

## **Do Director Elections Matter?\***

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This version: July, 2015

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\* We thank Heitor Almeida, Andrea Gamba, Todd Gormley, Wei Jiang, Steve Kaplan, Amit Seru, Ting Xu, Steve Young, seminar participants at Lancaster University, Leeds University, University of Hong Kong, University of Manchester, Warwick University, and conference participants at the LBS Summer Symposium for helpful comments, Dirk Jenter for sharing the CEO turnover data, and Bo Cheng, Jianan Hao, Cong Gu, Jason Kang, Yujia Liu, Xin Luo, Tong Wu, Ting Xu, and Tiantao Zheng for research assistance. Li acknowledges financial support from the Social Sciences and Humanities Research Council of Canada. Tsoutsoura gratefully acknowledges financial support from the Charles E. Merrill Faculty Research Fund and the Fama-Miller Center for Research in Finance at the University of Chicago, Booth School of Business. All errors are our own.

## Do Director Elections Matter?

### Abstract

Using a hand-collected sample of more than 30,000 directors nominated for election over the period 2001–2010, we construct a novel measure of director proximity to elections—*Distance-from-election*. We find that the closer a director is to her next election, the higher is CEO turnover–performance sensitivity. Each year closer to director elections is associated with a 23% increase in CEO turnover–performance sensitivity. Three tests support a causal interpretation. Cross-sectional tests further show that, when other governance mechanisms are in place, CEO turnover–performance sensitivity is less affected by *Distance-from-election*. We conclude that director elections have important governance implications.

**Keywords:** agency problems; CEO turnover–performance sensitivity; corporate governance; director elections; staggered boards

**JEL Classification:** G34; G38

Modern corporations are characterized by the separation of ownership and control, resulting in agency problems. Members of a corporate board are elected to monitor managers and to mitigate these agency problems. For board governance to be effective, shareholders must have a mechanism for monitoring and disciplining directors. Not giving shareholders the capacity to effectively monitor directors weakens the incentive alignment between owners and directors and hence between owners and managers. Shareholders' right to elect directors is therefore a fundamental feature of corporate governance. Despite its importance, there is little evidence that director elections matter in aligning directors' incentives with shareholders' incentives.

In this paper we contribute to the literature by introducing a novel measure of director proximity to elections—*Distance-from-election*—and by examining whether and how director elections matter, using CEO turnover as our experimental setting.

With unitary boards, directors are elected every year. With staggered boards, directors are elected every three (occasionally two) years. Thus, there is a temporal variation in a director's closeness to her next election if she sits on a staggered board. For example, a director's closeness to the next election is the shortest in the year when she is nominated for re-election and the longest in the following year (after the election). Some directors also sit on multiple boards. Our *Distance-from-election* measure, which is the average number of years from now to the next election across all of a director's board seats, captures these features using a hand-collected sample of more than 30,000 directors nominated for election over the period 2001–2010.

A key responsibility of a board of directors is hiring and firing a firm's CEO. We examine the effect of director *Distance-from-election* on CEO turnover–performance sensitivity. Using a large and comprehensive sample of directors and CEO turnover cases over the period 2001–2010, we find that the closer a director is to her next election, the higher is CEO turnover–performance sensitivity, suggesting that there is a significant effect of director elections on how boards make CEO turnover decision. In terms of economic

significance, a one-year change in director *Distance-from-election* is associated with a 23% change in CEO turnover–performance sensitivity. The results are almost unchanged when we include year, both industry and year, and industry-times-year fixed effects in the regression specifications.

The challenge involved in empirically identifying a causal effect of *Distance-from-election* on CEO turnover policy is the possibility that an omitted variable drives the relation between *Distance-from-election* and CEO turnover policy. For example, in anticipation of poor performance, firms with weak governance could attract directors who prefer less rigorous monitoring, while directors who are more responsive in replacing badly performing CEOs will self-select into firms with strong governance. If the quality of corporate governance correlates with director election cycles (i.e., firms with weak governance have staggered boards while firms with strong governance have unitary boards for which directors are up for election every year), then the positive association between *Distance-from-election* and CEO turnover–performance sensitivity might be due to endogenous matching between firms with strong governance and directors who monitor more.

We perform three tests that support a causal interpretation of our main results. First, we require all sample directors to have had tenure of at least three years. This is to mitigate the concern that our results might be driven by directors who join a board around the time of a CEO turnover event and hence by endogenous matching between the directors and the board. Now with every director having experienced at least one election cycle prior to the turnover event, it is highly unlikely that any contemporaneous endogenous matching between the directors and the board could have any effect on CEO turnover–performance sensitivity. We find no material change in the results. We then repeat the analysis while further restricting the sample of directors to those who have had tenure of at least six years and find similar results.

Second, to provide further support for a causal interpretation of the relation between

*Distance-from-election* and CEO turnover–performance sensitivity, we repeat the analysis using directors’ *Distance-from-election* on *other* boards as a measure of their proximity to elections. As such, it is less likely that the variation in the *Distance-from-election* measure due to *other* boards is related to factors that influence the CEO turnover decision in the event firm. We find no significant change in the results, supporting a causal interpretation.

Finally, we show that our results are not driven by director self-selection into firms with staggered boards. We limit the analysis to a sample of firms with unitary boards. In this case, the variation in the *Distance-from-election* measure is due to directors’ election cycles on *other* boards and furthermore, these directors sit on both unitary and staggered boards. Our main findings remain, further supporting a causal interpretation.

We conduct a large number of robustness checks on our main findings. First, we show that, when using alternative performance measures—stock returns, and both operating performance and stock returns—our main findings remain unchanged. Second, our results remain unchanged if the *Distance-from-election* measure is based on the *minimum* number of years from now to the next election across all of a director’s board seats. Third, we show that our results are robust to estimating the regressions at the firm–year level instead of at the firm–director–year level. Fourth, we exclude from the sample event CEOs who are close to retirement ( $\geq 63$  years old) to reduce the possibility that their turnover is due to age and not performance. Our main findings remain unchanged. Finally, our main findings remain unchanged when restricting the analysis to S&P 1500 firms.

We next explore possible explanations for our findings. We begin by showing that directors of firms with CEO turnover events are more likely to retain seats relative to a sample of matched directors (on age, number of directorships, and firm performance) whose firms do not experience CEO turnover events. Moreover, these directors are also more likely to retain other directorships relative to the sample of matched directors. Thus, CEO turnover events are associated with directors’ retaining more board seats (relative to those matched directors) both on the event firm board and on other boards. It is therefore plausible that

because there are labor market rewards for disciplining CEOs, directors who are closer to elections (and hence are more exposed to their labor market) are more eager to fire CEOs after poor performance.

We also consider several alternative explanations. Fich and Shivdasani (2006) show that directors on busy boards on which a majority of independent directors hold three or more directorships are not effective monitors. Could the relation between *Distance-from-election* and CEO turnover–performance sensitivity be due to the presence of busy directors/boards? We find that, after controlling for busy directors/boards, there remains a significant effect of *Distance-from-election* on CEO turnover–performance sensitivity. Another possible explanation for our findings is that directors with more experience serving on boards may be more lenient with CEOs who experience temporary performance setbacks, leading to lower CEO turnover–performance sensitivity. Consistent with our conjecture, we find that directors with longer tenure are indeed associated with lower CEO turnover–performance sensitivity. Importantly, after controlling for director tenure, there remains a significant effect of *Distance-from-election* on CEO turnover–performance sensitivity. We conclude that neither busy directors (boards) nor director experience could explain our findings of higher CEO turnover–performance sensitivities when directors are closer to elections.

We conclude the analysis by investigating whether other corporate governance mechanisms change the effect of *Distance-from-election* on CEO turnover–performance sensitivity. First, we find that, for firms with high institutional ownership, there is no relation between *Distance-from-election* and CEO turnover–performance sensitivity. Thus, when directors are monitored more closely by institutional shareholders, CEO turnover–performance sensitivity is invariant to director *Distance-from-election*. In contrast, for firms with low institutional ownership, we find a significant relation between *Distance-from-election* and CEO turnover–performance sensitivity in all but one specification. Second, we find that, for large market capitalization firms, there is no relation between *Distance-from-election* and CEO turnover–performance sensitivity. In contrast, for small

market-capitalization firms, we find a significant relation between *Distance-from-election* and CEO turnover–performance sensitivity across all specifications. These results are consistent with directors on the boards of large firms being more diligent monitors, possibly due to the high visibility and prestige associated with those positions. Finally, we find that the effect of *Distance-from-election* on CEO turnover–performance sensitivity is weaker for independent directors. This is consistent with director independence mitigating the role of *Distance-from-election* in CEO turnover policy.

Overall, these results suggest that when directors’ incentives are more closely aligned with shareholders’ interests (high institutional ownership, high job visibility and prestige, or director independence), CEO turnover–performance sensitivity is less strongly affected by *Distance-from-election*, providing further support for our thesis that director elections matter as a governance mechanism.

Our paper contributes to the literature along a number of dimensions. First, our paper contributes to the small but growing body of research that studies the role of director elections. Cai, Garner, and Walkling (2009) analyze uncontested director elections and show that, while shareholder votes are significantly related to firm and director performance, directors do not appear to suffer reputational effects from low voting support. However, they do show that, even though the variation in director votes is small, fewer votes for compensation committee members significantly influence subsequent abnormal CEO compensation, and fewer votes for independent directors influence subsequent CEO turnover. Fischer et al. (2009) find that uncontested elections provide informative polls of investor perceptions regarding board performance. After low votes, firm policies change significantly with more CEO/board turnover, lower CEO pay, fewer and better acquisitions, and more and better divestitures. Aggarwal, Dahiya, and Prabhala (2015) examine the labor market consequences of shareholder votes in director elections. They find that dissenting votes affect directors negatively: a larger number of withheld votes is associated with increased director turnover and directors’ losing membership on key committees. Furthermore, directors with

large numbers of dissenting votes in one firm are less likely to be elected to board seats in other firms. They conclude that even though director voting is advisory, it has negative consequences for directors. In an international setting, Iliev et al. (2015) find that greater dissent voting is associated with higher director turnover. Our paper contributes to that literature by showing that the mere proximity to (even) uncontested director elections has a significant impact on CEO turnover–performance sensitivity.<sup>1</sup>

Second, our paper contributes to the literature that studies the role of staggered boards. A number of studies have established the negative association between the presence of staggered boards and firm value as captured by Tobin’s Q (Bebchuk and Cohen, 2005; Faleye, 2007; Bebchuk, Cohen, and Ferrell, 2009; Cohen and Wang, 2013).<sup>2</sup> The typical explanation for this finding is that staggered boards protect management/boards from removal in either a hostile takeover or a proxy contest (Bebchuk, Coates, and Subramanian, 2002). Subsequent work provides some evidence pertaining to the sources of valuation destruction. Masulis, Wang, and Xie (2007) and Bates, Becher, and Lemmon (2008) show that acquirers with staggered boards are associated with value-decreasing acquisitions, and that target firms with staggered boards are associated with higher takeover premiums but also negatively associated with the likelihood of receiving a takeover bid. Faleye (2007) further shows that staggered boards are associated with lower CEO pay–performance and turnover–performance sensitivities. One major challenge in establishing the effect of staggered boards is that staggered boards are endogenous. Although we cannot randomize board structure (unitary versus staggered), our empirical design allows us to tease out the causal effect of director proximity to elections on CEO turnover policy. Furthermore, we provide new insights into the underlying mechanism: staggered boards shield directors from being exposed to the

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<sup>1</sup> In related work, Del Guercio, Seery, and Woidtke (2008) find that vote-no campaigns in director elections are associated with increased CEO turnover and improved operating performance. Fos and Tsoutsoura (2014) find significant adverse effects on careers of incumbent directors in proxy contest-targeted firms. Fos (2015) examines the real effects of proxy contests on corporate policies and performance. It is worth noting that after removing CEO turnover event firms involved in proxy contests, our main findings remain.

