Do Director Elections Matter?*

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Abstract

Using a hand-collected sample of election nominations for more than 30,000 directors over the period 2001–2010, we construct a novel firm-level measure of director proximity to elections—*Years-to-election*. Since directors often serve on multiple boards, the measure varies not only with director's nomination status in a given firm, but also with her nomination status on other boards. We find that the closer members of a board are to their next director elections, the higher is CEO turnover–performance sensitivity. The results are driven by board members who are likely to influence CEO turnover decisions, such as chairmen and nomination committee members. A series of further tests—including tests that exploit variation in *Years-to-election* that comes from other boards—supports a causal interpretation. Cross-sectional tests further show that, when other governance mechanisms are in place, CEO turnover–performance sensitivity is less affected by board *Years-to-election*. We conclude that the exposure of director to elections has 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. Failure to grant shareholders the opportunity to effectively monitor directors weakens the incentive alignment between shareholders and directors and hence between shareholders 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.

Prior research has focused on the role of voting outcomes of director elections in aligning directors' incentives (e.g., Cai, Garner, and Walkling, 2009; Fischer et al., 2009; Aggarwal, Dahiya, and Prabhala, 2015; Iliev et al., 2015). Nevertheless, the number of votes received by a director is related to firm and director performance. Thus, when investigating the effects of voting outcomes on firm policies, it is challenging to disentangle the effects that are due to the number of votes the director receives and the effects that are due to the performance of the firm. In this paper, we aim to isolate the effects of director elections in aligning directors' incentives. We introduce a novel measure of director proximity to elections—*Years-to-election*—and examine whether and how director elections matter, using CEO turnover as our focal corporate event.

Director elections are run in two distinctive ways in the US. With unitary boards, directors are elected every year. Thus, for a director sitting on a unitary board, the number of years from a given year to the next election is zero. With staggered boards, directors are elected every three (occasionally two) years. Thus, for a director sitting on a staggered board (with three classes of directors), the number of years from a given year to the next election is zero when she is nominated for re-election and is two years in the following year (after the election); there is a time-series variation in a director's closeness to her next election if she sits on a staggered board. Importantly, some directors also sit on multiple boards with different director-election cycles, such that in a given year, a director might be close to one director election and further away from another director election. For each director-year, our new measure, *Years-to-election*, is the average number of years from a given year to the next election across all of a director's board seats. Because directors seat of multiple boards, a

substantial part of variation in the number of years to the next election is driven by election cycles on other firms. To construct this variable, we hand-collect data on board structure (unitary versus staggered boards) and on director election cycles, i.e., which year a director is in her multi-year term and whether a director is nominated for election in a given year for more than 30,000 directors over the period 2001–2010.

A key responsibility of a board of directors is hiring and firing a firm's CEO. If shareholder scrutiny via director elections matters, we would expect to see our measure of director elections affect CEO turnover policy, particularly, CEO turnover–performance sensitivity. Using a large and comprehensive sample of directors and CEO turnover cases over the period 2001–2010 and measuring director *Years-to-election* at the firm-year level as the average across members of a board, we examine the relation between director elections and CEO turnover. We find that the closer members of a board are to their next director elections, the higher is their firm's CEO turnover–performance sensitivity, suggesting that there is a significant role of director elections in how boards make CEO turnover decisions. In terms of economic significance, a one-standard deviation change in board *Years-to-election* is associated with a 15% 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.

We find that not all board members matter equally: only *Years-to-election* of Chairman of the Board and members of the nomination committee have significant influence on CEO turnover. Moreover, we find that, for firms with separate CEO and Chairman of the Board, there is significant effect of board *Years-to-election* on CEO turnover–performance sensitivity, whereas for firms with CEOs also serving as Chairman of the Board, there is no effect of board *Years-to-election* on CEO turnover policy. Thus, when board members have little power to affect the CEO turnover policy, *Years-to-election* plays little role.

The challenge involved in empirically identifying a causal effect of board *Years-to-election* on CEO turnover policy is the possibility that an omitted variable drives the relation between *Years-to-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 significant association between board *Years-to-election* and CEO turnover–performance sensitivity might be due to endogenous matching between firms with staggered boards and directors who have preference to monitor less the CEO.

We perform four 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 the endogenous matching between director election cycle and CEO turnover event. Now with every director having experienced at least one election cycle prior to the turnover event, it is highly unlikely that any contemporaneous 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 board *Years-to-election* and CEO turnover–performance sensitivity, we repeat the analysis using each director's *Years-to-election* on *other* boards as a measure of their proximity to elections. As such, it is less likely that the variation in the *Years-to-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.

Third, we show that our results are not driven by director self-selection into firms with staggered boards that prior work has shown are associated with bad corporate governance practices (e.g., Bebchuk and Cohen, 2005). For this test we limit the analysis to firms with unitary boards and to directors who serve on these boards and on one additional staggered board. In this case, these directors have chosen the same number of board seats involving both a unitary and a staggered board, suggesting them having the same level of preference for staggered board seats. Moreover, the variation in the *Years-to-election* measure comes entirely from other boards. Our main findings remain, further supporting a causal interpretation.

Finally, we analyze pre-existing trends in the CEO turnover–performance sensitivity. We identify the very first year when a firm performance drops, and we then introduce interactions of board *Years-to-election* and indicators for the three years prior to the first bad performance. We find that there is no relation between board *Years-to-election* and CEO turnover–performance sensitivity in the years leading to the poor performance, further supporting a causal interpretation.

We conduct a number of robustness checks on our main findings. In our main analysis, the director-year level *Years-to-election* is the average number of years from a given year to the next election across all of a director's board seats. As a robustness check, for each director-year, we use the *minimum* number of years from a given year to the next election across all board seats of a director. Our main findings remain unchanged. Next, we exclude from the sample event CEOs who are close to retirement (at least 63 years old) to reduce the possibility that their turnover is due to age and not performance. Our main findings remain unchanged.

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 director 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 are not effective monitors. Could the effect of director *Years-to-election* on 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 *Years-to-election* on CEO turnover–performance sensitivity. Furthermore we show that our results remain robust when we control for board independence. Also, we find that, firms with high institutional ownership and hence more institutional monitoring

have higher chances of CEO turnover. Importantly, the effect of board Years-to-election remains positive and significant. Finally, we show that our results are not driven by less experienced directors.

Our paper contributes to the literature along a number of dimensions. First, our paper contributes to a small but growing body of research on director elections (e.g., Cai, Garner, and Walkling, 2009; Fischer et al., 2009; Aggarwal, Dahiya, and Prabhala, 2015; Iliev et al., 2015). For example, 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. 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.[1] Importantly, a series of tests suggests the documented effects are likely to have a causal interpretation.

