelihood of financial statement fraud (Beasley, 1996; Farber, 2005), and greater audit committee independence in particular is associated with less earnings management (Klein, 2002; Vafeas, 2005), and a reduced likelihood of internal control issues (Krishnan, 2005).

followed several infamous accounting scandals (e.g. Enron, Tyco, Waste Management, etc.), which prompted regulation focusing on the role of independent directors.[7] Ultimately, these new rules gave independent directors a greater voice in corporate governance just as the backdating scandal came to light.

Further, the evidence of widespread backdating spurred the SEC, analysts and investors to pressure public companies to investigate the degree to which backdating occurred (if at all), and to vigorously respond in the case that it did occur. The SEC, in particular, put pressure on boards to self-investigate and self-report (Marshall & Heffes, 2006). The Commission also made clear that firms should not "bury" the issue of backdating in financial statements, but had an obligation to address improprieties in an 8-K (Edelblut, 2006).

Practitioner-oriented publications were also encouraging directors to respond aggressively to the unfolding scandal while also facing the specter of personal liability. For example, the September/October 2006 issue of *The Corporate Board* advised (Page 11):

> It is critical that directors thoroughly understand the issue, work quickly to
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> identify whether or not their own companies engaged in the practice, and take
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> steps to protect against future abuse.… [Outside] directors may feel the ire of
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> shareholders in the form of campaigns to "withhold" votes at annual meetings.

The Corporate Governance Advisor (Page 9) described the process of granting options as a "[T]op-level governance issue demanding full attention of the board and its compensation committee (Whittlesey, 2006)." In short, these rule changes and highly public pressures put the board at the epicenter of firms' response.

Although the process firms undertook to respond to backdating varied, firms ultimately

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[7] In particular, the Sarbanes Oxley Act of 2002 requires that all members of the audit committee are independent, and the NYSE and Nasdaq adopted new rules requiring that a majority of directors on the board are independent.

responded in one of four manners. A prominent proxy advisor, Glass Lewis, issued a report in June of 2007 that highlighted the fallout from the scandal and documented these responses: 144 companies admitted to issuing a financial statement with a material error related to backdating and restated prior periods, 69 firms admitted to a non-material backdating error and issued a "charge" (correcting the backdating error in current period financials without restating prior periods), and 53 companies conducted internal investigations and did not issue a restatement or a charge (Glass Lewis & Co., 2007). The remaining firms issued no public disclosure regarding backdating. The next section documents the empirical methodology we employ to examine director penalties among these groups of firms.

III. DATA AND SAMPLE

To create our primary sample of independent directors, we gather accounting data from Compustat, director data from Boardex, returns from CRSP, restatement data from Audit Analytics, and director voting results from ISS. Panel A of Table 1 documents the evolution of the samples used to examine independent director turnover. We start with 4,352 firms in CRSP and Compustat for the entire backdating period (roughly 2005-2007). Of these, 2,910 issued stock option grants from 1996-2002 (the backdating period). Boardex includes data on 2,172 of these firms corresponding with 15,649 total independent directors.

We use two screens to identify our sample of new directors who did not serve while the firm was actively backdating stock options. First, we drop any director who joins the board in or before 2002, the year of the change in the SEC reporting requirements.[8] Second, while Heron and Lie (2007) show that backdating largely ceased after the change to the reporting requirements, they find that some firms violate the new reporting requirements after August of

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[8] Although the rule change took effect in August we remove all directors who joined the board in 2002 as the proxy statement often documents the year the director joined and not the specific date.

2002. Therefore, we remove any director who joined the board after 2002, but before the latest year the firm appears to have materially backdated options based on statistical analysis of option grants.[9] This reduces the sample to 4,216 independent directors serving on 1,773 boards.

Within this sample, we use data from Audit Analytics and Glass Lewis to identify 72 firms that issued a restatement related to backdating representing 168 directors.[10] While this may seem low compared to other studies examining backdating, we isolate backdating restatements (as opposed to identifying firms implicated in backdating) and also impose stricter data requirements.[11] We also identify 35 firms (corresponding with 80 directors) that took a charge to current income for backdating in lieu of issuing a restatement, and 22 firms (corresponding with 57 directors) that announced an investigation that did not uncover backdating. Finally, the remaining firms (1,644) and directors (3,911) are those that do not fit into any group (control firm).

We also construct a sample of director-firm voting outcomes. Panel B documents the voting sample evolution. Three main differences arise between this sample and the director turnover sample. First, we cannot capture voting data on directors that leave the board and therefore do not stand for reelection. This reduces the sample by 102 firms representing 677 directors (to 3,539). Second, we capture voting results disclosed within a two-year window pre

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[9] See appendix 1 for detail on how we analyze option grants to identify suspicious firms.

[10] Audit Analytics categorizes three types of restatements related to stock options: "deferred, stock-based options backdating only", "deferred, stock-based and/or executive comp issues", and "deferred, stock-based SFAS 123 only". We reviewed the disclosures of all three types issued after November of 2005 and included them in our sample if the description suggested evidence of backdating (as opposed to other issues such as incorrectly estimating the Black Scholes model). We also reviewed any restatements in the Glass Lewis list that were not captured by this search and include them if they indicate that the firm backdated.

[11] For example, Efendi et al. (2010) find 141 backdating firms, Ertimur et al. (2012) find 186 and Bernile and Jarrell (2009) find 129. Our study differs from these in that we require that the firm hired an independent director after backdating ceased. Further, we distinguish among backdating firms that issue a charge, a restatement, or no corrective disclosure. Our sample would include 171 backdating firms if we were to eliminate these data restrictions and use a more inclusive definition of backdating consistent with these studies.

(November 2003) and post (June 2007) backdating to reduce the likelihood that non backdating events affect votes. Therefore, at most we can capture two voting cycles. For classified boards (roughly half the firms), we will not capture voting data for one class of directors (or roughly one-third of directors). However, we often miss more than one class because the timing of the annual meeting does not correspond to our specific window. This reduces the sample by another 271 firms representing 955 directors (to 2,584 directors). Finally, ISS did not issue a recommendation for 1,181 directors (precluding us from controlling for an important dimension of shareholder voting). This leads to a final voting sample of 840 firms and 1,403 directors. Of this sample, 71 directors sit on 30 firms that restate while 26 sit on 10 firms that issue a charge, 22 directors sit on 10 firms that announced a clean investigation, and 1,284 directors at 790 firms do not fit into any group.

Consistent with prior studies examining director penalties and incentives (Ertimur, Ferri, & Maber, 2012; Cai, Garner, & Walkling, 2009; Ertimur, Ferri, & Muslu, 2010), we model the likelihood that the director loses the board seat (equation 1), and the amount of votes withheld against the director (equation 2). Ultimately, since we aim to capture incentives facing directors, we seek measures that influence director behavior. That is, if revealing misbehavior (for which the director is not directly responsible for) will lead to these penalties, it may discourage the director from doing so.

To estimate turnover, we include all directors on the board as of the latest voting meeting prior to November of 2005, which is the date the Wall Street Journal broke the backdating scandal.[12] Similarly, in June 2007, Glass Lewis published a report identifying all firms publicly

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[12] We use November of 2005 because that was the publication date of the first article in the Wall Street Journal (also covered by other mainstream publication outlets such as CFO.com) documenting the backdating scandal. Arguably, the more famous Wall Street Journal article ("Perfect Payday") triggered the backdating scandal four months later in

implicated in BD. Therefore, we measure turnover in the post period as of the first meeting after the Glass Lewis report where the director would have stood for election.[13] We use these dates because many firms in our sample were never publicly implicated in backdating, precluding specific "pre" and "post" periods. See Appendix 2 for a timeline of backdating events and our estimation windows.