<sup>2</sup> See a dissenting view from Cremers, Litov, and Sepe (2014) based on much longer time-series evidence.



market for directorships, leading to lower CEO turnover–performance sensitivity.

Our paper is also related to the literature that studies director labor market. Prior work has shown that better firm performance, the rejection of antitakeover provisions by directors, and directors who confront management are associated with additional subsequent board seats (Brickley, Linck, and Coles, 1999; Ferris, Jagannathan, and Pritchard, 2003; Coles and Hoi, 2003; Jiang, Wan, and Zhao, 2014). This is consistent with rewarding directors who establish reputations as good monitors with additional board seats (Fama, 1980; Fama and Jensen, 1983).<sup>3</sup> In contrast, poor firm performance in the form of dividend cuts, CEO turnover, financial distress, proxy contests, or selling a company is associated with fewer subsequent board seats (Kaplan and Reishus, 1990; Gilson, 1990; Shivdasani, 1993; Farrell and Whidbee, 2000; Harford, 2003; Yermack, 2004; Fos and Tsoutsoura, 2014). Furthermore, directors associated with firms engaged in earnings restatement (Srinivasan, 2005), class action lawsuits (Helland, 2006), financial fraud (Fich and Shivdasani, 2007), or targeted by shareholder activism (Gow, Shin, and Srinivasan, 2014) are shown to have fewer subsequent board seats. Differing from Farrell and Whidbee (2000), we present evidence consistent with positive labor market consequences for directors of firms that experience CEO turnover (controlling for firm performance).<sup>4</sup>

Finally, our paper contributes to the CEO turnover literature. Coughlan and Schmidt (1985) and Warner, Watts, and Wruck (1988) are the first to show empirically that boards control top management behavior by making compensation and management-termination decisions based on firm performance. Other studies further note that firms with

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<sup>3</sup> Levit and Malenko (2014) argue that directors care about two conflicting types of reputation, and which type of reputation is better rewarded in the labor market depends on the aggregate quality of corporate governance. If the aggregate quality of corporate governance is strong and boards of other firms protect the interests of their shareholders, then building a reputation for being shareholder-friendly can help in obtaining additional directorships. Conversely, if the aggregate quality of corporate governance is weak and boards of other firms are captured by their managers who want to maintain power, then having a management-friendly reputation can be more useful in securing additional board seats.

<sup>4</sup> Harford and Schonlau (2013) find that both value-destroying and value-increasing acquisitions have significant and positive effects on an acquirer or target CEO's future prospects in the director labor market. They conclude that, at least in the case of acquisitions, there are rewards for both experience and ability in the director labor market.

outsider-dominated boards, lower managerial ownership, and outside blockholders are significantly more likely than firms with insider-dominated boards, higher managerial ownership, and a lack of outside blockholders to remove their CEOs on the basis of poor performance (Weisbach, 1988; Denis, Denis, and Sarin, 1997; Jenter and Kanaan, 2010; Gao, Harford, and Li, 2015). We contribute to that literature by introducing *Distance-from-election* as a novel factor that affects CEO turnover–performance sensitivity, and by extension, other corporate policies.<sup>5</sup>

The paper proceeds as follows. We describe the data in Section 2. We present the main results in Section 3. We explore possible mechanisms in Section 4 and conduct a number of cross-sectional tests in Section 5. We conclude in Section 6.

## **2. Data**

Data are compiled from several sources. Basic director-level data come from BoardEx, which provides director profiles for over 9,000 US public and private firms, tracks directors across firms and over time, and provides information on the number of directorships at public firms as well as private firms. Our BoardEx sample covers the period 2001–2010. Data on board structure (unitary or staggered) are hand-collected from proxy statements available through EDGAR. For companies with a staggered board structure, we further hand-collect information at the level of firm–director–year based on which year the director is in her term and whether this is an election year for her or not. This information is matched to BoardEx data by company affiliation and director name. Data on firm characteristics and stock returns come from COMPUSTAT and CRSP. Data on institutional ownership come from Thomson-Reuters Institutional Holdings Database. Data on CEO turnover events come from Jenter and Kanaan (2010), Peters and Wagner (2014), and Jenter and Lewellen (2014).

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<sup>5</sup> Cziraki and Xu (2014) document significant effects of the threat of dismissal on CEO incentives with a focus on corporate risk-taking.

Throughout our empirical analyses, we remove firm–director–year observations if the director is the CEO who experiences the turnover event. The final sample contains 4,048 firms, 30,867 directors, and 878 CEO turnover events over the period 2001–2010.

To capture how close a director is to her next election, we first identify for each director–year the number of directorships and the number of years until the next election for each directorship. Then, for each director–year, we calculate the average number of years from now to the next election across all directorships. We call this variable “*Distance-from-election*.” By definition, *Distance-from-election* varies from zero (when the director is nominated in the current year across all boards on which she sits) to two (when the director is scheduled to be nominated in two years across all boards on which she sits).<sup>6</sup> The upper bound of two years is due to the longest possible election cycle among US corporate boards, which is three years.

Table 1 provides descriptive statistics pertaining to our sample. Panel A presents director characteristics. Across the entire sample of directors, our key variable of interest—*Distance-from-election*—has a sample mean of 0.5 years, which means that on average a director is expected to be voted on in about half a year. When we limit the sample to firms with staggered boards, the average *Distance-from-election* is close to one year.<sup>7</sup> Importantly, there is substantial variation in the *Distance-from-election* measure: the standard deviation is 0.71 in the full sample.<sup>8</sup> When we consider other director characteristics, we find that three-quarters of the directors in our sample are independent (note that our sample period begins after the adoption of SOX). The average (median) number of directorships is 2.8 (2.0).

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<sup>6</sup> In terms of timing, CEO turnover and performance measures are taken as of the fiscal year end  $t$ . A director’s distance from her next election is taken as of the first annual general meetings after the fiscal year end  $t$ .

<sup>7</sup> Note that when we consider directors of firms with staggered boards, some directors have directorships in firms with a unitary board structure. Therefore the average *Distance-from-election* is below one-and-a-half years.

<sup>8</sup> The cross-sectional variation in our *Distance-from-election* measure comes from directors who serve on multiple boards with (possibly) different board structures. This is because if each director has only one board seat and the board is unitary, then everyone is re-elected every year, and our *Distance-from-election* measure takes a value of zero for every director–year; if each director has only one board seat and the board is staggered, then at any point in time, a third of the board is zero (one, or two) year(s) away from the next election.

We consider a director to be busy if she serves on three or more boards. The fraction of busy directors is 11%. The average (median) director tenure is 7.8 (5.7) years. The average (median) director age is 60 (61) years old.

Panel B presents board characteristics. Half of the sample firms have adopted staggered boards, with a majority of them having three-year election cycles.<sup>9</sup> We consider boards to be busy if more than half of the board members are busy directors. About 7% of boards are busy, suggesting that busy boards are not as common now as in the mid-1990s (Fich and Shivdasani (2006) report that over a fifth of Forbes 500 firms had busy boards in the mid-1990s). The average (median) board size is about eight directors.

Panel C presents firm characteristics. The firm characteristics are fairly representative of COMPUSTAT firms. It is worth noting that the sample average (median) institutional ownership is 54% (57%).<sup>10</sup>

[Insert Table 1 about here]

### 3. Main results

#### 3.1. Distance from director elections and the sensitivity of CEO turnover to performance

In this section, we study the effect of a director's distance from elections on the sensitivity of CEO turnover to firm performance. To perform the analysis, we estimate the following linear probability model motivated by prior work (Huson, Parrino, and Starks, 2001; Jenter and Kanaan, 2010):

$$CEO\ turnover_{it} = \eta_t + \eta_j + \eta_{jt} + \beta_1 ROA_{it} + \beta_2 Distance - from - election_{idt} + \beta_3 ROA_{it} * Distance - from - election_{idt} + X_{it}' \gamma + \varepsilon_{idt}, \quad (1)$$

where the dependent variable is  $CEO\ turnover_{it}$ , which takes the value of one if firm  $i$

<sup>9</sup> About two percent of the sample firms have a two-year election cycle.

<sup>10</sup> In unreported analyses, we find that there are no strong correlations among board, director, and firm characteristics.

changes its CEO in year  $t$  and zero otherwise,  $\eta_t$  are year fixed effects,  $\eta_j$  are industry fixed effects,  $\eta_{jt}$  are industry-times-year fixed effects,  $ROA_{it}$  is return on assets,  $Distance - from - election_{idt}$  is a measure of firm  $i$  director  $d$ 's distance from elections, and  $X_{it}$  is a vector of firm-level controls including Size (as measured by  $\log(\text{Sales})$ ), Sales growth, Leverage, and Institutional ownership. All variables are defined in Table A1. The main variable of interest is the interaction term, which captures the effect of *Distance-from-election* on the sensitivity of CEO turnover to firm performance.

Table 2 presents the results. In column (1), the coefficient on ROA shows that there is a negative and significant association between ROA and CEO turnover, suggesting that there is strong CEO turnover–performance sensitivity. Furthermore, we find that the coefficient on the interaction between ROA and *Distance-from-election* is positive and significant at the 1% level, suggesting that the closer a director is to her next election, the higher is the CEO turnover–performance sensitivity. Specifically, we observe that CEO turnover–performance sensitivity is the highest when the director is in her election year (that is, *Distance-from-election* is zero). In terms of economic significance, a one-year change in *Distance-from-election* is associated with a 23% change in CEO turnover–performance sensitivity while holding other variables at their sample averages.

[Insert Table 2 about here]

In addition to our main findings, we also find that large firms and firms with low sales growth, low leverage, and strong institutional presence are more likely to experience CEO turnover. All of these findings are consistent with those reported in prior literature (Huson et al., 2001; Gao et al., 2015).

We next show that the results are robust to the inclusion of year, both industry and year, and industry-times-year fixed effects. First, the results shown in column (2) indicate that, when augmenting the regression with year fixed affects, there is no material change in the

results, implying that aggregate time-series factors do not drive the results. Moreover, the results shown in column (3) almost do not change at all when we augment the regression with both industry and year fixed effects, implying that industry-specific variables are not driving the results. Finally, we replace industry and year fixed effects with industry-times-year fixed effects. The evidence shown in column (4) indicates that the results are robust to controlling for any (either observable or unobservable) time-varying industry-level variables.<sup>11</sup> The coefficient on the interaction term remains positive and significant, both statistically and economically: a one-year change in *Distance-from-election* is associated with an 18% change in CEO turnover–performance sensitivity while holding other variables at their sample averages.

