

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 measure of director proximity to elections: *Years-to-election*. We find that the closer directors of a board are to their next elections, the higher CEO turnover–performance sensitivity is. A series of tests—including one that exploits variation in *Years-to-election* that comes from other boards—supports a causal interpretation. Further analyses show that other governance mechanisms are not driving the relation between board *Years-to-election* and CEO turnover–performance sensitivity. We conclude that director elections have important implications for corporate governance.

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

JEL Classification: G34; G38

Modern corporations are characterized by the separation of ownership and control. Members of a corporate board are tasked to monitor managers. For board governance to be effective, shareholders must have a mechanism for disciplining directors. The shareholders' right to elect directors is therefore a fundamental feature of corporate governance. Despite that feature's importance, evidence that director elections matter in aligning directors' incentives with those of shareholders is limited.

A number of papers examine the role of shareholder votes in director elections to align incentives (e.g., Cai, Garner, and Walkling, 2009; Fischer et al., 2009; Aggarwal, Dahiya, and Prabhala, 2015; Iliev et al., 2015), and show that the number of votes received by a director is associated with both firm and director performance. As a result, when examining the effect of shareholder votes on firm policies and director careers, it is difficult to distinguish the effect due to the number of votes the director receives from the effect due to firm and director performance. Moreover, whereas directors rarely lose seats in uncontested elections if they are nominated for re-election, director turnover is not negligible; according to the Institutional Shareholder Services (ISS) Director Data, the director turnover rate is 12% per year.¹ Of these 12% of director turnover cases, only 0.36% are due to directors receiving an insufficient number of votes, suggesting that an overwhelming majority of director turnover cases occur at the nomination stage and not at the voting stage.² Thus, in

¹ This statistic is in line with Kaplan (1993), who finds a 10% board turnover rate in Germany; Fahlenbrach, Low, and Stulz (2010), who report a 9.2% turnover rate for independent directors over the period 1989–2004; Fahlenbrach, Low, and Stulz (2015), who report a 7.5% turnover rate for independent directors over the period 1999–2010; and Bates, Becher, and Wilson (2015), who report a 7.6% turnover rate for non-executive directors over the period 2000–2011.

² It is worth noting that a low frequency of nominated directors receiving insufficient votes does not imply that directors do not care about voting outcomes. Consider, for example, proxy contests. The fact that we rarely see proxy contests does not mean that they are an ineffective mechanism for disciplining directors. Fos and Tsoutsoura (2014) show that contested elections lead to significantly negative career consequences for incumbent directors. Whether the number of contested elections is “large enough” remains an open question. If

order to study the role of the director election process, we need to consider not only the voting outcome, but also the overall electoral process.

In this paper, we aim to isolate the role of the director election process in aligning directors' incentives with those of shareholders by introducing a novel measure of director proximity to elections—*Years-to-election*—and thereby examine whether and how director elections matter, using CEO turnover as our focal corporate event. Our new measure is motivated by the political business cycle literature (e.g., Rogoff and Sibert, 1988; Alesina and Paradisi, 2015)³ and allows us to capture how electoral incentives affect director decisions.

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 (or occasionally every 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 two years in the following year (after the election); there is an exogenous variation in a director's closeness to her next election due to the passage of time. Importantly, many directors sit on multiple boards with different director-election cycles, such that in a given year, a director might be close to one election and farther away from another. 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

contested elections play a strong disciplinary role, the *ex post* relatively low frequency of their occurrence does not necessarily indicate that they are unimportant (Fos, 2016).