The advantage to examining director turnover is that it is a clear indicator of a sharp penalty levied on independent directors. The disadvantage is that, as a binary outcome, it may not capture subtle shifts in investor dissatisfaction. Further, turnover is a decision of other directors serving on the nominating committee who may be unwilling to remove a director who was not directly responsible for misbehavior. Also, some directors in our sample may voluntarily depart. Our setting naturally mitigates this concern to some degree, as we test turnover rates among directors with a short tenure during the backdating crisis.

We complement this analysis by examining the amount of votes withheld for the director after the backdating scandal. As a continuous variable, it is more suitable for capturing subtle shifts in investor sentiment, and (unlike turnover) votes are unaffected by voluntary director departures. Further, prior studies demonstrate that voting patterns significantly affect board decisions (e.g. Cai et al., 2009). For these reasons, both turnover and votes withheld are complementary and capture director penalties. We measure votes withheld in the post period as of the first meeting the director stood for election after the backdating scandal broke (June 2007).

March, 2006 (Forelle, 2006). However, we chose the earlier date so as to not capture any voting penalties that might be attributable to backdating occurring between November 2005 and March 2006. See Appendix 2 for a timeline.
[13] We delay the beginning of the post period as it likely took time for shareholders to recognize the extent of backdating and how it could be detected. Also, for firms with a staggered board, we capture shares withheld within two years of either the pre or post measurement date. For example, we capture votes withheld in the pre period for all directors who faced an election between November 2003 and November 2005. If the director faced two elections in that period, we use the latest election results. Similarly, we capture votes withheld in the post period for all directors who faced an election between June 2007 and June 2009. If the director faced two elections in that period, we use the earliest election results.

We also control for votes withheld prior to the backdating scandal (during the latest voting meeting prior to November of 2005).

Descriptive statistics of these samples are illustrated in table 2. The unconditional turnover rate is 11.69% for the full sample, while 5.42% of votes are withheld for the average director. Further, the mean director has 5.17% votes withheld prior to the backdating scandal, and receives a vote withheld recommendation from the ISS in 7.13% of elections.

IV. EMPIRICAL RESULTS

Univariate tests of differences in penalties levied on new directors

Table 3 compares differences in penalties between new directors at firms that issue a restatement, and those that issue a charge or announce a clean investigation that does not lead to a charge or restatement. Relative to firms that issue a charge, new directors at firms that restate are roughly 50% more likely to turnover (19.05% versus 11.25%, T-stat=1.67), and have nearly twice as many votes withheld (11.27% versus 5.43%, T-stat=3.52). These results are similar when comparing directors at restating firms with those at firms that announce a clean investigation. Turnover (19.05% versus 10.53%, T-stat=1.67) and votes withheld (11.27% versus 5.43%, T-stat=3.52) are higher among directors at restating firms. This suggests that new directors at firms that restate fare worse than directors at firms that issued a charge and that disclosed a clean investigation.

We also observe some statistically significant differences across the samples in firm characteristics. However, these differences would generally lead to directors at restating firms facing lower penalties. For example, log assets, ROA, abnormal returns and the proportion of female directors are all greater for restating firms while restating firms have fewer directors above retirement age. These characteristics are generally associated with *lower* turnover. Overall,

this table provides preliminary evidence that shareholders levied greater penalties on backdating

firms that issue restatements.

Multivariate tests of differences in penalties levied on new directors

To analyze the penalties levied on directors among our groups, we estimate the following

director-level cross-sectional OLS and probit models:

$Turnover = \beta_0 + \beta_1 Restatement\ Indicator + \beta_2 Charge\ Indicator + \beta_3 Clean$
$Investigation\ Indicator + \beta_j \sum_j Director\ and\ Firm\ Controls + \varepsilon$ (1)

$Votes\ Withheld\ Post = \beta_0 + \beta_1 Restatement\ Indicator + \beta_2 Charge\ Indicator$
$+ \beta_3 Clean\ Investigation\ Indicator + \beta_j \sum_j Director\ and\ Firm\ Controls + \varepsilon$ (2)

The variables of interest are the indicators identifying the groups (restatement, charge and

clean investigation). Since the sample includes all grant-issuing firms, the coefficients reflect the

difference in the dependent variables between the sample of interest and the omitted sample (i.e.

control firms that do not fit into any group) conditional on the covariates. As we are interested in

comparing differences between directors at the restating firms with directors at other firms, our

main tests will be a comparison of the magnitude of the coefficients on the indicators for these

three groups. If shareholders penalized new directors for issuing a backdating restatement, we

would observe higher turnover and votes withheld at restatement firms relative to those at other

firms (i.e. $\beta_1 > \beta_2$ and $\beta_1 > \beta_3$). Alternatively, if independent directors are rewarded when firms

issue a restatement, perhaps because shareholders prefer new directors to demonstrate a

commitment to transparency, new directors at these firms should show lower penalties relative to

directors at suspicious firms (i.e. $\beta_1 < \beta_2$ and $\beta_1 < \beta_3$). Finally, if director penalties do not

discriminate between suspicious and restating firms, the respective coefficients should not differ.

We follow prior literature (e.g. Cai et al., 2009) and control for the following firm

characteristics: the number of directors (Board Size), the percentage of independent directors

(Board Independence), ROA, log of assets, and the contemporaneous abnormal return. In terms

of director characteristics, we control for the dollar amount of common stock holdings to capture

incentives to reveal adverse news, as well as director tenure, gender, age, and whether it was the

director's first year on the board, as these are all associated with director penalties for reasons

unrelated to stock option backdating. We estimate these characteristics as of the fiscal year end

in 2007, which is around the time backdating would affect the board composition and

shareholder voting.

In model 1, we estimate a probit model, as the dependent variable is an indicator for

whether the director loses the board seat after the backdating scandal came to light for each

director-company observation. In equation 2, we examine an OLS model of the amount votes of

withheld in the first meeting the director stood for election after the backdating scandal broke

(June 2007). We also control for votes withheld prior to the backdating scandal (during the latest

voting meeting prior to November of 2005).

Table 4 documents multivariate tests of director penalties. Results indicate that penalties

levied on directors are limited to those that issue a restatement.[14] New directors at these firms,

relative new directors at both firms that issue a charge and those that announce a clean

investigation, are more likely to turnover, and have more votes withheld. Holding all covariates

at their means, the marginal effect of restating on turnover is 5.9% higher with 4% more votes

withheld, relative to directors at firms that do not announce either a charge or a clean

investigation.

One possible concern with this research design is that the hiring of independent directors

is not random. This would create erroneous inferences if unobservable characteristics that affect

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[14] Ertimur et al. (2012) find that new directors do not face greater turnover. Our results differ because we separately examine firms that issue a restatement and a charge, whereas Ertimur et al. (2012) identify all firms implicated in backdating (including those that faced a DOJ or SEC investigation). We do not find that new directors face greater turnover if we examine directors at all firms implicated in backdating, consistent with Ertimur et al. (2012).

the decision to hire independent directors also affect the penalties shareholders levy on the director after the backdating scandal materializes. To minimize this concern, we conduct two tests.