In our main analysis, the *Distance-from-election* measure is based on the average number of years from now to the next election across all of a director’s board seats. It is possible that if a director is faced with an imminent election in one of her board seats, this might more strongly affect her behavior. In Table A2 we repeat the analysis using an alternative measure of *Distance-from-election* based on the *minimum* number of years from now to the next election across all of a director’s board seats. The results remain unchanged.

Among directors, members of the nomination committee are mainly responsible for director and CEO appointments and corporate governance policies (most boards have joint nomination and corporate governance committees). These directors might face greater scrutiny from the labor market over their decision to fire the CEO. In Table A3 we split directors of event firms into members of the nomination committee and the rest. Panel A reports the results for members of the nomination committees of the event firms and Panel B reports the results for board members outside the nomination committees of the event firms. We find that the coefficient on *Distance-from-election* is statistically significant in both cases but it is greater in magnitude for members of nomination committees.

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<sup>11</sup> Since there are not a large number of directors that experienced CEO turnover events in multiple companies nor are there many companies that had multiple CEO turnover events over our time period, we do not have enough variation to introduce director or firm fixed effects in our specification.

Overall, the results shown in Table 2 indicate that there is a significant relation between *Distance-from-election* and CEO turnover–performance sensitivity, suggesting a significant role for director elections in CEO turnover policy. We next perform a series of tests that support a causal interpretation of the relation.

### 3.2. Addressing endogeneity

The challenge to empirically identify a causal effect of *Distance-from-election* on CEO turnover policy is the possibility that an omitted variable drives the relation between *Distance-from-election* and CEO turnover policy. For example, in anticipation of poor performance, firms with weak governance could attract directors who prefer less monitoring, while directors who are more responsive in replacing badly performing CEOs will self-select into firms with strong governance. If the quality of corporate governance correlates with director election cycles (i.e., firms with weak governance have staggered boards with three-year election cycles while firms with strong governance have unitary boards on which directors are up for election every year), then the positive association between *Distance-from-election* and CEO turnover–performance sensitivity might be due not to what we hypothesize (*Distance-from-election* leads to higher CEO turnover–performance sensitivity), but to endogenous matching between firms with strong governance and monitoring directors. We perform three tests to address this concern and help establish causality.

First, we limit the analysis to a sample of directors with tenure of at least three years. This is to mitigate the concern that our results might be due to directors who join a board contemporaneously with the CEO turnover event, and thus it might be some unobservables driving both their joining decision and the turnover event. By requiring that every director should have experienced at least one election cycle prior to the turnover event, it is highly unlikely that any contemporaneous endogenous matching between the directors and the board at the time could have any effect on CEO turnover–performance sensitivity three years later.

Panel A in Table 3 presents the results. We find that, across all specifications, the coefficients on the interaction between ROA and *Distance-from-election* are positive and significant at the 1% level, suggesting a strong effect of director election cycles on CEO turnover–performance sensitivity. We then repeat the analysis while further requiring the sample of directors with tenure of at least six years. Panel B in Table 3 shows that our main results continue to hold. Given that there is at least a six-year gap between a director’s decision to join a board and the board’s decision to replace a CEO, the evidence in Table 3 suggests that any contemporaneous endogenous matching between directors and the board is not likely to drive the results. One caveat to this analysis is that it does not address any endogenous matching that has long-lasting effects.

[Insert Table 3 about here]

Second, to provide further support for a causal interpretation of the relation between *Distance-from-election* and CEO turnover–performance sensitivity, we repeat the analysis using directors’ *Distance-from-election* on *other* boards as a measure of their proximity to elections. In this case, it is highly unlikely that our results are driven by the same factors that influence both director *Distance-from-election* on *other* boards and the CEO turnover decision made by the event firm board. This data structure is helpful for identification. Table 4 presents the results. Our results are similar to those reported in Table 2, thus further supporting the causal link between *Distance-from-election* and CEO turnover–performance sensitivity.

[Insert Table 4 about here]

Finally, we limit the analysis to a sample of firms with unitary boards. The main feature of this test is that the variation in *Distance-from-election* is driven by director election



cycles on *other* boards and furthermore, these directors sit on both unitary and staggered boards. This test provides reassurance that the variation in the *Distance-from-election* measure is unlikely to be driven by the same factors that influence the CEO turnover decision. Moreover, the variation is also unlikely to be driven by directors' self-selection into firms with staggered boards (because, by construction, these directors sit on both types of boards). This test helps mitigate concerns that our results are driven by the endogenous matching of directors who prefer less monitoring with firms having staggered boards. Table 5 presents the results. We find that the coefficients on the interaction between firm operating performance and *Distance-from-election* are positive and significant at the 10% level or lower, supporting the causal interpretation of the results.

[Insert Table 5 about here]

Interestingly, among firms with unitary boards, there is a negative and significant relation between *Distance-from-election* and the likelihood of CEO turnover: the closer a director is to being voted on by other firms' shareholders (smaller *Distance-from-election*), the less likely is it that CEO turnover takes place. Thus, when directors are closer to elections on other boards, the unconditional CEO turnover probability decreases while CEO turnover-performance sensitivity increases.

### 3.3. Robustness Tests

Next we conduct a number of robustness checks on our main findings. In addition to operating performance, the board also has access to stock market performance.<sup>12</sup> Panel A in Table 6 shows that, when we use stock returns as the performance measure, the coefficient on the interaction between stock market performance and *Distance-from-election* is positive and

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<sup>12</sup> We use ROA as the main measure of firm performance because stock prices are forward-looking and they might have already incorporated the market expectation of a forthcoming CEO turnover.

significant. Thus, our result is robust to using an alternative performance measure. Furthermore, Panel B in Table 6 shows that when we include both ROA and stock returns (and their interactions with *Distance-from-election*) in the regression, there remains a strong relation between *Distance-from-election* and CEO turnover–performance sensitivity. The coefficients on both ROA and stock returns are negative and significant, suggesting that underperforming CEOs are more likely to be fired. More importantly, the coefficients on the interactions between ROA and *Distance-from-election* and between stock returns and *Distance-from-election* are positive and significant (with one exception for the interaction between stock returns and *Distance-from-election* when we include industry-times-year fixed effects), suggesting that the closer a director is to facing an election, the higher is CEO turnover–performance sensitivity in her firm.

[Insert Table 6 about here]

Next, we examine whether the results are robust to estimating the CEO turnover regressions at the firm–year level. To perform the analysis, we use the mean of the *Distance-from-election* variable across all board members of a given firm in a given year and Table 7 presents the results. We find that the main results are not affected by estimating the regression specification in Equation (1) at the firm–year level. The coefficient on ROA remains negative and significant, while the coefficient on the interaction term remains positive and significant (with the exception of the last column where after controlling for industry-times-year fixed effects, the interaction terms remains positive and of similar magnitude but it is no longer insignificant).

[Insert Table 7 about here]

We also check to make sure that our main findings are not driven by voluntary CEO

turnover cases. To reduce the possibility that a turnover event is due to CEO age and not poor firm performance, we exclude from the sample CEO turnover events in which the CEOs are close to retirement (63 years old or older). The results are reported in the Appendix (Panel A in Table A4). We find that the coefficient on the interaction term remains positive and significant, both economically and statistically, suggesting that voluntary CEO turnover cases are not likely to drive the results.

The sample of CEO turnover events comes from S&P 1500 firms. The main sample in which we perform the analysis is the universe of all directors covered by BoardEx with firm-level information available from COMPUSTAT. We include all public firm directors in the analysis to capture the variation in *Distance-from-election* based on all seats the directors hold. Since we do not capture CEO turnover events outside S&P 1500 firms, CEO turnover cases are under-measured. We therefore perform an additional robustness test in which we restrict the analysis to S&P 1500 firms. The results are reported in the Appendix (Panel B in Table A4). We find that the relation between *Distance-from-election* and CEO turnover–performance sensitivity remains positive and significant (with one exception for the interaction between ROA and *Distance-from-election* when we include industry–year fixed effects).

#### **4. The underlying mechanism**

So far we have established a robust and plausibly causal relation between director *Distance-from-election* and CEO turnover–performance sensitivity. We document a significant increase in CEO turnover–performance sensitivity when directors are closer to their elections. The natural question is: what drives this relation? In this section, we explore a number of possible explanations.

##### *4.1. Director labor market experience after CEO turnover*

In this section we propose a mechanism that is consistent with greater CEO turnover–performance sensitivity when directors are closer to their elections. We argue that directors who are closer to elections (and therefore face greater exposure to their labor market) are more eager to fire the CEO following poor firm performance if there is a labor market reward for disciplining the CEO. We therefore investigate whether there are any labor market implications for disciplining the CEO.

Following Harford (2003) and Fos and Tsoutsoura (2014), we match directors of CEO turnover firms (i.e., event directors) in the year prior to the CEO turnover event with director cohorts from the universe of BoardEx with the same age, number of directorships, and firm-level operating performance. For each cohort, we calculate the average number of directorships per year over the seven-year period centered on the event year. We then use the difference between an event director’s number of directorships and her matching cohort’s average number of directorships to measure the labor market experience of the event director relative to that of her peers.

We follow Fos and Tsoutsoura (2014) and estimate the following linear probability model:

$$Board\ seat_{idt} = \eta_{id} + \eta_t + \beta_1 Post_{idt} + X_{it}' \gamma + \varepsilon_{idt}, \quad (2)$$

where the dependent variable is the number of seats director  $d$  of firm  $i$  holds on the event firm board during year  $t$  (either 0 or 1) minus the average number of seats held by matched directors (between 0 to 1),  $Post_{idt}$  is an indicator variable that takes a value of one for the three-year period after CEO turnover (and zero otherwise),  $\eta_{id}$  are firm–director fixed effects,  $\eta_t$  are event–year fixed effects, and  $X_{it}$  is a vector of firm-level controls including Size (as measured by  $\log(\text{Sales})$ ), Sales growth, Leverage, and Institutional ownership. The coefficient on  $Post_{idt}$  captures the abnormal change in directorships over the three-year period post CEO turnover relative to the sample of matched directors. The sample contains all director–year observations of CEO event firms from three years before to three years after the CEO turnover. Panel A in Table 8 presents the results.

[Insert Table 8 about here]

In column (1), the coefficient on *Post* indicates that, after a CEO turnover event, directors of event firms are 18% more likely to retain their seats relative to their matched peers. Evidence reported in columns (2) through (5) indicates that the result is robust to controlling for event–year fixed effects (controls for time-invariant characteristics as well as aggregate trends), firm–director fixed effects (controls for firm and director time-invariant heterogeneity as well as for the endogenous matching between firms and directors), and firm-level controls. Thus, there is evidence that directors of firms with CEO turnover events are more likely to retain seats on own boards relative to the sample of matched directors who do not experience CEO turnover events.