Second, our paper contributes to the literature on staggered boards (e.g., Bebchuk, Coates, and Subramanian, 2002; Bebchuk and Cohen, 2005; Faleye, 2007; Masulis, Wang, and Xiem, 2007; Bates, Becher, and Lemmon, 2008; Bebchuk, Cohen, and Ferrell, 2009; Cohen and Wang, 2013; Cremers, Litov, and Sepe, 2014). While a number of studies have established the negative association between the presence of staggered boards and firm value as captured by Tobin's Q, Cremers, Litov, and Sepe (2014) show that the relation is weaker when longer time-series evidence is concerned. Our paper is mainly related to Faleye (2007), who 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 boards), 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 market for directorships, leading to lower CEO turnover–performance

[1] 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.

sensitivity.

Our paper is also related to the literature on labor market for directors. Prior work has shown that directors in better performing firms, directors who reject antitakeover provisions, 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).[2] 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), or financial fraud (Fich and Shivdasani, 2007) 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).[3]

Finally, our paper contributes to the literature on CEO turnover. 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 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, 2015; Gao,

[2] Levit and Malenko (2015) 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.

[3] 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.

Harford, and Li, 2015). We contribute to that literature by introducing director *Years-to-election* as a novel factor that affects CEO turnover–performance sensitivity, highlighting an overlooked factor in CEO turnover policy—the labor market for directorships, and by extension, in other corporate policies.[4]

2. Data

2.1 Data Sources

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 versus staggered boards) are hand-collected from proxy statements available through EDGAR. For companies with a staggered board structure, we further hand-collect information on director election cycles, i.e., for each director-year, which year a director is in her multi-year term and whether this is an election year for her or not. This information is then 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 (2015), Peters and Wagner (2014), and Jenter and Lewellen (2014). Throughout our empirical analyses when constructing the firm-year level board *Years-to-election*, we remove firm–director–year observations if the director is the CEO. The final sample contains 4,048 firms, 30,867 directors, and 878 CEO turnover events over the period 2001–2010.

2.2 Years-to-election measure

We first construct the measure of Years-to-election at the director-year level and then we aggregate it at the firm-year level. At the director-year level, to capture how close a director is

[4] In related work, Cziraki and Xu (2014) document significant effects of the threat of dismissal on CEO incentives with a focus on corporate risk-taking.

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 a given year to the next election across all directorships. We call this variable director "*Years-to-election*." By definition, at the director-year level, *Years-to-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).[5] The upper bound of two years is due to the longest possible election cycle among US corporate boards, which is three years. Appendix B gives an example of the construction of the measure.

At the firm-year level, to capture on average how close the members of a board are to their next elections, we construct board "*Years-to-election*" as the average of director *Years-to-election* across all members of a board.

The variation in our Years-to-election measure comes from directors who serve on multiple boards with (possibly) different board structures. In one extreme case, when each director has only one board seat and that board is unitary, everyone is re-elected every year, and our Years-to-election measure takes a value of zero for every board-year. In another extreme case, when each director has only one board seat and that 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 so there is no variation within firm. In reality, many directors sit on multiple boards and some of them are unitary, and some of them are staggered, leading to cross-sectional and also time-series variation in the *Years-to-election* measure.

Table 1 provides descriptive statistics of the Years-to-Election measure. Panel A presents summary statistics at the director level. Across the entire sample of directors, our director *Years-to-election* measure has a sample mean of 0.494 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 director *Years-to-election* is close to one year.[6] Importantly, there is substantial variation in the *Years-to-election* measure: the cross-director

[5] 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*.

[6] Note that when we consider directors of firms with staggered boards, some of these directors have directorships in firms with a unitary board structure. Therefore the average director *Years-to-election* is below one-and-a-half years.

standard deviation is 0.711 in the full sample. When we calculate the within-director standard deviation of the *Years-to-election* measure, we find that the average within-director standard deviation is 0.450, suggesting that there is a substantial time-series variation in the *Years-to-election* measure.

Panel B summarizes the measure at the firm level. At the firm-year level, our key variable of interest—board *Years-to-election*—has a sample mean of 0.483 years, which means that on average the entire board is expected to be voted on in about half a year. The cross-firm standard deviation is 0.444 in the full sample. Moreover, the average within-board standard deviation is 0.145, suggesting that a substantial part of the variation in our key variable of interest comes from time-series variation.

[Insert Table 1 about here]

2.3 Additional Summary Statistics

Table 1 provides descriptive statistics pertaining to our sample. Detailed variable definitions are provided in Table A1 in the Appendix. Panel A presents 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 the SOX). The average (median) number of directorships is 2.8 (2.0) similar to the average number of directorships for Boardex covered firms in Fos and Tsoutsoura (2014). 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 firm characteristics. Half of the sample firms have adopted staggered boards, with a majority of them having three-year election cycles (about two percent of the sample firms have a two-year election cycle). More than half of sample firms have CEOs also serving as Chairman of the Board. We consider boards to be busy if more than half of the board members are busy directors with three or more board seats. 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. Other firm characteristics are fairly representative of COMPUSTAT firms. It is worth noting that the

sample average (median) institutional ownership is 54% (57%).

3. Main results

3.1. Board Years-to-election and the sensitivity of CEO turnover to performance

In this section, we study the effect of board *Years-to-election* on the sensitivity of CEO turnover to firm performance. To perform the analysis, we estimate the following linear probability model:[7]

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

where the dependent variable is $CEO\ turnover_{it}$, which takes the value of one if firm i changes its CEO in year t and zero otherwise, η_t are year fixed effects, η_j are industry fixed effects, η_{jt} are industry-times-year fixed effects, ROA_{it} is return on assets, $Years - to - election_{it}$ is a measure of firm i directors' proximity to their next director elections using the average of director *Years-to-election* across all directors in firm i, and X_{it} is a vector of firm-level controls including Size (as measured by log(Sales)), Sales growth, and Leverage. All variables are defined in Table A1. The main variable of interest is the interaction term, which captures the effect of board *Years-to-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. A one-standard deviation change in ROA is associated with about 1% change in chances of CEO turnover. Furthermore, we find that the coefficient on the interaction between ROA and *Years-to-election* is positive and significant at the 5% level, suggesting that the closer members of a board to their next director elections, the higher is CEO turnover–performance sensitivity. Specifically, we observe that CEO turnover–performance sensitivity is the highest when members of the board are in their election year (that is, board *Years-to-election* is zero). In terms of economic significance, a one-standard deviation change in board *Years-to-election* is associated with a 15% change in

[7] The specification is motivated by prior work (Huson, Parrino, and Starks, 2001; Jenter and Kanaan, 2015). Undocumented evidence suggests that the results are similar when we estimate a logit model.