First, we follow prior studies (Armstrong, Core, & Guay, 2014; Duchin, Matsusaka, & Ozbas, 2010) and utilize the new requirements stock exchanges imposed on firms as a shock to the hiring of independent directors. If unobservable firm characteristics drive the hiring of independent directors and the penalties detected, we would expect to see greater penalties levied on directors that were at firms whose choice of hiring were unconstrained by the regulations (i.e. the firms already in compliance). We estimate equations 1 and 2 and split the new directors at restating firms according to whether they joined the board of a firm that was already in compliance with the new requirements (and were not forced to hire additional independent directors). In untabulated results, we find that new directors at restating firms at both compliant and non-compliant firms faced statistically greater penalties than directors at non restating firms, and that the penalties were not different between the complaint and non-complaint groups.

Second, we examine propensity-matching models to ensure that the restatement firms are compared against similar firms. While this test does not incorporate the effect of all unobservable characteristics in our tests, it is closer to random assignment given the significant overlap in characteristics among firms in our sample. As such, it produces results with minimal bias (Heckman, Ichimura, & Todd, 1997). In these models, we estimate the likelihood of issuing a restatement using the covariates in table 4 and match restatement to non-restatement firms with the nearest likelihood of issuing a restatement in the same industry. We then compare turnover and votes withheld for the restating and non-restating, matched firms, and examine nearest neighbors matching of one, three and five firms. In untabulated tests, we find very similar results

as those presented in this paper. Overall, these tests suggest that penalties shareholders levied on new directors at restating firms were not related to firm characteristics associated with the choice to hire independent directors.

Cross-sectional analysis of penalties levied on restating directors

Next, we examine whether penalties levied on directors at restating firms vary in accordance with accountability. If shareholders clean the slate upon revelation of severe malfeasance, the directors' individual accountability in the malfeasance is likely unrelated to the penalties shareholders levy. To examine this, we next separate directors at restating firms according to their accountability related to the backdating scandal.

To test whether penalties levied on restating directors vary with the directors' accountability, we compare penalties levied on new directors at restating firms with restating directors who were on the board during the backdating period. The early directors who were on the board while the firm was backdating grants bore more responsibility for the underlying backdating. Overall, table 5 demonstrates that both groups of restating directors faced rates of turnover and votes withheld greater than directors at non restating firms, as the coefficients on the indicators are positive and statistically significant. However, the coefficients are not statistically different in either the turnover model (coefficient values = 0.34 v. 0.33, p value = 0.97) or the votes withheld model (coefficient values = 4.02 v. 4.61, p value = 0.61). This evidence suggests that in the case of severe malfeasance, shareholders do not levy penalties in accordance with accountability.

Examining whether penalties levied on new directors at restating firms are attributable to mismanagement of the backdating scandal

One possible explanation for the penalties facing new directors at restating firms is that new directors failed to mitigate the impact of (or possibly respond more aggressively to) the backdating scandal. Although the new directors were not present when the backdating occurred, they were present when the firm responded to the scandal. Therefore, the penalties levied on new directors at restating firms could be driven by a failure to take more aggressive steps when backdating was uncovered, such as repricing option grants, buttressing internal controls, or even removing the CEO. This could explain our results if the average new director mishandled the aftermath of the scandal to such a degree that he or she merits penalties equivalent to directors who were present during, and often personally benefitted from, backdating.

We first separate the new directors at restating firms according to whether they sat on the audit or compensation committee as the backdating scandal unfolded. These committees were responsible for determining how the firm would respond in terms of renegotiating compensation and strengthening internal controls. Therefore, sharper penalties levied on directors on these committees would be consistent with penalizing a poor response to the scandal. Panel A of table 6 demonstrates no statistical differences in penalties between new directors at restating firms serving on these committees and those not. Second, we separate new directors at restating firms into groups depending on whether the CEO was removed. As removing the CEO could be seen as the most proactive approach to dealing with the crisis, this test examines whether new directors at restating firms are penalized for a weak firm response. Panel B of table 6 also demonstrates no statistical differences in penalties between the groups, suggesting that directors were penalized at restating firms even if the board took the drastic step of removing the CEO.

These results imply that the penalties facing new directors are not attributable to either their responsibility in dealing with the unfolding crisis, or for the firm failing to take drastic steps such as removing the CEO.

Tests of outside board seats

Thus far, empirical tests focus on penalties levied on directors at firms associated with backdating. In reality, a director weighs these penalties against opportunities to sit on boards outside the backdating firm. For instance, developing a reputation as a diligent monitor by revealing backdating behavior could lead to gains in additional board seats which more than offset the loss of the board seat at a backdating firm. Similarly, Jiang et al. (2016) analyze data on director voting for proposals at Chinese firms and find that directors known for dissenting gain outside board seats. On the other hand, Ertimur et al. (2012) find no change in outside board seats among directors associated with backdating. To test this, we estimate the following models:

$$\Delta\textit{Total Board Seats}_j = \beta_0 + \beta_1\textit{Restatement Indicator} + \beta_2\textit{Charge Indicator}$$
$$+ \beta_3\textit{Clean Investigation Indicator} + \beta_j\sum{}_j\textit{Director and Firm Controls} + \varepsilon \quad (3)$$

$$\textit{Lose Board Seats}_j = \beta_0 + \beta_1\textit{Restatement Indicator} + \beta_2\textit{Charge Indicator} +$$
$$\beta_3\textit{Clean Investigation Indicator} + \beta_j\sum{}_j\textit{Director and Firm Controls} + \varepsilon \quad (4)$$

$$\textit{Gain Board Seats}_j = \beta_0 + \beta_1\textit{Restatement Indicator} + \beta_2\textit{Charge Indicator} +$$
$$\beta_3\textit{Clean Investigation Indicator} + \beta_j\sum{}_j\textit{Director and Firm Controls} + \varepsilon \quad (5)$$

The dependent variable in equation 3 is the change in total board seats held by director j in 2010 relative to 2005. This count excludes any seats on a firm associated with backdating (either by restating, issuing a charge, or in the clean investigation sample), and includes seats on all boards-public and private. Similarly, equations 4 and 5 examine whether the director increased or decreased total board seats over this period. We control for characteristics of the individual director (gender, age, tenure, and whether the director sat on the audit or compensation committee) and the firm (likelihood the firm backdated, log of total assets, and

ROA). We estimate these models at the director level, and capture the maximum value of the firm-level characteristics among the director's portfolio of non-backdating board seats, except the likelihood the firm backdated, as we use the mean value. We also add industry-fixed effects capturing the mode of the Fama-French 22 industry designation across all firms where the director held a seat. The variables of interest are the non-overlapping indicators β_1 through β_3 which identify the most adverse backdating firm i among director j's portfolio of firms.[15] If directors receive career benefits, in terms of outside board seats, from an association with a firm that restates, we expect that β_1 would be positive in equations 3 and 5 and negative in equation 4.

Table 7 documents the results of these tests. Broadly, we see no difference in outside board seats, regardless of whether the director was affiliated with a firm that issued a backdating restatement. This suggests that the penalties previously documented at firms that restate are not offset by gains at additional firms.