To show how event directors retain seats relative to their peers over time, we replace *Post<sub>dit</sub>* with indicators of one, two, and three years after the event. The results are reported in the Appendix (Panel A in Table A5). We find that one year after a CEO turnover event, directors of event firms are 14% more likely to retain their seats relative to the sample of matched directors. The effect increases to 27% by the third year after the event. The results are robust to a variety of fixed effects and firm-level controls.

Next we examine the labor market experience of event directors on *other* boards. We replace the dependent variable in Equation (2) with the number of seats that an event director holds on other boards minus the average number of seats held on other boards by matched directors. Panel B in Table 8 reports the results. Column (1) shows that after experiencing a CEO turnover event, directors are more likely to retain other directorships *relative* to the sample of matched directors. The coefficient on *Post* shows that, on average, directors retain 0.35 more outside directorships in the three years following a turnover event relative to the sample of matched directors. Across all specifications, the relative number of seats retained varies from 0.35 to 0.79 seats on other boards. The economic magnitude of the result is

significant given that an average director in our sample holds close to three board seats. In the Appendix (Panel B in Table A5) we provide evidence for the year-to-year change in directorships on other boards.

To illustrate the labor market implications of CEO turnover events for directors, Panel A in Figure 1 plots the total number of directorships in a seven-year window centered on the CEO turnover event. The blue line plots the number of directorships for directors in CEO turnover event firms and the red line plots the number of directorships for the sample of matched directors. We find that, for directors involved in CEO turnover, the average number of seats on all boards drops from about 3.5 seats in the event year to about 2.5 seats three years after the event (a 29% reduction).<sup>13</sup> Interestingly, matched directors experience an even greater reduction in the number of seats they hold: the total number of directorships held by matched directors decreases from about 3.5 seats to about 1.5 seats (a 57% reduction). Similar results are evident from Panel B, where we plot the number of other directorships in a seven-year window centered on the CEO turnover event.

[Insert Figure 1 about here]

These results help clarify how our findings fit in with those from prior literature showing that poor firm performance is associated with fewer subsequent board seats (Kaplan and Reishus, 1990; Gilson, 1990; Shivdasani, 1993; Farrell and Whidbee, 2000; Harford, 2003; Yermack, 2004; Fos and Tsoutsoura, 2014). Our baseline CEO turnover regression in Equation (1) clearly shows the significant association between poor firm performance and CEO turnover (Table 2)—the CEO turnover event is strongly correlated with firm performance. Therefore, if we do not control for performance, omitted variable bias leads to the findings that directors involved in CEO turnover cases are associated with fewer board

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<sup>13</sup> The extent of board seat losses is of similar magnitude to that of targeted directors in proxy contests (Fos and Tsoutsoura, 2014).

seats in the future. When we control for firm performance by using director characteristics– and firm performance–matched director control cohorts, we remove that specific source of CEO turnover endogeneity (driven by poor performance). We find that while directors of poorly performing firms lose seats, directors who fire their CEOs lose fewer seats. That is, they lose fewer seats relative to directors who do not pull the trigger to fire their CEOs.<sup>14</sup>

Overall, the evidence suggests that CEO turnover events are associated with directors retaining more board seats (relative to their matched directors) both on the event firm board and on other boards. In anticipation of this positive labor market implication for firing CEOs, directors closer to their elections in which shareholders assess director performance are associated with stronger CEO turnover–performance sensitivity.

#### 4.2. *Alternative explanations*

Fich and Shivdasani (2006) show that directors on busy boards on which a majority of independent directors hold three or more directorships are not effective monitors. Could weakened CEO turnover–performance sensitivity be due to the presence of busy directors/boards? To address this question, we first augment the main specification in Equation (1) with measures of director business as well as of its interaction with firm operating performance. We consider a director to be busy if she serves on three or more boards. Table 9 present the results. We find that the presence of busy directors is positively and significantly associated with the frequency of CEO turnover but there is no significant effect of busy directors on CEO turnover–performance sensitivity. The former finding is consistent with the observation that, due to a lack of effective monitoring by their boards, firms with busy directors are more likely to experience negative corporate events such as CEO turnover. Importantly, after controlling for busy directors, we find that the coefficient on the interaction between firm operating performance and *Distance-from-election* is positive

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<sup>14</sup> In contemporaneous work, Ellis, Guo, and Mobbs (2014) find that directors who have had prior experience with a forced CEO turnover event are associated with greater CEO turnover–performance sensitivity, are more likely to be on nominating committees, and have better board meeting attendance.

and significant.

[Insert Table 9 about here]

Second, we also augment the main specification in Equation (1) with a measure of board business as well as its interaction with firm operating performance. We consider a board to be busy if more than half of the board members are busy directors. Table 10 presents the results. Similarly to what we found regarding the effects of busy directors, we find that, while busy boards are positively and significantly associated with the frequency of CEO turnover, there is no significant effect of busy boards on CEO turnover–performance sensitivity. This is consistent with the observation that, due to the lack of effective monitoring by such boards, firms with busy boards are more likely to experience negative corporate events such as CEO turnover. Importantly, after controlling for busy boards, we find that the coefficient on the interaction between firm operating performance and *Distance-from-election* is positive and significant. Thus, the effect of director *Distance-from-election* on CEO turnover–performance sensitivity is incremental to the effects of busy directors and busy boards on CEO turnover decisions.

[Insert Table 10 about here]

Another possible explanation for our findings is that more experienced directors may be more tolerant of CEOs who experience temporary performance setbacks, leading to lower CEO turnover–performance sensitivity. To examine this possibility, we add to our baseline specification a measure of director experience—director tenure and its interaction with firm operating performance. For each director–year, director tenure is the average tenure across all the boards on which a director sits. Table 11 presents the results. Consistent with our conjecture, we find that the presence of more experienced directors is indeed associated with



lower CEO turnover–performance sensitivity. Importantly, however, after controlling for director experience, there remains a positive and significant relation between *Distance-from-election* and CEO turnover–performance sensitivity.

[Insert Table 11 about here]

In summary, we conclude that neither busy directors (boards) nor director experience could explain our findings of lower CEO turnover–performance sensitivities when directors are not faced with immediate elections. In the next section we explore some governance mechanisms that might affect the relation between *Distance-from-election* and CEO turnover–performance sensitivity.

## **5. The role of other governance mechanisms**

In this section, we explore cross-sectional variations in the effect of *Distance-from-election* on CEO turnover–performance sensitivity.

First, we sort the sample firms into high (above median) and low (below median) institutional ownership. The sample median institutional ownership is 57%. Table 12 presents the results. Panel A reports the results for firms with high institutional ownership and Panel B reports the results for firms with low institutional ownership. We find that, for firms with high institutional ownership and hence more institutional monitoring (see, for example, Chen, Harford, and Li, 2007), there is no relation between *Distance-from-election* and CEO turnover–performance sensitivity. Thus, when directors are monitored more closely by institutional shareholders, CEO turnover–performance sensitivity is invariant to director *Distance-from-election*. In contrast, in firms with low institutional ownership and hence less rigorous institutional monitoring, we find a significant relation between *Distance-from-election* and CEO turnover–performance sensitivity in all but one

specification.

[Insert Table 12 about here]

Second, we sort sample firms into large market capitalization firms (top tercile, above \$200 million) and the rest. Masulis and Mobbs (2014) find that directors care more about prestigious boards and work harder on those boards. They identify prestigious boards by market capitalization. We run the baseline regression on the two subsamples. Table 13 presents the results. Panel A reports the results for firms with large market capitalization and Panel B reports the results for firms with small market capitalization. We find that for large firms, there is no relation between *Distance-from-election* and CEO turnover–performance sensitivity. In contrast, for small firms we find a significant relation between *Distance-from-election* and CEO turnover–performance sensitivity across all specifications. These results are consistent with directors on more prestigious boards being more diligent (Masulis and Mobbs, 2014), possibly due to the high visibility and prestige associated with these positions. In contrast, directors on boards of small firms monitor less about CEO turnover–performance sensitivity when they are further away from elections.<sup>15</sup>

[Insert Table 13 about here]

Prior literature suggests that outsider-dominated boards are associated with stronger CEO turnover–performance sensitivity (Weisbach (1988)). We expect that director independence might mitigate their agency incentives—putting their own interests ahead of their shareholders’ interests. Therefore, we split directors of event firms into independent and

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<sup>15</sup> This finding is consistent with that of Harford and Schonlau (2013) that large acquisitions are associated with significantly higher numbers of subsequent board seats for CEOs and directors involved with a deal, irrespective of the performance of the deal. They conclude that the director labor market rewards experience with large deals.

inside directors. Table 14 present the results. Panel A reports the results for independent directors of event firms and Panel B reports the results for inside directors of event firms. Consistent with our conjecture, we find weaker results for the relation between *Distance-from-election* and CEO turnover–performance sensitivity when only independent directors of event firms are considered.

[Insert Table 14 about here]

In summary, our results suggest that there are a number of governance mechanisms that could potentially affect the role of director *Distance-from-election* in CEO turnover policy—such as institutional ownership, firm visibility, and director independence—lending further support to our main thesis that director elections are another important governance mechanism.

## **6. Conclusion**

It is fundamental governance that shareholders elect boards of directors. A great deal of research has focused on the role, size, composition, and impact of boards on firm performance, yet we know relatively little about the role of director elections in corporate governance. In this paper we contribute to the literature by introducing a novel measure of director proximity to elections—*Distance-from-election*—and by examining whether and how director elections matter, using CEO turnover as our experimental setting.

Using a hand-collected sample of more than 30,000 directors nominated for election over the period 2001–2010, we construct a novel measure of director proximity to elections—*Distance-from-election*. We find that the closer a director is to her next election, the higher is CEO turnover–performance sensitivity. Each year closer to director elections is associated with a 23% increase in CEO turnover–performance sensitivity. Three tests support

a causal interpretation of the results. First, when we require directors to have a minimum tenure of three years, there is no material change in our results, suggesting that it is not endogenous matching at the time of CEO turnover event that drives the results. Second, we find similar results when we use director *Distance-from-election* on *other* boards as a measure of their proximity to elections. Third, when we restrict the analysis to firms with unitary boards and use director *Distance-from-election* on *other* boards as a measure of their proximity to elections, there is no material change in our results, suggesting that director self-selection into firms with staggered boards does not drive the results. Cross-sectional tests suggest that, when other governance mechanisms are in place, CEO turnover–performance sensitivity is less strongly affected by *Distance-from-election*. We conclude that director elections have important implications for corporate governance.