³ Our empirical strategy builds on a vast political science literature that analyzes the effects of term length and proximity to elections on legislative behavior. There is substantial evidence of politicians taking more popular actions closer to elections. For example, Alesina and Paradisi (2015) show that municipalities choose lower tax rates when they are closer to elections. Conconi, Facchini, and Zanardi (2014) show that "... the political horizon of U.S. congressmen – the length of their terms in office and how close they are to facing elections – crucially affects their support for trade liberalization reforms." These findings provide the premise for constructing our key measure of interest.

all of a director's board seats. To construct this variable, we hand-collect data on board structure (unitary versus staggered boards), director election cycle (i.e., the year of a multi-year term of a director), and whether a director is nominated in a given year, for more than 30,000 directors. Because, as noted above, many directors sit on multiple boards, a substantial part of the variation in director *Years-to-election* is driven by election cycles on other boards. At the firm-year level, board *Years-to-election* is the average across an individual director's *Years-to-election*. It is worth noting that our measure is based on the scheduled nomination cycle of a director for each of her board seats, using information on when she joins a board and what election cycle she is in, thereby mitigating concerns that our results might be affected by off-cycle director replacements (e.g., deaths or forced turnovers).

A key responsibility of corporate boards is hiring and firing CEOs. If shareholder scrutiny via director elections matters, we would expect our measure of director elections to affect CEO turnover policy, and particularly CEO turnover–performance sensitivity.

Using a large and comprehensive sample of director elections and CEO turnover cases over the period 2001–2010, we examine the relation between director elections, firm performance, and CEO turnover. We find that the closer directors of a board are to their next elections, the higher their firm's CEO turnover–performance sensitivity. 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. Thus, director elections have a significant role in how boards make CEO turnover decisions and consequently affect the strength of CEOs' incentives.

We further show that not all board members matter equally: *Years-to-election* of the Chairman of the Board (COB) and members of the nomination committee have more

influence on CEO turnover–performance sensitivity relative to other board members. Moreover, we find that for firms with a separate CEO and COB, there is a significant effect of board *Years-to-election* on CEO turnover–performance sensitivity, whereas for firms with a common CEO and COB, this effect is entirely lacking. Thus, when directors have little influence on CEO turnover, their *Years-to-election* plays no disciplinary 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 is driving the relation between board *Years-to-election* and CEO turnover policy. For example, in anticipation of poor performance, directors who prefer less rigorous monitoring could be attracted to firms with weak governance, while directors who are more responsive by replacing poorly 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 where directors are up for election every year), then the 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 prefer less monitoring.

We perform four tests to support a causal interpretation of our main results. First, we require all sample directors have had tenure for at least three years. This requirement mitigates 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 cycles and the CEO turnover event. With every director having now experienced at least one election cycle prior to the turnover event, it is highly unlikely that the timing of a director’s joining the board will affect our results. We find no material change in the results.

We then repeat the analysis, further restricting the sample of directors to those who have had tenure for 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 her 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 poor 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 those boards and on one additional staggered board. In this case, the directors in the sample have chosen the same number of board seats involving both a unitary and a staggered board, suggesting that they have the same level of preference for staggered board seats. Moreover, the variation in the *Years-to-election* measure comes entirely from *other* (staggered) boards. Our main findings remain, which provides additional support for a causal interpretation.

Finally, we examine whether there is any pre-existing time trend in CEO turnover–performance sensitivity that might be correlated with the board *Years-to-election* measure, and thus would drive our results. We find no relation between board *Years-to-election* and CEO turnover–performance sensitivity in the years leading to the poor performance, supporting a causal interpretation.

We conduct a large number of robustness checks on our findings. We employ an

alternative logit model to estimate CEO turnover and obtain similar results to those from the linear probability model. In our main analysis, we include year and both industry and year fixed effects. As robustness checks, we include industry-times-year fixed effects to control for any (either observable or unobservable) time-varying industry-level variables, or industry-times-ROA fixed effects to control for different corporate governance practices across industries and hence different CEO turnover–performance sensitivities across industries. Our main findings remain unchanged. In our main analysis, we use ROA to measure firm performance. When we employ alternative performance measures of stock returns, lagged ROA, and industry-adjusted ROA, our main findings remain unchanged. In our main analysis, director *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 of a director’s board seats. Our main findings remain unchanged. Finally, 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 shareholders do pay attention to director elections. There is increased media coverage of directors closer to their elections, especially when their firm has experienced poor performance. Next, we show that directors of firms with CEO turnover events are more likely to retain seats both on the event firm board and on *other* boards relative to a sample of matched directors (on director age, number of directorships, and firm performance) whose firms do not experience CEO turnover events. 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 firm performance. Finally, we show that firms with CEO turnover events are less likely to receive negative recommendations for voting in director elections from proxy advisory firms relative to a sample of matched firms with similar performance that do not experience CEO turnover.