Tests of penalties among directors at firms with suspicious grant patterns

Another unique feature of stock option backdating is that we can replicate the analysis of market participants who analyzed stock option grants to identify firms that appear to have issued backdated grants. This allows us to identify another counterfactual: firms that faced external pressure (e.g. from analysts, investors, etc.), but were not publicly implicated in backdating. This is important, as previous tables indicate that directors face penalties when severe malfeasance is revealed even if they were not on the board when the malfeasance occurred. These penalties create incentives for all directors to avoid the revelation of severe malfeasance, regardless of culpability. However, director penalties for *not* revealing malfeasance would create a

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[15] For example, if a director served on a firm that restated as well as a firm that issued a charge, we put the director in the restate group (i.e. $\beta_1=1$ and β_2 and $\beta_3=0$). Similarly, if the director served on a firm in the charge group as well as the group that announced a clean investigation, we put the director in the charge group (i.e. $\beta_2=1$ and β_1 and $\beta_3=0$).

countervailing incentive to reveal firm misbehavior. Understanding director incentives to reveal misbehavior is important, as independent directors play a key role in monitoring firms and promoting transparency.[16]

Whether directors were penalized for failing to publicly act when clouded in the suspicion of backdating is also important, as evidence suggests that many firms did engage in backdating, but were never implicated. Heron and Lie (2009) estimate that over 2,000 firms backdated grants, yet the Glass Lewis report identified only 271 firms publicly implicated in the practice, and subsequent studies found few additional implicated firms (Ertimur et al., 2012; Efendi, Files, Ouyang, & Swanson, 2013; Bernile & Jarrell, 2009). This literature suggests that many backdating firms did not ultimately acknowledge the practice although backdating was a highly visible scandal that could be detected using publicly available data.

It is not clear whether directors would be held accountable for the appearance of backdating without definitive evidence that the firm backdated. On one hand, shareholders may not have either the sophistication or inclination to identify firms with suspicious grant patterns. On the other hand, evidence suggests that capital markets impounded the likelihood of options backdating into prices, regardless of whether the firm announced any backdating issues. In fact, studies demonstrate that the stock price declines facing firms publicly implicated in backdating actually *precede* the public announcement of backdating, suggesting that the market reacted to the inference of backdating, and not just the public disclosure (Narayanan & Seyhun, 2007; Bernile & Jarrell, 2009). Further, Carow et al. (2009) compare returns from a portfolio of suspicious firms (that were not implicated in backdating) with a portfolio of firms publicly

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[16] For discussion on the role of independent directors see Adams, Hermalin, & Weisbach, 2010. For evidence that independent directors promote transparency see Armstrong, Core, & Guay, 2014; Ahmed & Duellman, 2007; Petra, 2007; Beasley 1996.

implicated in backdating, and find no statistical difference. Given that stock prices reflect the likelihood of backdating, it is also possible that director penalties do.

To determine whether directors face penalties for not revealing misbehavior, we first identify "suspicious" firms by following Bizjak et al., (2009).[17] First, using the Thomson Financials Insider Filing database, we identify option grants to officers and directors between January 1, 1996, and August 29, 2002, when changes to reporting rules made backdating much more difficult.[18] Then, we compute the probability that each option grant was awarded on an abnormally favorable date as an indication of the likelihood that the grant was backdated.

We then compare penalties among new directors at suspicious firms with new directors at restating firms by estimating equations 1 and 2 and including indicators for both groups. Table 8 documents the results of these tests. Evidence indicates that directors at firms with suspicious grant patterns face penalties no different from directors at firms that also make no public revelation of backdating but do not issue option grants at suspicious patterns. However, these penalties are significantly lower than directors at firms that issue a backdating restatement. This suggests that new directors faced penalties in the backdating scandal if the firm issued a restatement, regardless of whether the firm appeared highly likely to have backdated stock options.

Further, these results are not dependent on our method of identifying suspicious firms that do not react to the backdating scandal but appear to backdate. Even if shareholders were unable to apply statistical methods to grant patterns to identify suspicious firms, they could have

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[17] In untabulated univariate and multivariate tests, we find that suspicious firms are statistically more likely to issue a restatement and face a DOJ investigation, an SEC investigation or litigation related to backdating than firms we do not identify as suspicious.

[18] In particular, in August 2002 the SEC shortened the filing deadline for Form 4 from 30 days to 2 days after the grant, substantially shortening the window over which grants can be backdated. See appendix 1 for more detail regarding the methodology we employ to identify suspicious firms.

used more crude techniques. Consequently, we also follow Bebchuk et al. (2010) and identify

backdating firms using a more easily implementable measure: whether firms issued a grant at the

lowest price of the month. Results are consistent with those in our prior tests. Firms that issued

grants in this fashion (but did not restate) faced lower penalties than directors at restating firms.

Overall, these results suggest that penalties were levied according to a rather simple

heuristic (i.e. a restatement), even if the firm was publicly associated with backdating and even if

the director was not on the board during the backdating period.

Tests comparing penalties levied on directors in other settings

To enhance the validity of our conclusions regarding director penalties that we draw from

our backdating setting, we next examine whether the preference to clean the slate is prevalent in

non-backdating settings. First, we examine restatements unrelated to backdating. We leverage

the fact that most restatements include a period over which the firm issued a material

misrepresentation (the restatement period) and a lag before the restatement is announced.

Therefore, we can compare penalties levied on directors after the restatement disclosure for two

groups of directors: those who were on the board during the restatement period, and those who

joined the board after, but before the public disclosure.[19]

Nevertheless, it poses several challenges. First, since backdating was unique with respect

to the vast penalties levied on executives and directors, penalties levied on non-backdating

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[19] We obtain data from Audit Analytics which contains 10,746 non-backdating restatements. After merging with
Boardex we identify 1,489 distinct restatements. The loss in restatement events is attributable to a lack of Boardex
coverage for restating firms as Boardex includes only S&P 1500 firms whereas Audit Analytics includes
restatements for all publicly listed U.S. firms disclosed since 2000. For our purposes, what is most lacking are
restatements where the window between the end of the restatement period and the disclosure date is sufficiently
large to capture new directors. Therefore, we collect director data on a random sample of 200 restatements for which
we are missing Boardex data. Among all directors we identified associated with these 200 firms, only 5 joined the
board after the restatement period but before the disclosure window. Given this low yield we did not hand collect
more data for these tests. However, we are able to hand collect voting data for 15 new directors that appear in
Boardex, but do not appear in our voting data.

restatements are likely less severe. Second, the lag between the end of the restatement period and the disclosure date is shorter, on average, for non-backdating restatements, hampering our ability to identify directors who joined the board after the restatement period but before the disclosure date. Further, in untabulated tests we find that more severe restatements are timelier, suggesting that penalties will be lower when we are more likely to identify new directors.[20]

Columns 1 and 2 of table 9 show several important trends. First, we observe statistically significant penalties primarily among early directors (those who were on the board during the restatement) relative to non-restating directors. That said, the coefficient on new directors is statistically different from zero in turnover tests (coefficient=16.49, T-stat=1.89). Further, the coefficient on the new directors is not statistically different from early directors in either test. This is driven by the fact that the standard errors for the new director sample are much higher than for the early director sample because we identify relatively few new directors.