## References:

- Aggarwal, R., S. Dahiya, and N.R. Prabhala, 2015. The power of shareholder votes: Evidence from director elections, Georgetown University working paper.
- Bates, T., D. Becher, and M. Lemmon, 2008. Board classification and managerial entrenchment: Evidence from the market for corporate control, *Journal of Financial Economics* 87 (3), 656-677.
- Bebchuk, L., J. Coates, and G. Subramanian, 2002. The powerful antitakeover force of staggered boards: Theory, evidence, and policy. *Stanford Law Review* 54, 887-951.
- Bebchuk, L., and A. Cohen, 2005. The costs of entrenched boards. *Journal of Financial Economics* 78 (2), 409-433.
- Bebchuk, L., A. Cohen, and A. Ferrell, 2009. What matters in corporate governance? *Review of Financial Studies* 22 (2), 783-827.
- Brickley, J., J. Coles, and J. Linck, 1999. What happens to CEOs after they retire? New evidence on career concerns, horizon problems, and CEO incentives, *Journal of Financial Economics* 52 (3), 341-378.
- Cai, J., J. Garner, and R. Walkling, 2009. Electing directors, *Journal of Finance* 64 (5), 2389-2421.
- Chen, X., J. Harford, and K. Li, 2007. Monitoring: Which institutions matter? *Journal of Financial Economics* 86 (2), 279-305.
- Cohen, A., and C.C.Y. Wang, 2013. How do staggered boards affect shareholder value? Evidence from a natural experiment, *Journal of Financial Economics* 110 (3), 627-641.

- Coles, J.L., and C.K. Hoi, 2003. New evidence on the market for directors: Board membership and Pennsylvania senate bill 1310, *Journal of Finance* 58 (1), 197-230.
- Coughlan, A., and R. Schmidt, 1985. Executive compensation, management turnover, and firm performance: An empirical investigation, *Journal of Accounting and Economics* 7 (1-3), 43-66.
- Cremers, K.J.M., L. Litov, and S. M. Sepe, 2014. Staggered boards and firm value, revisited, University of Notre Dame working paper.
- Cziraki, P., and M. Xu, 2014. CEO job security and risk-taking, University of Toronto working paper.
- Denis, D.J., D.K. Denis, and A. Sarin, 1997. Ownership structure and top executive turnover, *Journal of Financial Economics* 45 (1), 193-222.
- Del Guercio, D.G., L.J. Seery, and T. Woidtke, 2008. Do boards pay attention when institutional investors “just vote no”? CEO and director turnover associated with shareholder activism, *Journal of Financial Economics* 90 (1), 84-103.
- Ellis, J., L. Guo, and S. Mobbs, 2014. Directors with forced CEO turnover experience, North Carolina State University working paper.
- Faleye, O., 2007. Classified boards, firm value, and managerial entrenchment, *Journal of Financial Economics* 83 (2), 501-529.
- Fama, E., 1980. Agency problems and the theory of the firm, *Journal of Political Economy* 88 (2), 288-307.
- Fama, E., and M. Jensen, 1983. Separation of ownership and control, *Journal of Law and Economics* 26 (2), 301-325.

- Farrell, K.A., and D.A. Whidbee, 2000. The consequences of forced CEO succession for outside directors, *Journal of Business* 73 (4), 597-627.
- Ferris, S.P., M. Jagannathan, and A.C. Pritchard, 2003. Too busy to mind the business? Monitoring by directors with multiple board appointments, *Journal of Finance* 58 (3), 1087-1111.
- Fich, E.M., and A. Shivdasani, 2006. Are busy boards effective monitors? *Journal of Finance* 61 (2), 689-724.
- Fich, E.M., and A. Shivdasani, 2007. Financial fraud, director reputation, and shareholder wealth, *Journal of Financial Economics* 86 (2), 306-336.
- Fischer, P.E., J.D. Gramlich, B.P. Miller, and H.D. White, 2009. Investor perceptions of board performance: Evidence from uncontested director elections, *Journal of Accounting and Economics* 48 (2-3), 172-189.
- Fos, V., 2015. Disciplinary effects of proxy contests, working paper.
- Fos, V., and M. Tsoutsoura, 2014. Shareholder democracy in play: Career consequences of proxy contests, *Journal of Financial Economics* 114 (2), 316-340.
- Gao, H., J. Harford, and K. Li, 2015. CEO turnover-performance sensitivities in private firms, Nanyang Technological University working paper.
- Gilson, S.C., 1990. Bankruptcy, boards, banks, and blockholders: Evidence on changes in corporate ownership and control when firms default, *Journal of Financial Economics* 27(2), 355-387.
- Gow, I.D., S.S. Shin, and S. Srinivasan, 2014. Consequences to directors of shareholder activism, Harvard Business School working paper.

- Harford, J., 2003. Takeover bids and target directors' incentives: The impact of a bid on directors' wealth and board seats, *Journal of Financial Economics* 69(1), 51-83.
- Harford, J., and R.J. Schonlau, 2013. Does the director labor market offer ex post settling-up for CEOs? The case of acquisitions, *Journal of Financial Economics* 110 (1), 18-36.
- Helland, E., 2006. Reputational penalties and the merits of class action securities litigation, *Journal of Law and Economics* 49 (2), 365-395.
- Huson, M.R., R. Parrino, and L.T. Starks, 2001. Internal monitoring mechanisms and CEO turnover: A long term perspective, *Journal of Finance* 56 (6), 2265-2297.
- Iliev, P., K. Lins, D. Miller, and L. Roth, 2015. Shareholder voting and corporate governance around the world, *Review of Financial Studies* forthcoming.
- Jenter, D., and F. Kanaan, 2010. CEO turnover and relative performance evaluation, *Journal of Finance* forthcoming.
- Jenter, D., and K. Lewellen, 2014. Performance-induced CEO turnover, Stanford University working paper.
- Jiang, W., Wan, H., and S. Zhao, 2014. Reputation concerns of independent directors: Evidence from individual director voting, Columbia University working paper.
- Kaplan, S., and D. Reishus, 1990. Outside directorships and corporate performance, *Journal of Financial Economics* 27 (2), 389-410.
- Levit, D., and N. Malenko, 2014. The labor market for directors and externalities in corporate governance, University of Pennsylvania working paper.
- Masulis, R., and S. Mobbs, 2014. Independent director incentives: Where do talented



directors spend their limited time and energy? *Journal of Financial Economics* 111 (2), 406-429.

Masulis, R., C. Wang, and F. Xie, 2007. Corporate governance and acquirer returns, *Journal of Finance* 62 (4), 1851-1889.

Peters, F.S., and A.F. Wagner, 2014. The executive turnover risk premium, *Journal of Finance* 69 (4), 1529-1563.

Shivdasani, A., 1993. Board composition, ownership structure, and hostile takeovers, *Journal of Accounting and Economics* 16 (1-3), 167-198.

Srinivasan, S., 2005. Consequences of financial reporting failure for outside directors: evidence from accounting restatements, *Journal of Accounting Research* 43 (2), 291-334.

Warner, J.B., R.L. Watts, and K.H. Wruck, 1988. Stock prices and top management changes, *Journal of Financial Economics* 20 (1-2), 461-492.

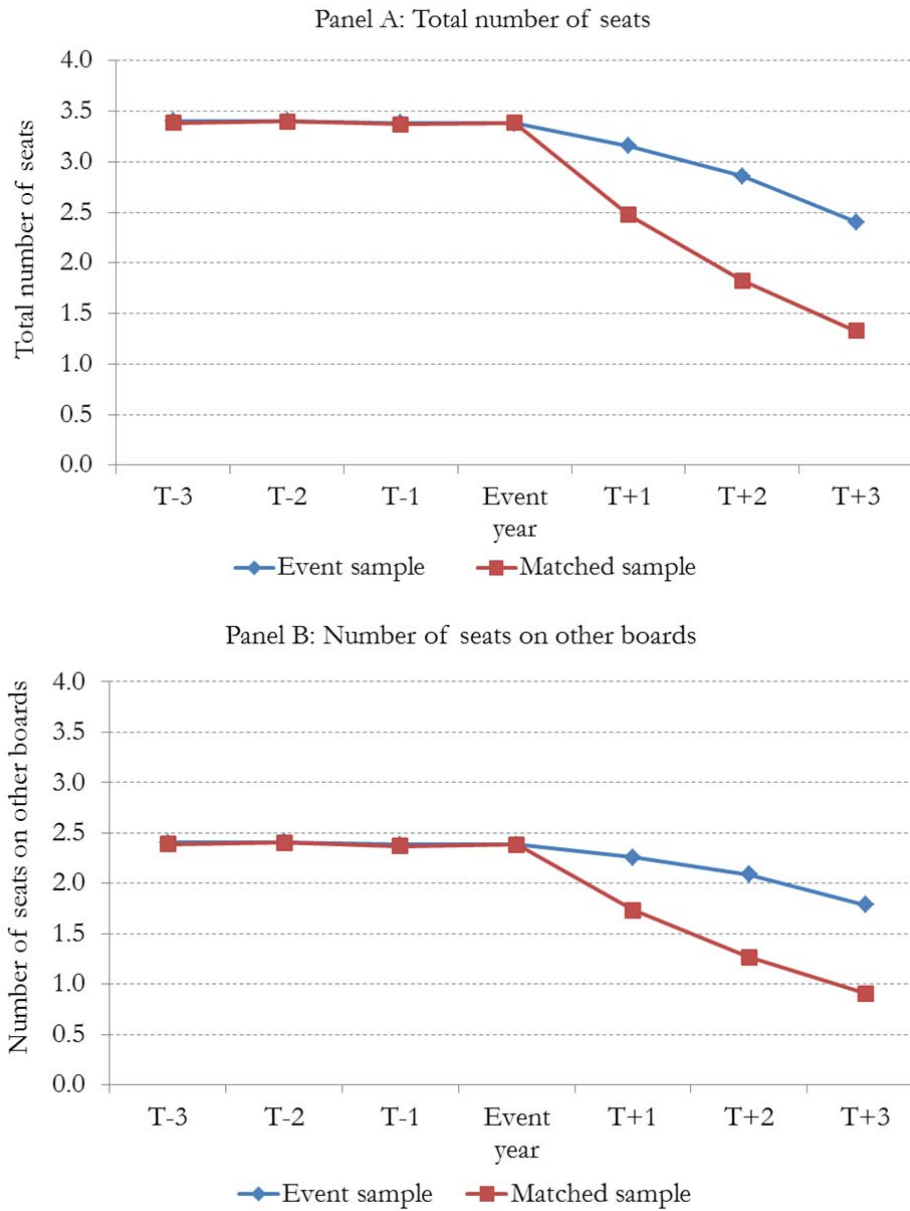
Weisbach, M.S., 1988. Outside directors and CEO turnover, *Journal of Financial Economics* 20 (1-2), 431-460.

Yermack, D., 2004. Remuneration, retention, and reputation incentives for outside directors, *Journal of Finance* 59 (5), 2281-2308.

**Figure 1**

**Director career consequences after CEO turnover**

Panel A presents the mean total number of seats held by the board members of firms that experience CEO turnover (blue line) and the mean total number of seats held by matched board members (red line). For each board member whose firm experiences a CEO turnover event, we identify matching directors from the cohort of directors in the year prior to the event based on director age, total number of seats held, and firm performance (as measured by ROA). Panel B presents the mean number of seats on other boards held by event directors (blue line) and by matched directors (red line).



**Table 1****Summary statistics**

Panel A reports summary statistics for director characteristics. The unit of observation is the director–year. Panel B reports summary statistics for board characteristics. The unit of observation is the firm–year. Panel C reports summary statistics for firm characteristics. The unit of observation is the firm–year. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1st and 99th percentiles.