We also consider a number of alternative explanations. Fich and Shivdasani (2006) show that directors on busy boards are not effective monitors. Could the effect of board *Years-to-election* on CEO turnover–performance sensitivity be due to the presence of busy boards? We find that after controlling for busy boards, a significant effect of board *Years-to-election* on CEO turnover–performance sensitivity remains. We further show that our findings remain unchanged when we control for board independence.

Finally, we offer some suggestive evidence and discussion on the governance role of director elections. We show that firms with more long-term-oriented institutional investors and hence more institutional monitoring exhibit higher CEO turnover–performance sensitivity in the same way as board *Years-to-election*, suggesting that the pressure from board members induced by their closeness to elections does not necessarily lead to myopia. In terms of performance implications of board *Years-to-election*, we show that when directors are closer to elections, firm performance improves.

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 et al., 2009; Fischer et al., 2009; Aggarwal et al., 2015; Iliev et al., 2015) by highlighting the role of the director election process in aligning directors’ incentives with those of shareholders to

have a significant impact on CEO turnover–performance sensitivity.⁴ Our new *ex-ante* measure of director elections overcomes the challenges of using *ex-post* shareholder votes (as discussed earlier), and thus allows for a clean identification of the effect of director elections on corporate policies.

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 Xie, 2007; Bates, Becher, and Lemmon, 2008; Bebchuk, Cohen, and Ferrell, 2009; Cohen and Wang, 2013; Cremers, Litov, and Sepe, 2016). 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. We provide new insights into the underlying mechanism of staggered boards: Being farther away from elections shield directors from being exposed to the market for directorships, leading to lower CEO turnover–performance sensitivity. Our findings contribute to the debate on board structure (unitary versus staggered boards). Moreover, our paper highlights a novel role played by staggered boards. Although almost the entire literature focuses on the role of staggered boards in increasing the costs of proxy contests and hostile takeovers, we use staggered boards to tease out the effect of *Years-to-election* on the strength of incentives faced by CEOs—an important correlation that we are the first to identify.

Our paper is also related to the literature on the labor market for directors (e.g., Fama, 1980; Fama and Jensen, 1983; Kaplan and Reishus, 1990; Gilson, 1990; Shivdasani, 1993; Brickley, Linck, and Coles, 1999; Farrell and Whidbee, 2000; Ferris, Jagannathan, and

⁴ 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 the careers of incumbent directors in proxy contest-targeted firms. Fos (2016) examines the real effects of proxy contests on corporate policies and performance. Untabulated results show that after removing firms involved in proxy contests, our main findings remain.

Pritchard, 2003; Coles and Hoi, 2003; Harford, 2003; Yermack, 2004; Helland, 2006; Fich and Shivdasani, 2007; Fos and Tsoutsoura, 2014; Jiang, Wan, and Zhao, 2016). In contrast to prior work, we present new evidence consistent with positive labor market consequences for directors of firms that experience CEO turnover (controlling for firm performance).⁵

Finally, our paper contributes to the literature on CEO turnover (e.g., Coughlan and Schmidt, 1985; Warner, Watts, and Wruck, 1988; Weisbach, 1988; Denis, Denis, and Sarin, 1997; Jenter and Kanaan, 2015; Gao, Harford, and Li, 2015) by introducing board *Years-to-election* as a novel factor—the labor market for directorships—that affects CEO turnover policy, and by extension, other corporate policies.⁶

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 the director election cycle (i.e., the year of a

⁵ 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.