Second, we examine the setting of securities class actions to compare penalties levied on directors who sat on the board during the class period with directors who joined the board after the class period ended, but before the first identified complaint was filed. To do so, we merge litigation data from securities class actions from the ISS litigation feed as well as the Stanford Securities Class Action website to the Boardex data. After the merge, we have 3,324 securities class actions over the time period 1999-2012. We end the sample in 2012, as we need to capture director penalties subsequent to the litigation. We examine turnover and votes withheld in the election following the filing of the securities class action.

Columns 3 and 4 of table 9 demonstrate similar trends to those observed in the non-

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[20] In particular, we conduct a t-test of the length of the window depending upon whether or not the restatement is associated with either a securities class action, an SEC investigation, or where fraud is explicitly mentioned. We find that fraud restatements have a statistically shorter window (204 days versus 271 days, t-stat=13.6).

backdating restatement tests. Broadly, new directors faced greater turnover in a litigation setting (coefficient= 29.93, T-stat= 3.22), and no difference in turnover or votes withheld between new and early directors.

Overall, this table suggests that penalties levied on new directors do not discriminate between those who were on the board during the restatement period or class period and those who joined the board after.

V. CONCLUSION

This paper examines whether directors are penalized for misbehavior that occurred prior to their tenure on the board. We find that new directors joining firms after the backdating period are more likely to turnover and have more votes withheld if the firm issued a backdating restatement, relative to new directors at firms that disclose non-material backdating and issue a charge, as well as new directors that disclose a clean investigation. These penalties do not distinguish between directors who were on the board during the backdating period and those who were not. Similarly, they are not driven by the firm failing to take action during the backdating crisis, as they are no different regardless of whether the firm took the drastic step of removing the CEO. Finally, the penalties do not distinguish between the directors' responsibilities in handling the unfolding backdating crisis, as they are the same regardless of whether the director sat on the audit or compensation committee. This evidence suggests that, in the case of severe malfeasance, shareholders prefer to clean the slate and penalize directors with a broad stroke, regardless of their role in the underlying malfeasance or in disclosing and correcting it.

These results have implications for the role of independent directors in corporate governance. Since directors play an integral role in determining how firms respond to crises and disclose information, the incentives directors face for such actions are important to understand.

Evidence in this study suggests that directors face penalties when the firm discloses severe malfeasance even if he or she played no direct role in the underlying malfeasance. To the extent that directors anticipate this dynamic and have control over the decision to reveal malfeasance, penalties create disincentives for independent directors to push the firm to uncover and reveal the misbehavior.

While we focus our empirical tests on director penalties in the form of turnover and votes withheld, directors likely have a much richer decision function. We do not examine other incentives, such as personal ethics, or legal liability, which may encourage a director to reveal misbehavior despite the observable penalties we document. Therefore, our results should be seen as illuminating an important incentive for directors rather than fully characterizing their behavior.

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Appendix 1: Methodology for Identifying Suspicious Grants

To determine whether a particular option grant was backdated, we compute the return on the underlying stock in the 20 trading days before and after the grant.[21] We next estimate the return "reversal" as the post-grant change in price minus the pre-grant change. This is done in order to control for price increases subsequent to the grant date driven by firm economics rather than opportunistic behavior on the part of management. For each firm, we also compute the firm's decile of monthly stock price volatility relative to the sample. We then compute the reversal for 1,000,000 hypothetical grant dates of a firm in the same volatility decile by randomly drawing from the CRSP Daily Stock Price database over the same period as our sample of option grants.

To obtain a grant-level estimate of the likelihood of backdating, we match the grant to the randomly generated sample of hypothetical grant dates with the same volatility decile and compute the proportion of hypothetical grants with lower reversal. This gives a volatility-controlled estimate of the likelihood that a grant on a randomly chosen date would have reversal at least as large as the observed reversal of the grant.

We then compute a firm-year estimate of the likelihood of having backdated by aggregating the grant-level estimates to the firm-year level. This aggregation is important given variation in grants across firms. We select the grant with the highest probability of backdating and correct for the family-wise error rate, which accounts for the fact that firms issuing many grants are more likely to randomly issue one with a high probability of backdating (Sidak, 1967).

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[21] This window length approximates the 45 calendar days allotted to firms to file the Form 4 with the SEC after granting stock options. Further, while some firms did issue backdating restatements for periods beyond this date, Heron and Lie (2007) show that option returns patterns indicative of backdating dramatically declined after August of 2002.

To do so, we calculate the firm likelihood of backdating as follows:

FirmYearProb = GrantProb^{NGrants}

Where FirmYearProb is the firm-year probability of backdating, GrantProb is the highest grant-level probability the firm issued during any year as estimated as described above and NGrants are the number of grants issued by the firm for that year. While other estimates are possible (such as aggregating the firm-level estimate across all grants with a high probability of backdating), this is a conservative estimate, as it only accounts for the grant with the highest probability and assumes the rest are not backdated. We consider a firm to be suspicious if the firm-level probability exceeds 95% in any year.

In addition to estimating the likelihood of backdating, we also account for the materiality of the backdating in our tests to capture a sample of firms that appear to be the most egregious backdaters.[22] Consistent with practitioner discussions (Vorhies, 2005) and empirical evidence on restatement thresholds (Acito, Burks, & Johnson, 2009), we consider a grant to be materially backdated if the difference between the strike price on the grant date and the strike price on our estimated measurement date multiplied by the number of grants exceeds 5% of annual income.

To operationalize this measure, we compare the stock price on the date the grant was issued with the median stock price over a 60 calendar-day window centered on the grant date. The difference between these stock prices reflects the compensation expense the firm should have recognized over the vesting period for one grant if the stock price on the actual measurement date were the median price over the window. We then multiply this by the number of grants issued, and compare it to the benchmark threshold of 5% of yearly income less special

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[22] Even minor backdating errors could be seen as material because they indicate "particularly egregious circumstances such as self-dealing or misappropriation by management" which are material regardless of error size (ASC 250-10-S99). Consistent with this, Bernile and Jarrell (2009) document significant abnormal negative returns upon the announcement of backdating.

items or non-operating items, following Vorhies (2005) and consistent with the finding that net income is the appropriate materiality benchmark. If the expense exceeds the threshold, we identify the grant as material. We create a ratio of yearly materiality (aggregating the materiality of all backdated grants) scaled by annual income less special items or non-operating items, and select the highest value to use as a control in firm-level regressions.[23]

While this methodology captures the essence of the possible error's size relative to the firm's operations, it is subject to the following four limitations. First, this method assumes the median stock price over the 60-day window reflects the stock price on the measurement date. Our estimation of materiality will vary from the actual error to the degree that these prices diverge. Second, we do not account for the income tax effects, although these are likely immaterial. Bernile and Jarrell (2009) examine backdating restatements and find that one-third report higher taxes while the median restatement reduced taxes by a negligible amount (0.09% of market value). Third, APB 25 requires amortizing the expense over the vesting period while our methodology compares the expense to one year of income. We do so because, although the accounting errors arose upon the issuance of the grants from 1996-2002, they were not disclosed until the 2005-2007 period. In other words, when the firm was considering whether to restate (from 2005-2007), many years had already passed (perhaps even the entire vesting period of the lucky grant). Thus, the magnitude of the error to incorporate into the current period financials would have reflected the aggregate amount of the error that should have already been expensed over the entire period between the grant date and the current period. Fourth, we capture only option grants publicly disclosed which omits grants to non-executive personnel. While this understates the materiality of the backdating, we wish to err on the side of making a conservative

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[23] We test alternative thresholds for the likelihood of backdating (90% and 99%) and materiality (10% and 15% of net income), and find very similar results.

estimate. Overall, we identify suspicious firms following common techniques (e.g. Bizjak 2009) and find that the results we note above are not sensitive to alternative research designs.