Variable	Obs (1)	5th Percentile (2)	Median (3)	95th Percentile (4)	Mean (5)	Std. dev. (6)
<i>Panel A: Director Characteristics</i>						
Distance-from-election	141,974	0.000	0.000	2.000	0.494	0.711
Distance-from-election (staggered)	80,251	0.000	1.000	2.000	0.865	0.757
Independence	131,988	0.000	1.000	1.000	0.755	0.417
Number of directorships	121,818	1.000	2.000	7.000	2.811	2.413
Busy director	118,835	0.000	0.000	1.000	0.113	0.317
Tenure	118,033	0.5	5.7	22.7	7.8	7.5
Age	131,437	44.0	61.0	75.0	60.1	9.5
<i>Panel B: Board Characteristics</i>						
Staggered board (two-year cycle)	22,762	0.000	0.000	0.000	0.018	0.116
Staggered board (three-year cycle)	22,762	0.000	0.000	1.000	0.494	0.496
Busy board	19,710	0.000	0.000	1.000	0.070	0.255
Board size	22,856	5.000	8.000	13.000	8.423	2.627
<i>Panel C: Firm Characteristics</i>						
ROA	22,003	-0.220	0.095	0.289	0.081	0.155
Stock return	22,044	-0.627	0.061	1.297	0.159	0.630
Sales (\$m)	22,045	11	291	10,863	2,390	7,575
Assets (\$m)	22,047	22	533	18,092	3,668	10,616
Sales growth	21,945	-0.278	0.079	0.659	0.154	0.566
Leverage	22,047	0.000	0.141	0.576	0.190	0.198
Institutional ownership	21,118	0.038	0.566	0.998	0.536	0.304

**Table 2****The role of director elections: CEO turnover–performance sensitivity**

This table presents the relation between director *Distance-from-election* and CEO turnover–performance sensitivity (Equation (1)). Firm performance is measured by ROA. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
ROA	-0.0544*** [0.0040]	-0.0581*** [0.0040]	-0.0665*** [0.0043]	-0.0613*** [0.0043]
Distance-from-election	-0.0014** [0.0007]	-0.0018*** [0.0007]	-0.0010 [0.0007]	-0.0010 [0.0007]
<b>ROA * Distance-from-election</b>	<b>0.0125***</b> <b>[0.0042]</b>	<b>0.0116***</b> <b>[0.0042]</b>	<b>0.0115***</b> <b>[0.0042]</b>	<b>0.0109***</b> <b>[0.0042]</b>
Sales (log)	0.0131*** [0.0004]	0.0131*** [0.0004]	0.0127*** [0.0004]	0.0125*** [0.0004]
Sales growth	-0.0047*** [0.0007]	-0.0063*** [0.0007]	-0.0060*** [0.0007]	-0.0065*** [0.0007]
Leverage	-0.0134*** [0.0026]	-0.0132*** [0.0026]	-0.0096*** [0.0029]	-0.0096*** [0.0029]
Institutional ownership	0.0423*** [0.0020]	0.0463*** [0.0021]	0.0434*** [0.0022]	0.0452*** [0.0022]
Constant	-0.0516*** [0.0013]	-0.0489*** [0.0021]	-0.0456*** [0.0022]	-0.0496*** [0.0015]
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes
R-squared	0.029	0.031	0.036	0.074
N	156,148	156,148	156,148	156,148

**Table 3****The role of director elections: Directors with predetermined elections**

This table addresses concerns about (contemporaneous) endogenous matching between directors and boards by restricting the sample of directors to those with at least three years (Panel A) and at least six years (Panel B) of tenure. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
<i>Panel A: Directors with at least three years of tenure</i>				
ROA	-0.048*** [0.004]	-0.052*** [0.004]	-0.052*** [0.004]	-0.057*** [0.004]
Distance-from-election	-0.001 [0.001]	-0.001* [0.001]	-0.000 [0.001]	-0.001 [0.001]
<b>ROA * Distance-from-election</b>	<b>0.017*** [0.004]</b>	<b>0.015*** [0.004]</b>	<b>0.016*** [0.004]</b>	<b>0.015*** [0.004]</b>
R-squared	0.029	0.031	0.033	0.036
N	118,129	118,129	118,129	118,129
<i>Panel B: Directors with at least six years of tenure</i>				
ROA	-0.054*** [0.005]	-0.059*** [0.005]	-0.060*** [0.005]	-0.065*** [0.006]
Distance-from-election	-0.002** [0.001]	-0.002*** [0.001]	-0.001 [0.001]	0.001* [0.001]
<b>ROA * Distance-from-election</b>	<b>0.013** [0.005]</b>	<b>0.012** [0.005]</b>	<b>0.013** [0.005]</b>	<b>0.011** [0.005]</b>
R-squared	0.031	0.033	0.036	0.039
N	89,637	89,637	89,637	89,637
Controls	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

**Table 4****The role of director elections: Other boards**

This table helps establish causality by using directors' *Distance-from-election* on other boards as a measure of their proximity to elections. Thus, in this analysis, any variation in director *Distance-from-election* is driven by directors' seats on other boards (not their seats on the event firm board). Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1st and 99th percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
ROA	-0.0571*** [0.0045]	-0.0608*** [0.0045]	-0.0682*** [0.0048]	-0.0606*** [0.0049]
Distance-from-election	0.0024* [0.0015]	0.0015 [0.0015]	0.0012 [0.0015]	0.0013 [0.0014]
<b>ROA * Distance-from-election</b>	<b>0.0144**</b> <b>[0.0070]</b>	<b>0.0147**</b> <b>[0.0070]</b>	<b>0.0170**</b> <b>[0.0070]</b>	<b>0.0155**</b> <b>[0.0070]</b>
Sales (log)	0.0127*** [0.0004]	0.0126*** [0.0004]	0.0122*** [0.0005]	0.0118*** [0.0004]
Sales growth	-0.0039*** [0.0009]	-0.0054*** [0.0009]	-0.0047*** [0.0010]	-0.0053*** [0.0009]
Leverage	-0.0104*** [0.0032]	-0.0102*** [0.0032]	-0.0078** [0.0037]	-0.0071* [0.0037]
Institutional ownership	0.0438*** [0.0026]	0.0481*** [0.0027]	0.0469*** [0.0028]	0.0487*** [0.0028]
Constant	-0.0500*** [0.0016]	-0.0445*** [0.0027]	-0.0408*** [0.0028]	-0.0475*** [0.0018]
<i>R</i> -squared	0.027	0.029	0.034	0.078
<i>N</i>	99,237	99,237	99,237	99,237
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

**Table 5****The role of director elections: Firms with unitary boards**

This table helps establish causality by restricting the sample of firms to those with a unitary board structure. Thus, in this sample variation in director *Distance-from-election* is driven by directors' seats on other boards (and the fact that these directors sit on both unitary and staggered boards). Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
ROA	-0.0539*** [0.0050]	-0.0571*** [0.0050]	-0.0648*** [0.0054]	-0.0532*** [0.0055]
Distance-from-election	0.0097*** [0.0037]	0.0082** [0.0037]	0.0066* [0.0037]	0.0069* [0.0036]
<b>ROA * Distance-from-election</b>	<b>0.0417*</b> <b>[0.0215]</b>	<b>0.0414*</b> <b>[0.0214]</b>	<b>0.0427**</b> <b>[0.0211]</b>	<b>0.0423**</b> <b>[0.0209]</b>
Sales (log)	0.0111*** [0.0005]	0.0110*** [0.0005]	0.0110*** [0.0005]	0.0105*** [0.0005]
Sales growth	-0.002 [0.0011]	-0.0030*** [0.0012]	-0.0027** [0.0012]	-0.0025** [0.0011]
Leverage	-0.0122*** [0.0035]	-0.0126*** [0.0035]	-0.0150*** [0.0042]	-0.0149*** [0.0043]
Institutional ownership	0.0462*** [0.0030]	0.0507*** [0.0031]	0.0469*** [0.0032]	0.0490*** [0.0032]
Constant	-0.0444*** [0.0018]	-0.0370*** [0.0031]	-0.0336*** [0.0032]	-0.0411*** [0.0020]
<i>R</i> -squared	0.028	0.031	0.038	0.101
<i>N</i>	72,668	72,668	72,668	72,668
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

**Table 6****The role of director elections: Stock returns as performance measure**

This table shows the robustness of the analysis reported in Table 2 by using stock returns as an alternative measure of firm performance. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
<i>Panel A: Stock returns as firm performance measure</i>				
Stock return	-0.0030*** [0.0010]	-0.0053*** [0.0010]	-0.0056*** [0.0010]	-0.0059*** [0.0010]
Distance-from-election	-0.001 [0.0007]	-0.001 [0.0007]	0.000 [0.0007]	0.000 [0.0007]
<b>Stock return * Distance-from-election</b>	<b>0.0033***</b> <b>[0.0012]</b>	<b>0.0029**</b> <b>[0.0012]</b>	<b>0.0031**</b> <b>[0.0012]</b>	<b>0.0023*</b> <b>[0.0012]</b>
R-squared	0.028	0.029	0.035	0.073
N	153,717	153,717	153,717	153,717
<i>Panel B: ROA and Stock returns as firm performance measures</i>				
ROA	-0.0532*** [0.0042]	-0.0561*** [0.0042]	-0.0656*** [0.0045]	-0.0603*** [0.0045]
Distance-from-election	-0.0015** [0.0007]	-0.0019*** [0.0007]	-0.0012* [0.0007]	-0.001 [0.0007]
<b>ROA * Distance-from-election</b>	<b>0.0103**</b> <b>[0.0043]</b>	<b>0.0097**</b> <b>[0.0043]</b>	<b>0.0095**</b> <b>[0.0043]</b>	<b>0.0094**</b> <b>[0.0043]</b>
Stock return	-0.002 [0.0010]	-0.0034*** [0.0010]	-0.0036*** [0.0010]	-0.0037*** [0.0010]
<b>Stock return * Distance-from-election</b>	<b>0.0029**</b> <b>[0.0013]</b>	<b>0.0025**</b> <b>[0.0013]</b>	<b>0.0027**</b> <b>[0.0012]</b>	<b>0.0020</b> <b>[0.0012]</b>
R-squared	0.029	0.031	0.036	0.074
N	152,881	152,881	152,881	152,881
Controls	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes



**Table 7****The role of director elections: Firm-level analysis**

This table shows the robustness of the analysis reported in Table 2 by using firm-level data. *Distance-from-election* is the mean of *Distance-from-election* across all board members of a given firm in a given year. Definitions of other variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

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Dependent variable: CEO turnover				
	(1)	(2)	(3)	(4)
Variable				