⁶ In related work, Cziraki and Xu (2014) document significant effects of the threat of dismissal on CEO incentives related to corporate risk-taking.

multi-year term of a director) and information on whether a director is nominated in a given year. 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 the investment horizon of institutional investors come from Cella, Ellul, and Giannetti (2013).⁷ Data on ISS recommendations for voting in director elections come from the ISS Voting Analytics 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 calculating *Years-to-election* for a given firm, we ignore *Years-to-election* of the director who also serves as the CEO of that firm. The final sample consists of 4,048 firms, 30,867 directors, and 878 CEO turnover events over the period 2001–2010.⁸

2.2. The *Years-to-election* measure

The goal of our measure is to capture board members' proximity to director elections. We first construct the measure at the director-year level and then aggregate it at the firm-year level. Consider director d , who has a board seat in firm i in fiscal year t .⁹ Public companies typically hold annual general meetings (AGMs) of shareholders shortly after the end of the

⁷ We thank Andrew Ellul for graciously sharing data.

⁸ The existing literature on CEO turnover debates whether and how to classify turnover cases as either forced or voluntary. On the one hand, voluntary turnover cases may arise due to normal CEO retirement, which need not be associated with poor prior performance (Huson, Malatesta, and Parrino, 2004). However, Jenter and Lewellen (2014) argue that even (early) retirements can be performance-induced. On the other hand, Kaplan and Minton (2012) and Jenter and Lewellen (2014) argue that existing algorithms fail to successfully distinguish between 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 significant turnover–performance sensitivity) and we exclude turnover cases due to retirement (i.e., CEOs who are 63 years old or older) in our robustness check.

⁹ In our specifications ROA_{it} captures operating performance in fiscal year t .

fiscal year (about 70% of AGMs take place in April, May, and June). Therefore, *Years – to – election*_{dit} for director *d* in firm *i* is measured using her election status at the AGMs that follow the end of fiscal year *t*. If director *d* is nominated for re-election, the measure is set to “0”. If director *d* is to be nominated for re-election one year later, the measure is set to “1”; and if director *d* is to be nominated for re-election two years later, the measure is set to “2”.¹⁰ After we calculate *Years – to – election* for each firm *i* in which director *d* is holding a seat in fiscal year *t*, then for director *d*, we calculate the average of *Years – to – election*_{dit} across all firms where she holds a board seat in fiscal year *t*. This gives us the measure for director *d* in fiscal year *t*. Then to calculate the measure at the firm-year level, for firm *i* in fiscal year *t*, we calculate the average *Years – to – election* across all directors who serve on the board of firm *i* in fiscal year *t*.¹¹

The variation in our *Years-to-election* measure comes from several sources. 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 firm-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 will be zero (one or two) year(s) away from the next election so there will be no variation within the firm. In reality, as noted earlier, many directors sit on multiple boards; some are unitary and others are staggered,

¹⁰ The upper bound of two years is due to the longest possible election cycle among US corporate boards, which is three years. Appendix A provides an example of how we construct the measure.

¹¹ The literature on boards often highlights the heterogeneity of incentives faced by insider and independent directors. Hermalin and Weisbach (1988) is one of the first papers identifying “gray” directors as outsiders of dubious independence, such as having prior or current business dealings with the firm. In recent years, in particular over our sample period, public pressure and regulatory requirements have led firms to have majority-outsider boards (Adams, Hermalin, and Weisbach, 2010). Later, we show that the average fraction of independent directors for our sample firms is 90%. As a result, we opt to explore heterogeneity across directors based on their roles on a board (such as being the Chairman of the Board and/or serving on the nomination committee).

leading to both cross-sectional and temporal variations in the *Years-to-election* measure. The sources of variation in the *Years-to-election* measure therefore include the number of boards on which each director serves, the staggered versus unitary structure of those boards, and the election cycles of those boards. The diverse sources of variation in *Years-to-election* are important; they allow for a causal interpretation of the main findings (see Section 4). Moreover, it is worth noting that our measure is based on the scheduled nomination cycle of a director for each of her board seats, using information on when she joins a board and that board's election cycle. The scheduled nomination cycle is pre-set, in the same spirit of Shue and Townsend (2016) regarding executives' scheduled option grants, which mitigates concerns that our results might be affected by off-cycle director replacements, including voluntary departures, deaths, forced turnovers, changes in board size, and changes in board structure.¹²

Table 1 provides descriptive statistics of the *Years-to-election* measure. Panel A presents summary statistics at the director-year 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 will 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. Importantly, there is substantial variation in the *Years-to-election* measure: The cross-director standard deviation is 0.711 in the full sample, and the average within-director standard deviation is 0.450, suggesting a substantial temporal variation in the *Years-to-election* measure.