Appendix 2: Timeline of Events

Early Director

New Director (if no backdating observed post 2002)

New Director (if backdating observed post 2002)

| Backdating Occurs | | Pre Period | Backdating Scandal Unfolds | Post Period |

| 1/1/1996: Backdating period begins | 8/2002: Reporting rule change | 12/2002: New director tenure begins | Latest materially backdated grant observed | 11/11/2003 | 11/11/2005: WSJ article | 6/14/2007: Glass Lewis report | 6/14/2009 |

Appendix 3: Variable Definitions

Samples	Description	Source
Restatement	Indicator variable that takes a value of (1) if the firm issued a backdating restatement and (0) otherwise. Backdating restatements are those labeled by Audit Analytics as "Deferred, stock-based options backdating only". We also reviewed the restatement text for all other stock option restatements issued during the backdating period. See section 3 for more detail.	Audit Analytics
Charge	Indicator variable that takes a value of (1) if the firm revealed non-material backdating and issued a charge and (0) otherwise.	June 2007 Yellow Card Trend Alert list published by Glass Lewis
Clean Investigation	Indicator variable that takes a value of (1) if the firm announced an internal investigation related to backdating and did not issue either a restatement or a charge and (0) otherwise.	June 2007 Yellow Card Trend Alert list published by Glass Lewis, Audit Analytics
Suspicious Firm	Indicator variable that takes a value of (1) if the firm has a backdating likelihood above 0.95 and materiality above 0.05 and (0) otherwise. See appendix 1 for detail on how we estimate backdating likelihood and materiality.	Thomson Financials Insider Filing database and CRSP

Penalties

Votes Withheld - Post	The proportion of votes withheld against the director in the first election after the backdating scandal unfolded (6/14/2007 to 6/14/2009) measured as: [(votes withheld + votes against)/(votes for + votes against + votes abstain + votes withheld)];	ISS Voting Analytics
Turnover	Indicator variable that takes a value of (1) if the director was not on the board in the first year after he or she would have stood for election after the backdating scandal unfolded (between 6/14/2007 and 6/14/2009) and (0) otherwise;	Boardex

Controls

Abnormal Return	Annualized firm raw return less the value weighted return compounded over the fiscal year 2005 (following Compustat convention- "fyear"), which immediately precedes the beginning of the backdating scandal period.	CRSP and Compustat
Board Independence	The percentage of independent board members in the meeting immediately preceding the beginning of the backdating scandal (11/11/2005).	Boardex
Board Size	The number of board members in the meeting immediately preceding the beginning of the backdating scandal (11/11/2005).	Boardex
Director Age>65	Indicator variable that takes a value of (1) if the director is older than 65 years of age as of the meeting immediately preceding the beginning of the backdating scandal (11/11/2005), and (0) otherwise.	Boardex
Director Stock Holdings	The market value of the firm's shares held by the director when the backdating scandal began to unfold. Measured as shares held in the latest form 4 multiplied by share price as of 11/1/2005.	Thomson Financials Insider Filing database and CRSP
Female	Indicator variable that takes a value of (1) if the director is female and (0) otherwise.	Boardex

Appendix 3: Variable Definitions (Continued)

First Year Indicator	Indicator variable that takes a value of (1) if the director is serving his/her first year on the Board and (0) otherwise.	Boardex
Industry	Defined as the Fama-French 22 industry designation (SICH).	Compustat
ISS Withhold Recomm.	Indicator variable that takes a value of (1) if ISS recommended a vote against or vote withheld for the director in the first election after the backdating scandal unfolded (6/14/2007 to 6/14/2009) and (0) otherwise.	ISS Voting Analytics
Leverage	The ratio of total liabilities (LT) to total assets (AT).	
Log Assets	Log of total assets (AT).	Compustat
Network Size	The size of the directors network (director network size in Boardex).	Boardex
ROA	Return on assets defined as income before extraordinary items (IB) divided by total assets (AT) as of the beginning of the year.	Compustat
Tenure	The number of years the director served on the board. The first year the director appears on the proxy tenure is set to zero.	
Votes Withheld - Pre	The proportion of votes withheld against the director in the last election before the backdating scandal came to light (11/11/2005 to 11/11/2003) measured as: [(votes withheld + votes against)/(votes for + votes against + votes abstain + votes withheld)].	ISS Voting Analytics

Table 1
Sample Evolution

Panel A: Turnover Sample	Firms	Directors
Firms with data in Compustat and CRSP pre and post backdating scandal	4,352	
Firms issuing grants from 1996-2002	2,910	
Independent director data available from Boardex pre and post backdating scandal	2,172	15,649
Independent directors who joined the board after backdating ceases	1,773	4,216
Composition:		
Restatement	72	168
Charge	35	80
Clean Investigation	22	57
Control	1,644	3,911
Total	1,773	4,216

Panel B: Voting Sample	Firms	Directors
Independent directors who joined the board after backdating ceases (from Panel A above)	1,773	4,216
Directors that do not turnover	1,671	3,539
Directors standing for election during the pre and post windows	1,400	2,584
ISS provided recommendation	840	1,403
Composition:		
Restatement	30	71
Charge	10	26
Clean Investigation	10	22
Control	790	1,284
Total	840	1,403

Table 2

Descriptive Statistics

This table provides descriptive statistics for the main samples used in this paper. In this table, backdating likelihood and materiality are multiplied by 100. Variables are defined in appendix 3.

	N	Mean	Std	P25	P50	P75
Penalties						
Turnover	4,216	11.69%	32.14%	0.00%	0.00%	0.00%
Votes Withheld Post	1,403	5.42%	8.65%	1.05%	2.25%	5.66%
Controls						
Votes Withheld Pre	1,403	5.17	6.88	1.38	2.79	6.02
ISS Withhold Recomm.	1,403	7.91	27.00	0.00	0.00	0.00
Director Stock Holdings	4,216	0.36	1.82	0.00	0.02	0.10
Board Size	4,216	9.70	2.81	8.00	9.00	11.00
Indep. Percentage	4,216	83.24%	8.75%	77.78%	85.71%	90.00%
ROA	4,216	-0.15%	18.14%	0.58%	3.24%	7.43%
Log Assets	4,216	7.30	2.12	5.88	7.35	8.68
Abn Return	4,216	-0.06	0.39	-0.30	-0.12	0.11
Tenure	4,216	0.95	0.79	0.00	1.00	2.00
Female	4,216	14.07%	34.77%	0.00%	0.00%	0.00%
Director Age>65	4,216	11.43%	31.82%	0.00%	0.00%	0.00%
First Year Indicator	4,216	35.34%	47.81%	0.00%	0.00%	100.00%

This table documents T-tests of differences in mean characteristics between the sample of new directors on boards at firms that restate relative to new directors at firms that announced a charge or clean investigation. ***,**,* represents significance at a $p<0.01$, $p<0.05$, $p<0.1$ level, respectively using two-sided tests. Variables are defined in appendix 3. In this table, all variables are multiplied by 100 except those expressed as a percentage as well as board size, log assets, and tenure.