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ROA	-0.0617*** [0.0112]	-0.0651*** [0.0113]	-0.0696*** [0.0117]	-0.0663*** [0.0120]
Distance-from-election	-0.0041 [0.0027]	-0.0050* [0.0027]	-0.0038 [0.0027]	-0.0039 [0.0028]
<b>ROA * Distance-from-election</b>	<b>0.0269*</b> <b>[0.0152]</b>	<b>0.0256*</b> <b>[0.0151]</b>	<b>0.0255*</b> <b>[0.0151]</b>	<b>0.023</b> <b>[0.0155]</b>
Sales (log)	0.0121*** [0.0009]	0.0121*** [0.0009]	0.0118*** [0.0010]	0.0117*** [0.0010]
Sales growth	-0.0052*** [0.0013]	-0.0065*** [0.0014]	-0.0062*** [0.0015]	-0.0065*** [0.0015]
Leverage	-0.0112* [0.0068]	-0.0109 [0.0068]	-0.0073 [0.0078]	-0.0081 [0.0079]
Institutional ownership	0.0406*** [0.0054]	0.0440*** [0.0054]	0.0421*** [0.0057]	0.0430*** [0.0058]
Constant	-0.0444*** [0.0035]	-0.0427*** [0.0054]	-0.0413*** [0.0055]	-0.0435*** [0.0038]
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes
R-squared	0.028	0.030	0.035	0.066
N	21464	21464	21464	21464

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**Table 8****Director career consequences after CEO turnover**

This table reports changes in the total number of seats held by the board members of firms that experience CEO turnover (Equation (2)). In Panel A, the dependent variable is the difference between the number of seats held in the event firm (either 0 or 1) and the average number of seats held by matched directors in the same year (between 0 and 1). For each board member whose firm experiences a CEO turnover event, we identify matching directors from the cohort of directors in the year prior to the event based on director age, total number of seats held, and firm performance (as measured by ROA). *Post* indicates the three years after CEO turnover. Panel B repeats the analysis in Panel A for the number of seats held on other boards. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

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Dependent variable: the number of seats					
	(1)	(2)	(3)	(4)	(5)
Variable					

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*Panel A: The number of seats on event firm board*

Post	0.18***	0.21***	0.21***	0.21***	0.15***
	[0.01]	[0.01]	[0.01]	[0.01]	[0.01]
R-squared	0.047	0.114	0.091	0.091	0.057
N	18,602	18,602	18,602	18,602	15,891

*Panel B: The number of seats on other boards*

Post	0.35***	0.37***	0.79***	0.79***	0.55***
	[0.04]	[0.03]	[0.04]	[0.04]	[0.04]
R-squared	0.006	0.013	0.083	0.083	0.052
N	21,339	21,339	21,339	21,339	17,354

Controls	No	No	No	No	Yes
Event Year FE	No	Yes	No	Yes	Yes
Firm-Director FE	No	No	Yes	Yes	Yes

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**Table 9****Alternative explanations: Busy directors**

This table explores other possible explanations for the findings reported in Table 2 by controlling for the presence of busy directors. We augment the main specification (Equation (1)) with an indicator variable for busy directors and the interaction between the indicator variable and firm performance. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
ROA	-0.058*** [0.004]	-0.058*** [0.004]	-0.064*** [0.004]	-0.065*** [0.004]
Distance-from-election	-0.001* [0.001]	-0.001* [0.001]	-0.001 [0.001]	-0.001 [0.001]
<b>ROA * Distance-from-election</b>	<b>0.012*** [0.004]</b>	<b>0.011*** [0.004]</b>	<b>0.011*** [0.004]</b>	<b>0.011** [0.004]</b>
Busy director	0.014*** [0.002]	0.015*** [0.002]	0.013*** [0.002]	0.014*** [0.002]
ROA * Busy director	0.006 [0.010]	0.007 [0.010]	0.008 [0.010]	0.008 [0.010]
Sales (log)	0.013*** [0.000]	0.013*** [0.000]	0.012*** [0.000]	0.012*** [0.000]
Sales growth	-0.009*** [0.001]	-0.009*** [0.001]	-0.008*** [0.001]	-0.008*** [0.001]
Leverage	-0.014*** [0.003]	-0.013*** [0.003]	-0.010*** [0.003]	-0.009*** [0.003]
Institutional ownership	0.047*** [0.002]	0.050*** [0.002]	0.045*** [0.002]	0.048*** [0.002]
Constant	-0.053*** [0.001]	-0.066*** [0.004]	-0.048*** [0.002]	-0.063*** [0.004]
<i>R</i> -squared	0.030	0.032	0.035	0.037
<i>N</i>	137,366	137,366	137,366	137,366
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

**Table 10****Alternative explanations: Busy boards**

This table explores other possible explanations for the findings reported in Table 2 by controlling for the presence of busy boards. We augment the main specification (Equation (1)) with an indicator variable for busy boards and the interaction between the indicator variable and firm performance. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1st and 99th percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover Variable	(1)	(2)	(3)	(4)
ROA	-0.053*** [0.004]	-0.054*** [0.004]	-0.060*** [0.004]	-0.060*** [0.004]
Distance-from-election	-0.001** [0.001]	-0.001** [0.001]	-0.001 [0.001]	-0.001 [0.001]
<b>ROA * Distance-from-election</b>	<b>0.013***</b> <b>[0.004]</b>	<b>0.012***</b> <b>[0.004]</b>	<b>0.012***</b> <b>[0.004]</b>	<b>0.011***</b> <b>[0.004]</b>
Busy board	0.040*** [0.004]	0.041*** [0.004]	0.041*** [0.004]	0.041*** [0.004]
ROA * Busy board	0.002 [0.018]	0.004 [0.018]	0.002 [0.017]	0.003 [0.017]
Sales (log)	0.012*** [0.000]	0.012*** [0.000]	0.011*** [0.000]	0.011*** [0.000]
Sales growth	-0.009*** [0.001]	-0.008*** [0.001]	-0.008*** [0.001]	-0.008*** [0.001]
Leverage	-0.013*** [0.003]	-0.012*** [0.003]	-0.010*** [0.003]	-0.009*** [0.003]
Institutional ownership	0.049*** [0.002]	0.051*** [0.002]	0.047*** [0.002]	0.050*** [0.002]
Constant	-0.048*** [0.001]	-0.060*** [0.004]	-0.043*** [0.002]	-0.056*** [0.004]
<i>R</i> -squared	0.032	0.034	0.037	0.039
<i>N</i>	137,366	137,366	137,366	137,366
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

**Table 11****Alternative explanations: Director experience**

This table explores other possible explanations for the findings reported in Table 2 by controlling for director experience (as measured by the average tenure across all directorships). We augment the main specification (Equation (1)) with director tenure and the interaction between director tenure and firm performance. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
ROA	-0.062*** [0.005]	-0.064*** [0.005]	-0.064*** [0.005]	-0.066*** [0.005]
Distance-from-election	-0.001 [0.001]	-0.001 [0.001]	0.000 [0.001]	0.000 [0.001]
<b>ROA * Distance-from-election</b>	<b>0.012*** [0.004]</b>	<b>0.011*** [0.004]</b>	<b>0.012*** [0.004]</b>	<b>0.011*** [0.004]</b>
Tenure	0.000 [0.000]	0.000 [0.000]	0.000 [0.000]	0.000 [0.000]
ROA * Tenure	0.002*** [0.001]	0.002*** [0.001]	0.001** [0.001]	0.001* [0.001]
Sales (log)	0.013*** [0.000]	0.013*** [0.000]	0.013*** [0.000]	0.013*** [0.000]
Sales growth	-0.008*** [0.001]	-0.009*** [0.001]	-0.007*** [0.001]	-0.009*** [0.001]
Leverage	-0.010*** [0.003]	-0.010*** [0.003]	-0.007** [0.003]	-0.007** [0.003]
Institutional ownership	0.043*** [0.002]	0.047*** [0.002]	0.041*** [0.002]	0.045*** [0.002]
Constant	-0.052*** [0.002]	-0.064*** [0.004]	-0.049*** [0.002]	-0.064*** [0.004]
<i>R</i> -squared	0.028	0.030	0.034	0.036
<i>N</i>	132,174	132,174	132,174	132,174
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

**Table 12****The role of director elections: Does institutional ownership matter?**

This table examines whether institutional ownership changes the relation between director *Distance-from-election* and CEO turnover–performance sensitivity. In Panel A, the analysis is limited to firms with high institutional ownership (above the sample median). In Panel B, the analysis is limited to firms with low institutional ownership (below the sample median). Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
<i>Panel A: High institutional ownership</i>				
ROA	-0.040*** [0.008]	-0.051*** [0.008]	-0.072*** [0.009]	-0.060*** [0.009]
Distance-from-election	-0.001 [0.001]	-0.002 [0.001]	0.00 [0.001]	-0.001 [0.001]
<b>ROA * Distance-from-election</b>	<b>0.010</b> <b>[0.008]</b>	<b>0.008</b> <b>[0.008]</b>	<b>0.011</b> <b>[0.008]</b>	<b>0.008</b> <b>[0.008]</b>
R-squared	0.012	0.016	0.024	0.080
N	83,093	83,093	83,093	83,093
<i>Panel B: Low institutional ownership</i>				
ROA	-0.058*** [0.004]	-0.057*** [0.004]	-0.055*** [0.004]	-0.050*** [0.004]
Distance-from-election	0.000 [0.001]	0.000 [0.001]	0.000 [0.001]	0.000 [0.001]
<b>ROA * Distance-from-election</b>	<b>0.010***</b> <b>[0.004]</b>	<b>0.010***</b> <b>[0.004]</b>	<b>0.008**</b> <b>[0.004]</b>	<b>0.005</b> <b>[0.004]</b>
R-squared	0.025	0.026	0.036	0.107
N	73,054	73,054	73,054	73,054
Controls	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

**Table 13****The role of director elections: Does firm size matter?**

This table examines whether firm size changes the relation between director *Distance-from-election* and CEO turnover–performance sensitivity. In Panel A, the analysis is limited to firms with large market capitalization (above \$200 million). In Panel B, the analysis is limited to the rest of the firms (below \$200 million). Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
<i>Panel A: Firms with market capitalization above \$200 million</i>				
ROA	-0.0216*	-0.0258**	-0.0625***	-0.0480***
	[0.0130]	[0.0130]	[0.0151]	[0.0153]
Distance-from-election	0.004	0.004	0.0058*	0.0063**
	[0.0029]	[0.0029]	[0.0030]	[0.0029]
<b>ROA * Distance-from-election</b>	<b>-0.016</b>	<b>-0.018</b>	<b>-0.020</b>	<b>-0.023</b>
	<b>[0.0167]</b>	<b>[0.0166]</b>	<b>[0.0170]</b>	<b>[0.0168]</b>
R-squared	0.005	0.009	0.019	0.103
N	50,778	50,778	50,778	50,778
<i>Panel B: Firms with market capitalization below \$200 million</i>				
ROA	-0.0495***	-0.0520***	-0.0563***	-0.0507***
	[0.0042]	[0.0043]	[0.0044]	[0.0044]
Distance-from-election	-0.0021***	-0.0023***	-0.0015**	-0.0017***
	[0.0006]	[0.0006]	[0.0006]	[0.0006]
<b>ROA * Distance-from-election</b>	<b>0.0160***</b>	<b>0.0155***</b>	<b>0.0148***</b>	<b>0.0135***</b>
	<b>[0.0039]</b>	<b>[0.0039]</b>	<b>[0.0039]</b>	<b>[0.0039]</b>
R-squared	0.029	0.031	0.041	0.091
N	105,374	105,374	105,374	105,374
Controls	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