Panel B summarizes the measure at the firm-year level. The board *Years-to-election*

¹² Relatedly, it is worth noting that the marked decline in staggered boards over time as documented by Cremers et al. (2016) does not affect our results, as changes in board structure are only one source of variation in director *Years-to-election*. In Section 4 we show that our results do not change qualitatively when we shut down this source of variation.

measure has a sample mean of 0.483 years, which means that on average the entire board will be voted on in about half a year. The cross-board standard deviation of the measure is 0.444, and the average within-board standard deviation is 0.145, suggesting a substantial temporal variation in the board *Years-to-election* measure as well.

[Insert Table 1 about here]

2.3. Additional summary statistics

Table 1 also provides descriptive statistics of other director and firm characteristics pertaining to our sample. Detailed variable definitions are provided in Appendix B. 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 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 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 the sample firms have the CEO also serving as the COB. The average (median) board size is about eight directors. We consider a board to be busy if more than half the board members are busy directors. About 7% of boards are busy. We note 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. Other firm characteristics are fairly representative of COMPUSTAT firms.

3. Main results

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

In this section, we study the effect of board *Years-to-election* on CEO turnover–performance sensitivity. To perform the analysis, we estimate the following linear probability model:¹³

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

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 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 $\log(\text{Sales})$), Sales growth, and Leverage. All variables are defined in Appendix B. The main variable of interest is the interaction term, which captures the effect of board *Years-to-election* on CEO turnover–performance sensitivity.

Table 2 presents the results. In column (1), the coefficient on ROA shows a negative and significant association between ROA and CEO turnover, suggesting strong CEO turnover–performance sensitivity. A one-standard deviation change in ROA is associated

¹³ The specification is motivated by prior work (Parrino, 1997; Huson, Parrino, and Starks, 2001; Jenter and Kanaan, 2015; Guo and Masulis, 2015). As a robustness check, Table C1 in Appendix C shows that the results hold when we estimate a logit probability model.

with a one-percentage point change in the probability of a 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 directors of a board are to their next elections, the higher CEO turnover–performance sensitivity is. Specifically, we observe that CEO turnover–performance sensitivity is the highest when all directors 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 CEO turnover–performance sensitivity while holding other variables at their sample averages.¹⁴

[Insert Table 2 about here]

Among directors, the COB and members of the nomination committee are mainly responsible for director and CEO appointments. We therefore expect these directors' *Years-to-election* to have a stronger effect on CEO turnover than that of the rest of the board. In Table 3 we measure board *Years-to-election* using only the COB and members of the nomination committee (columns (1)-(3)) and the rest of the board (columns (4)-(6)).¹⁵ 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 the COB or members of the nomination committee.¹⁶ Importantly, when we restrict the analysis to the

¹⁴ 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).

¹⁵ In Table C2, we show that the results hold when we use only the COB (columns (1)-(3)) and only members of the nomination committee (columns (4)-(6)).

¹⁶ In columns (2) and (3) of Table C3 Panel A, we replace industry and year fixed effects with industry-times-year fixed effects and show that our main findings remain. Similarly, in columns (2) and (3) of

rest of the board in columns (4)-(6), the coefficients on the interaction between ROA and board *Years-to-election* are not only statistically insignificant, but also close to zero in terms of their economic magnitude. The *F*-tests suggest that the differences in the coefficients on the interaction between ROA and board *Years-to-election* are statistically significant between these two groups of directors.¹⁷

[Insert Table 3 about here]

Prior literature shows that a CEO serving as a COB (i.e., CEO-COB duality) is a poor corporate governance practice (e.g., Morse, Nanda, and Seru, 2011). We explore whether and how CEO-COB duality changes the relation between board *Years-to-election* and CEO turnover–performance sensitivity. We sort the sample firms into those with a separate CEO and COB and those with a common CEO and COB. 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 COB (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 where the CEO is also the COB. Our evidence offers a new explanation for why CEO-COB duality is a poor governance practice by showing that it shields CEOs from the disciplinary role of director elections.