CEO turnover–performance sensitivity while holding other variables at their sample averages.[8]

[Insert Table 2 about here]

We next show that the results are robust to the inclusion of year and both industry and 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 no drive the results. Moreover, the results shown in column (3) reveal that the effect of *Years-to-election* almost does not change when we augment the regression with both industry and year fixed effects, implying that industry-specific variables are not driving the results. The coefficient on the interaction term remains positive and significant, both statistically and economically: a one-year change in board *Years-to-election* is associated with an 17% change in CEO turnover–performance sensitivity while holding other variables at their sample averages. In Table A2 column (1) in the Appendix, we replace industry and year fixed effects with industry-times-year fixed effects. We find that our main results are robust to controlling for any (either observable or unobservable) time-varying industry-level variables.

Among directors, Chairman of the Board, and members of the nomination committee are mainly responsible for director and CEO appointments. We therefore conjecture that *Years-to-election* will have a stronger association with the CEO turnover policy when chairmen and nomination committee members are concerned (relative to rest of the board). In Table 3 we measure board *Years-to-election* using only Chairman of the Board (columns (1)-(3)), using only members of the nomination committee (columns (4)-(6)), and using the rest of the board who are neither Chairman of the Board nor members of the nomination committee (columns (7)-(9)). We find that the coefficients on the interaction between ROA and board *Years-to-election* are statistically significant only in cases where directors under consideration are either Chairman of the Board or members of the nomination committee.[9]

[8] In addition to our main findings, we also find that large firms and firms with low sales growth, and low leverage 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).

[9] In Table A2 columns (2) and (3), we replace industry and year fixed effects with industry-times-year fixed effects and show that our main findings remain.

Importantly, when we restrict the analysis to the other directors in columns (7)-(9) the coefficients on the interaction between ROA and board *Years-to-election* are not only statistically insignificant, but are also closer to zero economically. Consistent with our conjecture, the effect of director elections on CEO turnover policy is more prominent for those directors who are directly responsible for the CEO turnover decision.

[Insert Table 3 about here]

To above evidence suggests that the CEO turnover policy depends on *Years-to-election* of Chairman of the Board. We further conjecture that having the CEO serving as Chairman of the Board would substantially reduce the sensitivity of the CEO turnover policy to *Years-to-election*. This is because the CEO serving as Chairman of the Board can mitigate the impact of *Years-to-election* of other board members. We sort the sample of firms into firms where the roles of CEO and Chairman of the Board are separate and firms where the CEO also serves as Chairman of the Board. About 56% of the sample firm-year observations have CEOs also serving as Chairman of the Board. Table 4 presents the results. We find that board *Years-to-election* has a significant effect on CEO turnover–performance sensitivity across all specifications in firms that separate the role of CEO from that of Chairman of the Board (Panel A). In stark contrast, we find that the interaction between ROA and board *Years-to-election* is not significant across all specifications in firms whose CEOs are also Chairman of the Board.

[Insert Table 4 about here]

The prior literature has shown that having the CEO serving as Chairman of the Board is bad corporate governance practice (e.g., Morse, Nanda, and Seru, 2011). Our evidence highlights a novel channel through which CEO-Chairman duality affects corporate governance. We find that whereas the CEO serving as Chairman of the Board substantially reduces the impact of *Years-to-election* on the CEO turnover policy, *Years-to-election* can induce Chairman of the Board to fire the CEO after bad performance.

In our main analysis, the director-level *Years-to-election* measure is based on the average number of years from a given year 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 A3 we repeat the analysis using an alternative measure of board *Years-to-election* which is based on at the director-year level, the *minimum* number of years from a given year to the next election across all board seats of a director. We find that our main results remain unchanged: the coefficients on the interaction between ROA and board *Years-to-election* are of the same significance and similar magnitude as those in our baseline specifications in Table 2.

In our main analysis, we do not differentiate between forced and voluntary turnover cases and show significant turnover–performance sensitivity[10]. As a further robustness check, we exclude from the sample CEO turnover cases where the CEOs are close to retirement (63 years old or older). The remaining CEO turnover cases are therefore less likely to be voluntary. The results are reported in Table A4 in the Appendix. We find that the coefficients on the interaction term are positive and significant at the 1% level, and are of bigger magnitude than those in our baseline specifications, suggesting that the effect of director elections on turnover–performance sensitivity is bigger for performance-based CEO turnover cases.

Overall, the results shown in Tables 2, 3, and 4 indicate that there is a significant relation between board *Years-to-election* and CEO turnover–performance sensitivity, suggesting a significant role for director elections in CEO turnover policy. Importantly, the results are driven by board members who are likely to influence CEO turnover decisions, such as chairmen and nomination committee members. 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 board *Years-to-election* on CEO turnover policy is the possibility that an omitted variable drives the effect of *Years-to-election*

[10] The existing literature on CEO turnover has debated whether and how to classify turnover cases into forced versus voluntary ones. On the one hand, voluntary turnover cases may arise due to normal CEO retirement, which need not be associated with poor prior performance (Huson, Malastesta, and Parrino, 2004). On the other hand, Kaplan and Minton (2012) and Jenter and Lewellen (2014) argue that existing algorithms fail to successfully distinguish forced and voluntary turnover, leading to a downward bias in the estimated turnover–performance sensitivity. In this paper, our baseline specification includes all turnover cases (and we find turnover–performance sensitivity) and in our robustness check, we exclude turnover cases due to retirement.

on 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 association between *Years-to-election* and CEO turnover–performance sensitivity might be due not to what we hypothesize (*Years-to-election* leads to higher CEO turnover–performance sensitivity), but to endogenous matching between firms with strong governance and directors who are better monitors. We perform four 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 prefer less monitoring and join a board contemporaneously with the CEO turnover event, and thus it might be an omitted variable driving both their joining the board decision, *Yea*rs-*to-election*, and the CEO turnover policy. By requiring that every director should have experienced at least one election cycle prior to the turnover event, we mitigate the possibility that a contemporaneous matching between the directors and the board has an effect on CEO turnover–performance sensitivity three years later. Panel A in Table 5 presents the results. We find that, across all specifications, the coefficients on the interaction between ROA and *Years-to-election* are positive and significant at lower than the 5% 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 5 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 5 suggests that the timing of directors joining the firm is unlikely to drive the results.

[Insert Table 5 about here]

There remains a concern that an endogenous matching between directors with certain

monitoring preferences (i.e., director type) and boards with certain level of governance (i.e., firm type) is driving the results. For example, the results might be due to matching between directors who always prefer less monitoring and staggered boards. Directors who monitor less might be more likely to choose staggered boards and directors who monitor more might have a preference for unitary boards and this selection might be driving our results. That is, whereas the previous test rules out the possibility that time-series matching between directors and boards is driving the results, there remains a concern that cross-sectional differences in director type and boards' levels of governance are driving the results.