**Table 14****The role of director elections: Does director independence matter?**

This table examines whether director independence changes the relation between director *Distance-from-election* and CEO turnover–performance sensitivity. In Panel A, the analysis is limited to independent directors of event firms and all directors of non-event firms. In Panel B, the analysis is limited to inside directors and all directors of non-event firms. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
<i>Panel A: Independent directors</i>				
ROA	-0.0470*** [0.0037]	-0.0502*** [0.0037]	-0.0566*** [0.0040]	-0.0525*** [0.0040]
Distance-from-election	-0.0013** [0.0006]	-0.0016*** [0.0006]	-0.0011* [0.0006]	-0.0011* [0.0006]
<b>ROA * Distance-from-election</b>	<b>0.0072*</b> <b>[0.0038]</b>	<b>0.0065*</b> <b>[0.0038]</b>	<b>0.0072*</b> <b>[0.0038]</b>	<b>0.0066*</b> <b>[0.0038]</b>
R-squared	0.027	0.028	0.033	0.065
N	149,044	149,044	149,044	149,044
<i>Panel B: Inside directors</i>				
ROA	-0.0174*** [0.0026]	-0.0176*** [0.0026]	-0.0247*** [0.0029]	-0.0226*** [0.0029]
Distance-from-election	0.000 [0.0004]	0.000 [0.0004]	0.000 [0.0004]	0.000 [0.0004]
<b>ROA * Distance-from-election</b>	<b>0.0077***</b> <b>[0.0029]</b>	<b>0.0077***</b> <b>[0.0029]</b>	<b>0.0087***</b> <b>[0.0029]</b>	<b>0.0082***</b> <b>[0.0029]</b>
R-squared	0.013	0.014	0.018	0.04
N	127,888	127,888	127,888	127,888
Controls	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes



**Appendix:**  
**Table A1**  
**Definitions of variables**

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Variable	Definition
<i>Panel A: Director Characteristics</i>	
Distance-from-election	The average number of years from now until the next election across all directorships of a director
Independence	An indicator of an independent director
Number of directorships	The total number of board seats held by a director
Busy director	An indicator of a director who sits on three or more boards
Tenure	The average number of years a director has served across all directorships
Age	Director age
<i>Panel B: Board Characteristics</i>	
Staggered board (two-year cycle)	An indicator of a staggered board on which all directors serve a two-year term
Staggered board (three-year cycle)	An indicator of a staggered board on which all directors serve a three-year term
Busy board	An indicator of a board with more than half of its directors being busy
Board size	The number of directors on a board
<i>Panel C: Firm Characteristics</i>	
ROA	Return on assets, computed as earnings before interest, taxes, depreciation, and amortization divided by total assets
Stock return	Twelve-month stock return as of fiscal year end
Sales (\$m)	Annual sales, in millions of dollars
Assets (\$m)	Total assets, in millions of dollars
Sales growth	Percentage change in annual sales
Leverage	Book leverage ratio, computed as the book value of debt divided by the book value of debt and the book value of equity.
Institutional ownership	The proportion of outstanding shares held by institutional investors

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**Table A2****The role of director elections: Minimum distance from next election by director-year**

This table presents the relation between director *Distance-from-election* and CEO turnover–performance sensitivity (Equation (1)). *Distance-from-election* is based on the *minimum* number of years from now to the next election across all of a director’s board seats. Firm performance is measured by ROA. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
ROA	-0.0525*** [0.0039]	-0.0563*** [0.0039]	-0.0645*** [0.0041]	-0.0595*** [0.0042]
Distance-from-election	-0.0021*** [0.0006]	-0.0023*** [0.0006]	-0.0014** [0.0007]	-0.0013** [0.0006]
<b>ROA * Distance-from-election</b>	0.0114*** [0.0043]	0.0105** [0.0043]	0.0097** [0.0043]	0.0096** [0.0043]
Sales (log)	0.0131*** [0.0004]	0.0130*** [0.0004]	0.0127*** [0.0004]	0.0125*** [0.0004]
Sales growth	-0.0047*** [0.0007]	-0.0063*** [0.0007]	-0.0060*** [0.0007]	-0.0065*** [0.0007]
Leverage	-0.0132*** [0.0026]	-0.0129*** [0.0026]	-0.0092*** [0.0030]	-0.0092*** [0.0029]
Institutional ownership	0.0422*** [0.0020]	0.0461*** [0.0021]	0.0434*** [0.0022]	0.0452*** [0.0022]
Constant	-0.0512*** [0.0013]	-0.0490*** [0.0021]	-0.0459*** [0.0022]	-0.0495*** [0.0015]
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes
R-squared	0.029	0.031	0.036	0.074
N	155645	155645	155645	155645

**Table A3****The role of director elections: Nomination committee members**

This table examines whether membership on a board's nomination committee changes the relation between director *Distance-from-election* and CEO turnover–performance sensitivity. In Panel A, the analysis is limited to directors on the nomination committees of event firms and all directors of non-event firms. In Panel B, the analysis is limited to directors not on the nomination committees of event firms and all directors of non-event firms. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
<i>Panel A: Members of the nomination committee</i>				
ROA	-0.0382*** [0.0035]	-0.0399*** [0.0035]	-0.0472*** [0.0038]	-0.0440*** [0.0039]
Distance-from-election	-0.0019*** [0.0005]	-0.0021*** [0.0005]	-0.0016*** [0.0006]	-0.0016*** [0.0006]
<b>ROA * Distance-from-election</b>	0.0102*** [0.0036]	0.0097*** [0.0036]	0.0091** [0.0036]	0.0086** [0.0036]
R-squared	0.021	0.022	0.027	0.053
N	138,592	138,592	138,592	138,592
<i>Panel B: Not members of the nomination committee</i>				
ROA	-0.0511*** [0.0036]	-0.0530*** [0.0036]	-0.0580*** [0.0039]	-0.0533*** [0.0039]
Distance-from-election	-0.0017*** [0.0006]	-0.0019*** [0.0006]	-0.0013** [0.0006]	-0.0012** [0.0006]
<b>ROA * Distance-from-election</b>	0.0074** [0.0037]	0.0069* [0.0037]	0.0071* [0.0037]	0.0067* [0.0037]
R-squared	0.026	0.028	0.033	0.066
N	144,528	144,528	144,528	144,528
Controls	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

**Table A4****The role of director elections: Additional robustness tests**

This table shows the robustness of the analysis reported in Table 2 by removing CEO turnover cases in which the CEO is above 63 years of age (Panel A), limiting the sample to S&P 1500 firms (Panel B), and ending the sample period at the end of 2008 (Panel C). Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
<i>Panel A: Exclude CEO retirements</i>				
ROA	-0.0474*** [0.0041]	-0.0493*** [0.0041]	-0.0603*** [0.0044]	-0.0542*** [0.0045]
Distance-from-election	-0.001 [0.0007]	-0.0013* [0.0007]	0.000 [0.0007]	0.000 [0.0007]
<b>ROA * Distance-from-election</b>	<b>0.0158***</b> <b>[0.0043]</b>	<b>0.0150***</b> <b>[0.0043]</b>	<b>0.0146***</b> <b>[0.0043]</b>	<b>0.0136***</b> <b>[0.0042]</b>
R-squared	0.024	0.026	0.033	0.074
N	131,052	131,052	131,052	131,052
<i>Panel B: S&amp;P 1500 sample</i>				
ROA	-0.1020*** [0.0128]	-0.1116*** [0.0128]	-0.1800*** [0.0140]	-0.1651*** [0.0143]
Distance-from-election	-0.0050** [0.0024]	-0.0057** [0.0023]	-0.0040 [0.0023]	-0.0030 [0.0023]
<b>ROA * Distance-from-election</b>	<b>0.0300**</b> <b>[0.0142]</b>	<b>0.0288**</b> <b>[0.0141]</b>	<b>0.0247*</b> <b>[0.0140]</b>	<b>0.0210</b> <b>[0.0140]</b>
R-squared	0.003	0.008	0.017	0.082
N	78,416	78,416	78,416	78,416
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

**Table A4 – cont.**


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Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
<i>Panel C: Pre-2009 period</i>				
ROA	-0.0520***	-0.0539***	-0.0641***	-0.0600***
	[0.0045]	[0.0045]	[0.0048]	[0.0049]
Distance-from-election	-0.0015**	-0.0017**	-0.001	-0.001
	[0.0007]	[0.0007]	[0.0007]	[0.0007]
<b>ROA * Distance-from-election</b>	<b>0.0111**</b>	<b>0.0104**</b>	<b>0.0106**</b>	<b>0.0103**</b>
	<b>[0.0046]</b>	<b>[0.0046]</b>	<b>[0.0046]</b>	<b>[0.0045]</b>
R-squared	0.030	0.031	0.038	0.073
N	134,172	134,172	134,172	134,172
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

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**Table A5****Director career consequences after CEO turnover: Robustness tests**

This table reports changes in the total number of seats held by the board members of firms that experience CEO turnover (Equation (2)). In Panel A the dependent variable is the difference between the number of seats held in the event firm (either 0 or 1) and the average number of seats held by matched directors in the same year. For each board member whose firm undergoes a CEO turnover event, we identify matching directors from the cohort of directors in the year prior to the event based on director age, total number of board seats held, and firm performance (as measured by ROA).  $Post(t+k)$  indicates  $k$  years after CEO turnover in year  $t$ . Panel B repeats the analysis shown in Panel A for the number of seats held on other boards. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. \*\*\*, \*\*, \* correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

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Dependent variable: the number of seats					
	(1)	(2)	(3)	(4)	(5)
Variable					

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*Panel A: The number of seats in event firms*

Post (t+1)	0.14*** [0.01]	0.18*** [0.01]	0.16*** [0.01]	0.16*** [0.01]	0.11*** [0.01]
Post (t+2)	0.21*** [0.01]	0.25*** [0.01]	0.22*** [0.01]	0.22*** [0.01]	0.18*** [0.01]
Post (t+3)	0.27*** [0.01]	0.32*** [0.01]	0.29*** [0.01]	0.29*** [0.01]	0.23*** [0.02]
R-squared	0.066	0.142	0.108	0.108	0.071
N	18,602	18,602	18,602	18,602	15,891

*Panel A: The number of seats on other boards*

Post (t+1)	0.19*** [0.04]	0.22*** [0.04]	0.55*** [0.04]	0.55*** [0.04]	0.42*** [0.04]
Post (t+2)	0.52*** [0.05]	0.54*** [0.04]	0.88*** [0.05]	0.88*** [0.05]	0.65*** [0.05]
Post (t+3)	0.71*** [0.05]	0.75*** [0.05]	1.13*** [0.05]	1.13*** [0.05]	0.90*** [0.06]
R-squared	0.013	0.02	0.105	0.105	0.069
N	21,339	21,339	21,339	21,339	17,354

Controls	No	No	No	No	Yes
Event Year FE	No	Yes	No	Yes	Yes
Firm-Director FE	No	No	Yes	Yes	Yes

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