	(A)	(B)	(C)	Difference in Means	
	Restatement	Charge	Clean Invest.	(A)-(B)	(A)-(C)
Penalties					
Turnover	19.05%	11.25%	10.53%	7.80% *	8.52% *
	(168 Obs.)	(80 Obs.)	(57 Obs.)	(1.67)	(1.67)
Votes Withheld Post	11.27%	5.43%	5.61%	5.84% ***	5.66% ***
	(103 Obs.)	(41 Obs.)	(37 Obs.)	(3.52)	(3.14)
Controls					
Votes Withheld Pre	9.10%	5.32%	6.78%	3.78% ***	2.32%
				(2.62)	(1.14)
ISS Withhold Recomm.	16.50%	4.88%	2.70%	11.62% **	13.80% ***
				(2.32)	(3.03)
Director Stock Holdings	21.74	30.93	9.07	-9.19	12.67
				(-0.40)	(1.19)
Board Size	8.80	8.88	8.70	-0.08	0.10
				(-0.24)	(0.42)
Indep. Percentage	82.48	83.16	81.54	-0.68	0.94
				(-0.62)	(0.64)
ROA	-2.58	-7.42	-13.86	4.84	11.28 **
				(1.36)	(2.25)
Log Assets	7.37	6.97	6.88	0.40	0.49 *
				(1.54)	(1.77)
Abn Return	-1.25	-21.67	-5.78	20.42 ***	4.53
				(4.82)	(0.78)
Tenure	0.99	0.88	0.93	0.11	0.06
				(1.06)	(0.50)
Female	11.90	12.50	5.26	-0.60	6.64 *
				(-0.13)	(1.70)
Director Age>65	7.74	11.25	22.81	-3.51	-15.07 **
				(-0.85)	(-2.52)
First Year Indicator	35.71%	36.25%	31.58%	-0.54%	4.13%
				(-0.08)	(0.57)

Table 4

Multivariate Tests of Director Penalties Levied on New Directors

This table documents multivariate tests of differences in penalties levied on new directors on boards at firms that restate relative to new directors at firms that announced a charge or clean investigation. Column 1 documents a probit model of the likelihood of director turnover, while column 2 documents an OLS test of votes withheld after the backdating scandal broke (the first director election after June 2007). The sample is all directors who sat on firms that issued stock-option grants from 1996-2002 where the director joined the board after 2002, or the latest year the firm likely issued a material misstatement due to backdating. ***,**,* represents significance at a p<0.01, p<0.05, p<0.1 level, respectively using two-sided tests and t-statistics clustered at the firm level. Variables are defined in appendix 3. In this table, votes withheld (pre and post) are multiplied by 100 while tenure is scaled by 100 and the first year indicator by 1,000.

		(1) Turnover	(2) Votes Withheld
Sample			
(A) Restatement		0.31**	4.23***
		(2.37)	(3.60)
(B) Charge		-0.09	-0.63
		(-0.51)	(-0.74)
(C) Clean Investigation		-0.15	-1.67
		(-0.69)	(-1.61)
	(A) - (B)	0.40*	4.86***
	P value	0.07	< .01
	(A) - (C)	0.46*	5.90***
	P value	0.07	< .01
Controls			
Votes Withheld - Pre			22.23***
			(14.11)
ISS Withhold Recomm.			0.14***
			(3.58)
Director Stock Holdings		0.03**	-0.16*
		(2.21)	(-1.78)
Board Size		0.04***	-0.14
		(2.85)	(-1.21)
Board Independence		-0.13	-3.11
		(-0.40)	(-1.23)
ROA		-0.48***	-2.29
		(-2.81)	(-1.15)
Log Assets		-4.02**	16.03
		(-2.06)	(0.84)
Abn Return		-0.14	-1.06
		(-1.61)	(-1.32)
Tenure		-2.11	-80.98**
		(-0.34)	(-2.30)
Female		-0.05	-0.38
		(-0.63)	(-0.99)
Director Age>65		0.22***	-0.64
		(2.80)	(-1.30)
First Year Indicator		-78.98	-734.05
		(-0.78)	(-1.15)
Constant		-0.81**	8.03***
		(-2.15)	(3.04)
Observations		4,216	1,403
R-Squared			0.56
Pseudo R-Squared		0.03	
Cluster		Firm	Firm
Fixed Effects		Industry	Industry

Table 5

Cross-sectional Tests of Director Penalties Levied on Directors at Restating Firms

This table documents multivariate tests of differences in director penalties levied on directors that serve at firms that issued a backdating restatement. Column 1 documents a probit model of the likelihood of director turnover, while column 2 documents an OLS test of votes withheld after the backdating scandal broke (the first director election after June 2007). The sample is all directors who sat on firms that issued stock-option grants from 1996-2002. New directors are those that joined the board after backdating largely ceased (after 2002, or the latest year the firm likely issued a material misstatement due to backdating) whereas early directors are those who were present at the time of backdating. ***,**,* represents significance at a $p<0.01$, $p<0.05$, $p<0.1$ level, respectively using two-sided tests and t-statistics clustered at the firm level. Variables are defined in appendix 3. In this table, votes withheld are multiplied by 100.

	(1) Turnover	(2) Votes Withheld
Sample		
(A) New Director, Restatement Firm	0.34**	7.12***
	(2.42)	(3.29)
(B) Early Director, Restatement Firm	0.33***	4.59***
	(3.12)	(4.83)
(A) - (B)	0.01	2.53
P value	0.97	0.22
Controls	YES	YES
Observations	15,419	5,301
R-Squared		0.52
Pseudo R-Squared	0.04	
Cluster	Firm	Firm
Fixed Effects	Industry	Industry

Table 6
Cross-sectional Tests of Director Penalties Levied on New Restating Directors

This table documents cross-sectional tests of director penalties levied on new directors at restating firms. Columns 1 and 3 in Panel A document probit models of the likelihood of turnover, while columns 2 and 4 represent OLS tests of the amount of votes withheld. The sample is all directors who sat on firms that issued stock-option grants from 1996-2002 where the director joined the board after 2002, or the latest year the firm likely issued a material misstatement due to backdating. Panel A partitions the sample of new restating directors according to whether they sat on the compensation (columns 1 and 2) or audit (columns 3 and 4) committees. Panel B partitions the sample of new restating directors according to whether the CEO turned over after the backdating scandal. ***,**,* represents significance at a $p<0.01$, $p<0.05$, $p<0.1$ level, respectively using two-sided tests and t-statistics clustered at the firm level. Variables are defined in appendix 3. In this table, votes withheld are multiplied by 100.