We perform two tests to address this concern and provide further support for a causal interpretation of the relation between board *Years-to-election* and CEO turnover–performance sensitivity. We begin from repeating the analysis in Table 2 using each director's *Years-to-election* on *other* boards as a measure of their proximity to elections. The board-level *Years-to-election* is now defined as the average of directors' modified *Years-to-election* excluding their home board. In this case, it is less likely that the variation in the *Years-to-election* on other boards is related to factors that influence the CEO turnover decision made by the home board. Table 6 Panel A presents the results. We find no significant change in the results from our baseline specifications in Table 2, supporting a causal link between board *Years-to-election* and CEO turnover–performance sensitivity.

[Insert Table 6 about here]

Next, to address the concern that our results are driven by poorly-monitoring directors self-selecting into firms with staggered boards that prior work has shown are associated with bad corporate governance practices (see, for example, Bebchuk and Cohen, 2005), we limit the analysis to a sample of directors who sit on a unitary board and have one additional seat on a staggered board. In this case, director preferences for staggered boards is unlikely to drive our results because these directors have chosen the same number of board seats involving both a unitary and a staggered board. Further, the variation in *Years-to-election* solely comes from time-series variation in *Years-to-election* on the outside staggered board and not the home board which is unitary. Table 6 Panel B presents the results. We show that the coefficient on the interaction between ROA and *Years-to-election* is positive and

significant, suggesting that the closer those directors to their next director elections on staggered boards, the higher is CEO turnover–performance sensitivity.

Three tests described above mitigate the concern that either time-series or cross-sectional matching between directors and boards is driving the relation between board *Years-to-election* and CEO turnover–performance sensitivity. There remains a possibility, however, that there is a trend in CEO turnover–performance sensitivity and that the trend is somehow related to board *Years-to-election* measure. Whereas such a possibility is arguably not likely, we next perform a test that directly addresses this concern. To perform the test, we define a time-series event that indicates a year of bad performance—*First bad ROA*. Specifically, *First bad ROA* indicates the first year when a firm's ROA drops below the 40th percentile among all firms in that year.[11] Table 7 shows that chances of CEO turnover are significantly higher during the First bad ROA year. Specifically, chances of CEO turnover increase by about 2% when firm's ROA drops below the 40th percentile among all firms in that year. The coefficient of the interaction between First bad ROA and *Years-to-election* shows that *Years-to-election* have a significant impact on chances of CEO turnover after bad performance.

[Insert Table 7 about here]

Next we can test whether there is trend in the CEO turnover–performance sensitivity and that the trend is somehow related to board *Years-to-election* measure. To do that, we introduce interactions of board *Years-to-election* during *First bad ROA* year and indicators for the three years prior to First bad ROA year. Table 7 shows that board *Years-to-election* is not significantly related to CEO turnover in the years leading to the poor performance, further supporting a causal interpretation of the results.

4. The underlying mechanism

So far we have established a robust and plausibly causal effect of board *Years-to-election* on

[11] We use 40th percentile cutoff because is delivers the strongest relation between board *Years-to-election* and CEO turnover–performance sensitivity. The idea here is to show that this relation is not significant during years that precede poor performance. We therefore use the specification that delivers the strongest results.

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 effect?

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 a CEO following poor firm performance if there is a labor market reward for disciplining the CEO. Moreover, the sensitivity of the CEO turnover policy to *Years-to-election* on other boards suggests that the labor market reward for disciplining the CEO to go beyond the event firm. 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 matching director 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:

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

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 director cohorts (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), η_t are event–year fixed effects, η_{id} are firm–director fixed effects, and X_{it} is a vector of firm-level controls including Size (as measured by log(Sales)), Sales growth, and Leverage. The coefficient on $Post_{idt}$ captures the abnormal change in directorships over the three-year period post CEO turnover relative to matched director cohorts. The sample contains all director–year

observations of CEO event firms from three years before to three years after the CEO turnover.[12] Table 8 Panel A 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.

To show how event directors retain home board seats relative to their peers over time, we replace $Post_{dit}$ 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

[12] The specification in Equation (2) has the control director cohort-adjusted number of board seats as the dependent variable (in the same way as we do for many industry-adjusted measures like leverage and ROA). As a result, the sample for estimation is the sample of event directors whose firms experience CEO turnover events.

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).[13] 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.

The above analysis helps clarify how our findings fit in with 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 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.[14]

[13] The extent of board seat losses is of similar magnitude to that of incumbent directors in proxy contest-target firms (Fos and Tsoutsoura, 2014).

[14] 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.

More importantly, our paper highlights the broad labor market implications for members of a board on their CEO turnover decision. Our 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. Our findings echoes Aggarwal et al. (2015) who show that directors with large numbers of dissenting votes in one firm are less likely to be elected to board seats in other firms, suggesting that the labor market for directors work across firms to have real effect on director behavior. As such, our paper contributes to the literature on CEO turnover by introducing director *Years-to-election* as a novel factor that affects CEO turnover–performance sensitivity, highlighting the labor market for directorships as an important factor in CEO turnover policy.

5. Alternative explanations and the role of other governance mechanisms

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 boards? To address this question, we 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 9 presents the results. 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 *Years-to-election* is positive and significant. Thus, the effect of board *Years-to-election* on CEO turnover–performance sensitivity is incremental to the effects of busy directors and busy boards on CEO turnover decisions.

[Insert Table 9 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. In Table A6 we include board independence and its interaction with firm performance to make sure that our main findings are not due to board independence. We find that there is no significant effect of independent boards on CEO turnover–performance sensitivity. Importantly, after controlling for independent boards, we find that the coefficient on the interaction between firm operating performance and *Years-to-election* is positive and significant.

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. Consistent with our conjecture, Table 6 shows that the presence of more experienced directors (as measured by having at three or six years of tenure) is indeed associated with lower CEO turnover–performance sensitivity. Importantly, however, there remains a significant effect of directors' *Years-to-election* on CEO turnover–performance sensitivity even when we consider experienced directors.

Finally, we sort the sample firms into high (above median) and low (below median) institutional ownership. The sample median institutional ownership is 57%. Table A7 in the Appendix presents the results. We find that, for firms with high institutional ownership and hence more institutional monitoring (e.g., Chen, Harford, and Li, 2007) have higher chances of CEO turnover. Moreover, firms with high institutional ownership exhibit lower CEO turnover–performance sensitivity. Importantly, the effect of board *Years-to-election* remains positive and significant.

In summary, we conclude that neither busy boards, board independence, high institutional ownership, nor director experience could explain our findings of lower CEO turnover–performance sensitivities when directors are not faced with immediate elections.

6. Conclusion

The election of boards of directors by shareholders is a fundamental feature of corporate governance. A great deal of research has focused on the role, size, and composition 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—*Years-to-election*—and by examining whether and how director elections matter, using CEO turnover as our focal corporate event.

Using a hand-collected sample of election nominations for more than 30,000 directors over the period 2001–2010, we construct a novel firm-level measure of director proximity to elections—*Years-to-election*. We find that the closer members of a board to their next director elections, the higher is CEO turnover–performance sensitivity.

A series of further 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 the contemporaneous matching between directors and boards at the time of CEO turnover event that drives the results. Second, we find similar results when we use directors' *Years-to-election* on *other* boards as a measure of their proximity to elections. Third, when we restrict the analysis to directors with a fixed level of preference for staggered boards by sitting on only one unitary board and additionally on one staggered board, we find that there is no material change in our results, suggesting that director self-selection into firms with different board structures does not drive the results. Finally, we conduct a falsification test where we find that there is no association between board *Years-to-election* and CEO turnover–performance sensitivity in the years before bad firm performance.

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, Journal of Financial and Quantitative Analysis forthcoming.

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.

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., P.H. Malatesta, and R. Parrino, 2004. Managerial succession and firm performance, Journal of Financial Economics 74 (2), 237-275.

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 28 (8), 2167-2202.

Jenter, D., and F. Kanaan, 2015. CEO turnover and relative performance evaluation, Journal of Finance 70 (5), 2155-2184.

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.

Kaplan, S., and B.A. Minton, 2012. How has CEO turnover changed? International Review of Finance 12 (12), 57-87.

Levit, D., and N. Malenko, 2015. The labor market for directors and externalities in corporate governance, Journal of Finance forthcoming.

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.

Morse, A., V. Nanda, and A. Seru, 2011. Are incentive contracts rigged by powerful CEOs? Journal of Finance 56 (5), 1779-1821.

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.

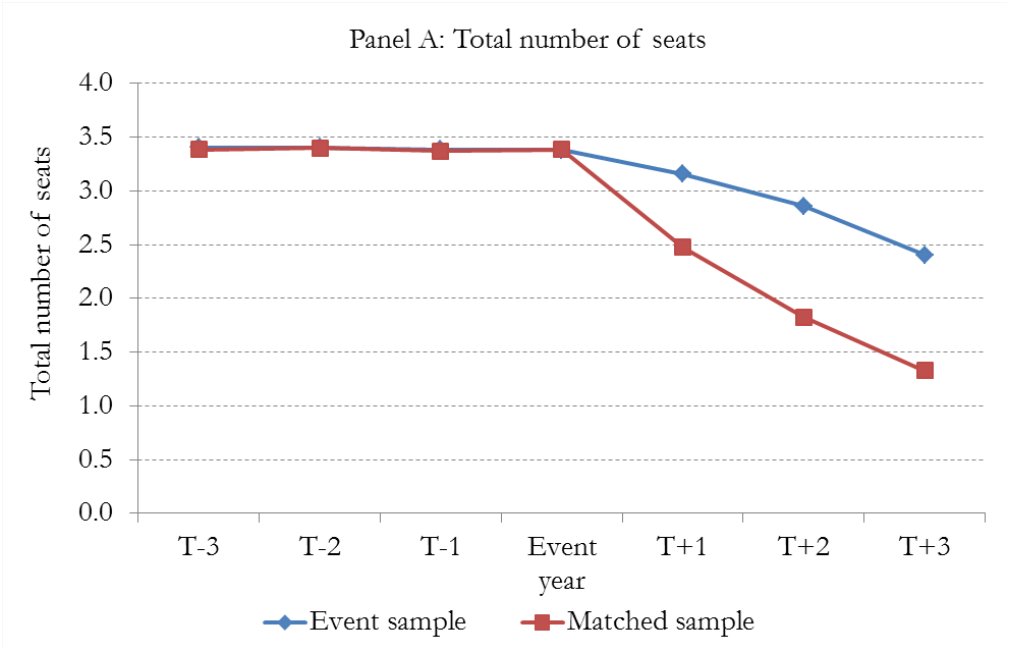
Warner, J.B., R.L. Watts, and K.H. Wruck, 1988. Stock prices and top management changes, Journal of Financial Economics 20 (1-2), 461-492.

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 event directors whose firms experience CEO turnover (blue line) and the mean total number of seats held by matched director cohorts (red line). For each event director, we identify a cohort of matching 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 director cohorts (red line).