Panel A: Partition new restating directors according to committee role

Sample, New Restating Director:		(1) Turnover		(2) Votes Withheld		(3) Turnover		(4) Votes Withheld
On the Compensation Committee	(A)	0.30	(A)	5.70***				
		(1.40)		(3.08)				
Not on Compensation Committee	(B)	0.33**	(B)	3.18**				
		(2.03)		(2.43)				
On the Audit Committee					(A)	0.15	(A)	4.44***
						(0.79)		(2.72)
Not on Audit Committee					(B)	0.47***	(B)	4.10***
						(3.03)		(2.64)
(A) - (B)		-0.03		2.52		-0.32		0.34
P value		0.90		0.23		0.14		0.64
Controls		YES		YES		YES		YES
Observations		4,216		1,403		4,216		1,403
R-Squared				0.56				0.56
Pseudo R-Squared		0.03				0.03		
Cluster		Firm		Firm		Firm		Firm
Fixed Effects		Industry		Industry		Industry		Industry

Panel B: Partition new restating directors according to whether the CEO turned over

Sample, New Restating Director and:	(1) Turnover	(2) Votes Withheld
(A) CEO turned over	0.50**	4.09**
	(2.22)	(2.28)
(B) CEO did not turn over	0.20	4.41***
	(1.34)	(2.98)
(A) - (B)	0.30	-0.32
P value	0.25	0.89
Controls	YES	YES
Observations	4,192	1,400
R-Squared		0.56
Pseudo R-Squared	0.03	
Cluster	Firm	Firm
Fixed Effects	Industry	Industry

Table 7

Multivariate Tests of Changes in Total Board Seats after the Backdating Scandal

This table documents test of the change in a directors portfolio of board seats from 2005 to 2010 excluding firms that either issued a backdating restatement, announced an investigation that did not lead to a backdating restatement, or issued a charge. Column 1 documents OLS tests of the change in a director's total board seats while column 2 (3) documents probit tests of whether the director lost (gained) board seats over the period. In this table, Log Assets, ROA and Tenure are the set at the highest level in 2005 for the director across the portfolio of companies for which the director sits on the board. Audit is set to one if the director sat on the audit committee for any firm in 2005, and the mean backdating likelihood is the mean value of the likelihood any firm backdated as described in appendix 3. Total board seats derives from Boardex, and includes all seats public and private, U.S. and foreign. The sample is all directors listed in boardex with at least 2 seats in 2005. Industry is defined as the mode of the Fama-French 22 industry designation across all companies in which the director held a board seat in 2005. ***,**,* represents significance at a $p<0.01$, $p<0.05$, $p<0.1$ level, respectively using two-sided tests and t-statistics clustered at the industry level. Variables defined in appendix 3. In this table, the indicators for restate, charge, audit committee membership and compensation committee membership as well as log assets are scaled by 100.

		(1)	(2)	(3)
			1 if director lost seat from	1 if director gained seat from
		# seats 2010 - # seats 2005	2005-2010, 0 otherwise	2005-2010, 0 otherwise
Penalties				
(A) Restatement		-9.49	3.99	22.53
		(-0.80)	(0.38)	(1.26)
(B) Charge		-17.52*	10.75	-22.55
		(-1.74)	(0.84)	(-1.13)
(C) Clean Investigation		-2.59	-3.18	-8.82
		(-0.29)	(-0.27)	(-0.26)
	(A) - (B)	8.03	-6.76	45.08
	P value	0.62	0.67	0.14
	(A) - (C)	-6.90	7.17	31.35
	P value	0.63	0.63	0.43
Controls				
Mean Backdating Likelihood		-0.04	-0.11	-0.38*
		(-0.28)	(-0.63)	(-1.81)
Female		0.09	-0.13**	0.01
		(1.53)	(-2.43)	(0.13)
Director Age>65		-0.61***	0.65***	-0.72***
		(-11.23)	(8.68)	(-5.71)
Log Assets		-0.12	-2.88*	7.52***
		(-0.09)	(-1.86)	(4.93)
ROA		0.14***	-0.19**	0.26
		(3.44)	(-2.10)	(1.01)
Tenure		-0.00	0.01	-0.03***
		(-1.63)	(1.57)	(-3.25)
Audit Comm.		13.37***	-17.28***	12.69***
		(4.39)	(-4.13)	(2.61)
Compensation Comm.		-0.16	-3.05	2.77
		(-0.04)	(-0.61)	(0.42)
Constant		-0.99***	0.73***	-1.87***
		(-6.86)	(4.17)	(-9.68)
Observations		4,010	4,010	3,950
R-Squared		0.06		
Pseudo R-Squared			0.05	0.08
Cluster		Industry	Industry	Industry
Fixed Effects		Industry	Industry	Industry

Table 8
Multivariate Tests of Penalties Levied on New Directors at Firms with Suspicous Grant Patterns

This table documents multivariate tests of differences in director penalties levied on new directors that serve at firms with a high likelihood of issuing a material misstatement related to backdating (suspicious firm) relative to new directors that serve at firms that issued a backdating restatement (restatement). Column 1 documents a probit model of the likelihood of director turnover, while column 2 documents an OLS test of votes withheld after the backdating scandal broke (the first director election after June 2007). The sample is all directors who sat on firms that issued stock-option grants from 1996-2002 where the director joined the board after 2002, or the latest year the firm likely issued a material misstatement due to backdating. ***,**,* represents significance at a p<0.01, p<0.05, p<0.1 level, respectively using two-sided tests and t-statistics clustered at the firm level. Variables are defined in appendix 3. In this table, votes withheld are multiplied by 100.

		(1) Turnover	(2) Votes Withheld
(A) Restatement Firm		0.32**	4.33***
		(2.47)	(3.66)
(B) Suspicious Firm		0.03	0.18
		(0.36)	(0.19)
	(A) - (B)	0.29*	4.15***
	P value	0.06	< 0.01
Controls		YES	YES
Observations		4,216	1,403
R-Squared			0.56
Pseudo R-Squared		0.03	
Cluster		Firm	Firm
Fixed Effects		Industry	Industry

Table 9

Multivariate tests of penalties levied on directors for events that occurred prior to joining the board unrelated to backdating

This table documents multinomial probit (columns 1 and 3) and OLS (columns 2 and 4) tests of the relation between penalties levied on individual directors (where the dependent variable is tabulated in the column heading) for non-backdating events. In columns 1 and 2 new directors are defined as those that joined the board after the restatement period ended, but before the disclosure of the restatement. In columns 3 and 4, new directors are defined as those that joined the board after the class period ended (the period over which the firm was alleged to have issued intentionally issued a material misrepresentation), but before the filing of a securities class action. The sample is all directors in Boardex. Non-backdating restatements are all those in Audit Analytics that result in a decrease in income that are not driven by stock option backdating. ***,**,* represents significance at a $p<0.01$, $p<0.05$, $p<0.1$ level, respectively using two-sided tests and t-statistics clustered at the firm level. In this table new director and early director indicators are scaled by 100.

	Non-backdating Restatements		Security Class Actions	
	(1) Turnover	(2) Votes Withheld	(3) Turnover	(4) Votes Withheld
New Director	16.49*	-0.37	29.93***	1.33
	(1.89)	(-0.57)	(3.22)	(1.58)
Early Director	7.25***	0.36***	24.80***	1.54***
	(3.59)	(2.61)	(7.97)	(5.34)
New Director - Early Director	9.24	-0.73	5.13	-0.21
P value	0.28	0.25	0.34	0.45
Controls	Yes	Yes	Yes	Yes
Observations	189,843	133,534	188,043	111,568
# of obs: New Director=1	376	213	423	221
# of obs: Early Director=1	11,345	7,451	5,328	2,591
R-Squared		0.48		0.49
Pseudo R-Squared	0.03		0.03	
Cluster	Firm	Firm	Firm	Firm
Fixed Effects	Industry, Year	Industry, Year	Industry, Year	Industry, Year