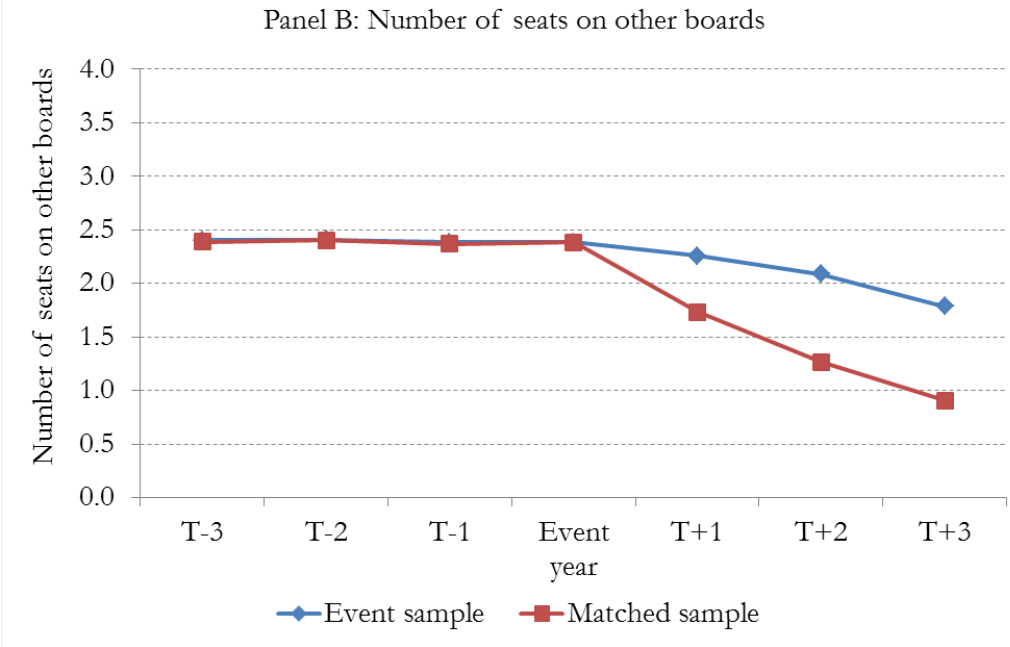


Table 1
Summary statistics

Panel A reports summary statistics for director characteristics. The unit of observation is director–year. Panel B reports summary statistics for firm characteristics. The unit of observation is firm–year. Definitions of the variables are provided in Table A1. All potentially unbounded 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)
Panel A: Director characteristics						
Years-to-election	141,974	0.000	0.000	2.000	0.494	0.711
Years-to-election (staggered boards)	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
Panel B: Firm characteristics						
Years-to-election	25,975	0.000	0.389	1.167	0.483	0.444
Years-to-election on other boards	25,975	0.000	0.143	1.000	0.296	0.405
Classified board (two-year cycle)	22,762	0.000	0.000	0.000	0.018	0.116
Classified board (three-year cycle)	22,762	0.000	0.000	1.000	0.494	0.496
CEO-Chairman	26,791	0.000	1.000	1.000	0.558	0.497
Board independence	18,408	0.000	0.7500	1.000	0.693	0.284
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
ROA	22,003	-0.220	0.095	0.289	0.081	0.155
First bad ROA	22,003	0.000	0.000	1.000	0.105	0.307
Sales ($m)	22,045	11	291	10,863	2,390	7,575
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 board *Years-to-election* and CEO turnover–performance sensitivity (Equation (1)). Definitions of the variables are provided in Table A1. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the firm level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover	(1)	(2)	(3)
ROA	-0.0676***	-0.0702***	-0.0709***
	[0.0094]	[0.0095]	[0.0099]
Years-to-election	-0.0020	-0.0030	-0.0004
	[0.0024]	[0.0024]	[0.0024]
ROA * Years-to-election	**0.0282****	**0.0279****	**0.0259****
	[0.0123]	**[0.0123]**	**[0.0122]**
Sales (log)	0.0156***	0.0158***	0.0156***
	[0.0007]	[0.0007]	[0.0007]
Sales growth	-0.0042***	-0.0051***	-0.0052***
	[0.0011]	[0.0011]	[0.0012]
Leverage	-0.0192***	-0.0193***	-0.0150**
	[0.0060]	[0.0060]	[0.0069]
Constant	-0.0416***	-0.0425***	-0.0429***
	[0.0032]	[0.0048]	[0.0049]
R-squared	0.027	0.028	0.033
N	24,878	24,878	24,878
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table 3
The role of director elections: Do all directors matter?

This table presents the relation between board *Years-to-election* and CEO turnover–performance sensitivity (Equation (1)), separated by different roles of directors. In columns (1) to (3) the firm-level Years-to-election is the distance-from-election of Chairman of the Board. In columns (4) to (6) the firm-level distance-from-election is the average distance-from-election across nomination committee members. In columns (7) to (9) the firm-level distance-from-election is the average distance-from-election across board members who are neither Chairman of the Board nor members of the nomination committee. Definitions of the variables are provided in Table A1. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the firm level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover									
Type of Directors:	*Chairman of the Board*			*Nomination committee*			*Other board members*		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ROA	-0.0813***	-0.0836***	-0.0823***	-0.0681***	-0.0706***	-0.0716***	-0.0625***	-0.0641***	-0.0707***
	[0.0134]	[0.0134]	[0.0141]	[0.0091]	[0.0092]	[0.0098]	[0.0110]	[0.0111]	[0.0115]
Years-to-election	-0.0003	-0.0004	0.0017	-0.0013	-0.0019	-0.0003	0.0006	0.0003	0.0022
	[0.0024]	[0.0024]	[0.0024]	[0.0023]	[0.0023]	[0.0023]	[0.0024]	[0.0024]	[0.0024]
ROA * Years-to-election	**0.0340*** **	**0.0331*** **	**0.0315** **	**0.0301*** **	**0.0300*** **	**0.0285** **	**0.0086**	**0.0093**	**0.0080**
	[0.0123]	**[0.0124]**	**[0.0123]**	**[0.0116]**	**[0.0116]**	**[0.0117]**	**[0.0123]**	**[0.0123]**	**[0.0122]**
R-squared	0.036	0.038	0.046	0.028	0.029	0.034	0.027	0.028	0.034
N	13,807	13,807	13,807	23,506	23,506	23,506	17,650	17,650	17,650
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Industry FE	No	No	Yes	No	No	Yes	No	No	Yes

Table 4
Does CEO-Chairman duality matter?

This table examines whether CEO-Chairman duality changes the effect of board *Years-to-election* on CEO turnover–performance sensitivity. In Panel A, the analysis is limited to firms with separate CEO and Chairman of the Board. In Panel B, the analysis is limited to firms whose CEOs also serve as Chairman of the Board. Definitions of the variables are provided in Table A1. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the firm level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover	(1)	(2)	(3)
Panel A: Firms with separate CEO and Chairman of the Board			
ROA	-0.0890***	-0.0916***	-0.0891***
	[0.0148]	[0.0148]	[0.0152]
Years-to-election	0.0000	-0.0010	0.0040
	[0.0036]	[0.0036]	[0.0038]
ROA * Years-to-election	**0.0541*** **	**0.0538*** **	**0.0503*** **
	[0.0193]	**[0.0193]**	**[0.0193]**
R-squared	0.036	0.038	0.046
N	13,806	13,806	13,806
Panel B: Firms with CEOs who also serve as Chairman of the Board			
ROA	-0.0448***	-0.0467***	-0.0461***
	[0.0106]	[0.0107]	[0.0119]
Years-to-election	-0.0015	-0.0022	-0.0017
	[0.0030]	[0.0030]	[0.0031]
ROA * Years-to-election	**-0.0015**	**-0.0019**	**-0.0009**
	[0.0145]	**[0.0145]**	**[0.0149]**
R-squared	0.020	0.022	0.028
N	11,072	11,072	11,072
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table 5
Addressing endogenous matching between directors and boards

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. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the firm level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover	(1)	(2)	(3)
Panel A: Directors with at least three years of tenure			
ROA	-0.0690***	-0.0715***	-0.0727***
	[0.0095]	[0.0095]	[0.0100]
Years-to-election	-0.0010	-0.0020	0.0000
	[0.0023]	[0.0023]	[0.0023]
ROA * Years-to-election	**0.0319*** **	**0.0312*** **	**0.0297** **
	[0.0118]	**[0.0117]**	**[0.0117]**
R-squared	0.026	0.028	0.032
N	23,933	23,933	23,933
Panel B: Directors with at least six years of tenure			
ROA	-0.0662***	-0.0688***	-0.0712***
	[0.0098]	[0.0099]	[0.01040]
Years-to-election	-0.0010	-0.0020	0.000
	[0.0022]	[0.0022]	[0.0023]
ROA * Years-to-election	**0.0252** **	**0.0244** **	**0.0230** **
	[0.0117]	**[0.0117]**	**[0.0116]**
R-squared	0.027	0.028	0.033
N	22,494	22,494	22,494
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table 6
Years-to-election on other boards

In Panel A we use board *Years-to-election* based on director elections on other boards. In Panel B we perform the analysis at director-year level and restrict the sample to directors who seat on one unitary and one additional staggered board, i.e., the same number and type of seats. Definitions of the variables are provided in Table A1. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the firm (director) level in Panel A (Panel B). ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover			
	(1)	(2)	(3)
Panel A: Years-to-election on other boards			
ROA	-0.0648***	-0.0677***	-0.0700***
	[0.0084]	[0.0084]	[0.0089]
Years-to-election	0.0030	0.0020	0.0020
	[0.0029]	[0.0029]	[0.0029]
ROA * Years-to-election	**0.0245****	**0.0244****	**0.0266****
	[0.0124]	**[0.0124]**	**[0.0126]**
R-squared	0.025	0.026	0.031
N	21,644	21,644	21,644
Panel B: Directors who seat on one unitary and one additional staggered board			
ROA	-0.1034***	-0.1099***	-0.1346***
	[0.0252]	[0.0252]	[0.0285]
Years-to-election	-0.0058	-0.008	-0.0097
	[0.0077]	[0.0077]	[0.0076]
ROA * Years-to-election	**0.0671***	**0.0696***	**0.0747***
	[0.0380]	**[0.0380]**	**[0.0382]**
R-squared	0.019	0.025	0.048
N	6,471	6,471	6,471
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table 7
Pre-existing trends in CEO turnover–performance sensitivity

This table shows that there is no relation between board *Years-to-election* and CEO turnover–performance sensitivity in the years leading to the first bad performance. The regression specification includes interactions of board *Years-to-election* and indicators for the three years prior to the first bad performance. Definitions of the variables are provided in Table A1. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the firm level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover	(1)	(2)	(3)
First bad ROA	**0.0181****	**0.0209****	**0.0224*****
	[0.0081]	**[0.0085]**	**[0.0086]**
Years-to-election	0.0005	0.0000	0.0019
	[0.0043]	[0.0041]	[0.0044]
First bad ROA (t) * Years-to-election	**-0.0229****	**-0.0226****	**-0.0202****
	[0.0095]	**[0.0094]**	**[0.0095]**
First bad ROA (t-1)	-0.0057	-0.0046	-0.0052
	[0.0110]	[0.0110]	[0.0110]
First bad ROA (t-1) * Years-to-election	**-0.0086**	**-0.0091**	**-0.0103**
	[0.0136]	**[0.0135]**	**[0.0138]**
First bad ROA (t-2)	-0.0154	-0.0148	-0.0141
	[0.0115]	[0.0115]	[0.0115]
First bad ROA (t-2) * Years-to-election	**0.0348**	**0.0357**	**0.0309**
	[0.0242]	**[0.0242]**	**[0.0242]**
First bad ROA (t-3)	-0.0185*	-0.0182*	-0.0193*
	[0.0110]	[0.0110]	[0.0110]
First bad ROA (t-3) * Years-to-election	**0.0249**	**0.0252**	**0.0245**
	[0.0218]	**[0.0218]**	**[0.0215]**
R-squared	0.03	0.031	0.041
N	11,389	11,389	11,389
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table 8
Director career consequences after CEO turnover

This table reports changes in the total number of seats held by event directors whose firms experience CEO turnover (Equation (2)). In Panel A, the dependent variable is the difference between the number of seats held in the event firm by the event director (either 0 or 1) and the average number of seats held by her matched director cohort in the same year (between 0 and 1). For each event director, we identify a cohort of matching 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 by the event director on other boards adjusted by the average number of seats held by her matching director cohort. Definitions of the variables are provided in Table A1. 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: the number of seats					
	(1)	(2)	(3)	(4)	(5)
Panel A: The number of seats on event firm board					
Post	0.1835***	0.2094***	0.2095***	0.2095***	0.1523***
	[0.0086]	[0.0087]	[0.0095]	[0.0095]	[0.0098]
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	0.3543***	0.3693***	0.7851***	0.7851***	0.5457***
	[0.0362]	[0.0347]	[0.0380]	[0.0380]	[0.0369]
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

Table 9
The role of director elections: Do busy boards matter?

This table examines whether business of the board changes the effect of board *Years-to-election* on CEO turnover–performance sensitivity. Definitions of the variables are provided in Table A1. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the firm level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover			
	(1)	(2)	(3)
ROA	-0.0621***	-0.0631***	-0.0633***
	[0.0090]	[0.0088]	[0.0094]
Years-to-election	-0.0018	-0.0016	0.0008
	[0.0027]	[0.0027]	[0.0028]
ROA * Years-to-election	**0.0283****	**0.0281****	**0.0255****
	[0.0117]	**[0.0117]**	**[0.0115]**
Busy board	0.0471***	0.0479***	0.0474***
	[0.0100]	[0.0100]	[0.0100]
ROA * Busy board	-0.0117	-0.0105	-0.0109
	[0.0434]	[0.0435]	[0.0430]
R-squared	0.031	0.032	0.037
N	21,365	21,365	21,365
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Appendix A.

Table A1
Definitions of variables

Variable	Definition
Panel A: Director characteristics	
Years-to-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
Panel B: Firm characteristics	
Years-to-election	The average distance-from-election across board members
Years-to-election on other boards	The average distance-from-election on other boards across board members
Classified board (two-year cycle)	An indicator of a staggered board on which all directors serve a two-year term
Classified board (three-year cycle)	An indicator of a staggered board on which all directors serve a three-year term
CEO-Chairman	An indicator of CEO who serves as Chairman of the Board
Busy board	An indicator of a board with more than half of its directors being busy
High board independence	An indicator of a board with the proportion of independent directors above median
High institutional ownership	An indicator of a board with the institutional ownership above median
Board size	The number of directors on a board
ROA	Return on assets, computed as earnings before interest, taxes, depreciation, and amortization divided by total assets
Sales ($m)	Annual sales, 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
First bad ROA	An indicator of the first year when a firm's ROA drops below the 40^{th} percentile.

Table A2
Controlling for industry-year fixed effects

This table presents the relation between board *Years-to-election* and CEO turnover–performance sensitivity (Equation (1)) while controlling for industry-times-year fixed effects. In column (1) the firm-level distance-from-election is the average distance-from-election across all board members. In column (2) the firm-level distance-from-election is the average distance-from-election across Chairman of the Board and nomination committee members. In column (3) the firm-level distance-from-election is the average distance-from-election across board members who are neither Chairman of the Board nor members of the nomination committee. Definitions of the variables are provided in Table A1. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the firm level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover			
Sample of directors:	*All board members*	*Chairman and nomination committee*	*Other board members*
	(1)	(2)	(3)
ROA	-0.0697***	-0.0735***	-0.0687***
	[0.0101]	[0.0104]	[0.0118]
Years-to-election	-0.0005	-0.0001	0.0017
	[0.0025]	[0.0023]	[0.0024]
ROA * Years-to-election	**0.0237***	**0.0304****	**0.0042**
	[0.0125]	**[0.0123]**	**[0.0125]**
R-squared	0.059	0.060	0.069
N	24,878	24,024	17,650
Controls	Yes	Yes	Yes
Industry *Year FE	Yes	Yes	Yes

Table A3
Using minimum number of years to next election by director-year

This table presents the relation between board *Years-to-election* and CEO turnover–performance sensitivity (Equation (1)). Director *Years-to-election* is based on the *minimum* number of years from a given year to the next election across all board seats of a director. Definitions of the variables are provided in Table A1. 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	(1)	(2)	(3)
ROA	-0.0675***	-0.0700***	-0.0708***
	[0.0094]	[0.0095]	[0.0099]
Years-to-election	-0.002	-0.003	-0.0004
	[0.0024]	[0.0024]	[0.0024]
ROA * Years-to-election	**0.0280****	**0.0276****	**0.0256****
	[0.0124]	**[0.0123]**	**[0.0123]**
R-squared	0.027	0.028	0.033
N	24,878	24,878	24,878
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table A4
Removing CEOs close to retirement

This table shows the robustness of the analysis reported in Table 2 by removing CEO turnover cases where the CEO is close to retirement (63 years old or older). Definitions of the variables are provided in Table A1. 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			
	(1)	(2)	(3)
ROA	-0.0659***	-0.0674***	-0.0714***
	[0.0098]	[0.0099]	[0.0105]
Years-to-election	-0.0018	-0.0023	0.0007
	[0.0024]	[0.0024]	[0.0025]
ROA * Years-to-election	**0.0395*** **	**0.0394*** **	**0.0366*** **
	[0.0128]	**[0.0128]**	**[0.0127]**
R-squared	0.023	0.024	0.030
N	20,448	20,448	20,448
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table A5
Director career consequences after CEO turnover: Additional evidence

This table reports changes in the total number of seats held by event directors whose firms experience CEO turnover (Equation (2)). In Panel A the dependent variable is the difference between the number of seats held in the event firm by the event director (either 0 or 1) and the average number of seats held by her matched director cohort in the same year. For each event director, we identify a cohort of matching 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(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 by the event director on other boards adjusted by the number of seats held by her matching director cohort. Definitions of the variables are provided in Table A1. 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: the number of seats					
	(1)	(2)	(3)	(4)	(5)
Variable					
Panel A: The number of seats in event firms					
Post (t+1)	0.1445***	0.1764***	0.1590***	0.1590***	0.1140***
	[0.0098]	[0.0101]	[0.0103]	[0.0103]	[0.0108]
Post (t+2)	0.2143***	0.2472***	0.2227***	0.2227***	0.1810***
	[0.0120]	[0.0121]	[0.0124]	[0.0124]	[0.0134]
Post (t+3)	0.2697***	0.3176***	0.2915***	0.2915***	0.2319***
	[0.0128]	[0.0126]	[0.0129]	[0.0129]	[0.0153]
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)	0.1888***	0.2175***	0.5493***	0.5493***	0.4152***
	[0.0395]	[0.0381]	[0.0373]	[0.0373]	[0.0382]
Post (t+2)	0.5152***	0.5375***	0.8784***	0.8784***	0.6526***
	[0.0460]	[0.0445]	[0.0463]	[0.0463]	[0.0484]
Post (t+3)	0.7131***	0.7540***	1.1335***	1.1335***	0.8964***
	[0.0482]	[0.0463]	[0.0501]	[0.0501]	[0.0575]
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

Table A6
The role of director elections: Does board independence matter?

This table examines whether director independence changes the effect of board *Years-to-election* on CEO turnover–performance sensitivity. Definitions of the variables are provided in Table A1. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the firm level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover			
	(1)	(2)	(3)
ROA	-0.0680***	-0.0691***	-0.0732***
	[0.0104]	[0.0101]	[0.0114]
Years-to-election	-0.0012	-0.0016	0.0005
	[0.0023]	[0.0023]	[0.0023]
ROA * Years-to-election	**0.0399*** **	**0.0397*** **	**0.0374*** **
	[0.0120]	**[0.0119]**	**[0.0119]**
High board independence	-0.0018	-0.0006	-0.0008
	[0.0024]	[0.0025]	[0.0025]
ROA* High board independence	0.0045	0.0029	0.0049
	[0.0118]	[0.0119]	[0.0121]
R-squared	0.023	0.025	0.032
N	19,107	19,107	19,107
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table A7
Other governance mechanisms: Does institutional ownership matter?

This table examines whether institutional ownership changes the effect of board *Years-to-election* on CEO turnover–performance sensitivity. Definitions of the variables are provided in Table A1. 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	(1)	(2)	(3)
ROA	-0.0811***	-0.0832***	-0.0869***
	[0.0108]	[0.0118]	[0.0113]
Years-to-election	-0.0017	-0.0022	0.0001
	[0.0024]	[0.0024]	[0.0024]
ROA * Years-to-election	**0.0312****	**0.0310****	**0.0296****
	[0.0125]	**[0.0125]**	**[0.0125]**
High institutional ownership	0.0150***	0.0150***	0.0137***
	[0.0023]	[0.0023]	[0.0024]
ROA * High institutional ownership	0.0432***	0.0440***	0.0427***
	[0.0112]	[0.0112]	[0.0113]
R-squared	0.025	0.027	0.032
N	20,448	20,448	20,448
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Appendix B.

Example of measure construction

Example from our sample: General Richard Myers; Retired four star general and served as the 15th Chairman of the Joint Chiefs of Staff

In 2008 he is sitting in the following boards:

1. Deere & Co -- up for election in 2010 (2 year horizon)
2. United Technologies -- up for election in 2008 (0 year horizon)
3. Northrop Grumman -- up for election in 2008 (0 year horizon)

The Years-to-election in 2008 is (2+0+0)/3=0.67 years

Note that United Technologies has a unitary board while Deere & Co and Northrop Grumman have staggered boards.

In 2009 he is sitting in the following boards:

1. Deere & Co -- up for election in 2010 (1 year horizon)
2. United Technologies -- up for election in 2009 (0 year horizon)
3. Northrop Grumman -- up for election in 2011 (2 year horizon)

The Years-to-election in 2009 is (1+0+2)/3=1.00 year

In 2010 he is sitting in the following boards:

4. Deere & Co -- up for election in 2010 (0 year horizon)
5. United Technologies -- up for election in 2010 (0 year horizon)
6. Northrop Grumman -- up for election in 2011 (1 year horizon)

The Years-to-election in 2010 is (0+0+1)/3=0.33 year

As the example show, there is within director time series variation in the measure.