[Insert Table 4 about here]

Overall, the results shown in Tables 2-4 indicate a significant relation between board

Table C3 Panel B, we replace industry fixed effects with industry-times-ROA fixed effects and show that our main findings remain.

¹⁷ In Table C4, we further separate independent directors into the lead (columns (1)-(3)) and all other independent directors (columns (4)-(6)) and show that both groups of independent directors have similar effects on CEO turnover–performance sensitivity.

Years-to-election and CEO turnover–performance sensitivity, suggesting a significant role for director elections in CEO turnover policy. Importantly, board members likely to influence CEO turnover decisions, such as the COB and nomination committee members, drive the results.

3.2. Robustness checks

We next show that the results are robust to the inclusion of year and both industry and year fixed effects. The results in column (2) of Table 2 indicate that when augmenting the regression with year fixed effects, there is no material change in the results, implying that aggregate time trends do not drive the results. Moreover, the results in column (3) of Table 2 show that the effect of *Years-to-election* barely changes 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. In column (1) of Table C3 Panel A in Appendix C, 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. Moreover, in column (1) of Table C3 Panel B, we replace industry fixed effects with industry-times-ROA fixed effects. We find that our main results are robust to controlling for any (either observable or unobservable) industry-level heterogeneity in CEO turnover–performance sensitivity.

We also show that our results are robust to using alternative measures of performance. Our choice of ROA as a measure of performance in our main tests follows a large body of the CEO turnover literature using operating performance to measure CEO performance when

CEO effort is unobservable (e.g., Hermalin and Weisbach, 1998; Huson, Parrino, and Starks, 2001; Huson, Malatesta, and Parrino, 2004; Fich and Shivdasani, 2006; Fisman et al., 2014). Hermalin and Weisbach (1998) and Jenter and Lewellen (2014) argue that stock returns are not an ideal measure of firm performance in CEO turnover regressions because stock prices are forward looking, incorporating investors' assessment of the probability of a CEO turnover. If investors deem a turnover highly likely, then stock prices and returns reflect the expected value of the firm not under the incumbent, but rather under a successor CEO. This scenario reduces the predictive power of stock prices for CEO turnover and biases the estimates of performance-induced turnover downward. In contrast, operating performance measures are backward-looking and therefore are less likely to suffer from forward-looking bias. Moreover, Fisman et al. (2014) note that stock performance is noisy, and is often due to factors outside the CEO's control. Nonetheless, in Table C5 Panel A in Appendix C, we use stock returns as a measure of performance. We show that our main results are robust to a different measure of performance: CEO turnover is more responsive to poor stock returns when directors are closer to elections.¹⁸

In our main analysis, the director *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 at one of her boards, it might strongly affect her behavior more than if she were not. In Table C6 we repeat the analysis using an alternative measure of board *Years-to-election* that is based on, at the director-year level, the *minimum* number of years from a given year to the next election across all of a director's board seats. We find that our main results remain unchanged: The coefficients on

¹⁸ Table C5 Panel B further shows that our main findings remain when we use lagged ROA as a measure of performance in Equation (2). Our main findings also remain when we use industry-adjusted ROA (untabulated).

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. As a robustness check, we exclude from the sample CEO turnover cases in which 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 C7. We find that the coefficients on the interaction term are positive and significant at the 1% level, and are of greater magnitude than those in our baseline specifications, suggesting that the effect of director elections on turnover–performance sensitivity is greater for likely performance-driven CEO turnover cases.

Finally, large boards are known to be ineffective in monitoring (Yermack, 1996) and are also more likely to have directors with multiple board seats. To ensure that our results are not driven by board size, in Table C8 we control for board size and show that our main findings remain.

We next perform a series of tests that support a causal interpretation of the relation.

4. Addressing endogeneity

The challenge to empirically identifying a causal effect of board *Years-to-election* on CEO turnover policy is the possibility that an omitted variable may be driving the effect of *Years-to-election* on CEO turnover policy. For example, in anticipation of poor performance, directors who prefer less rigorous monitoring could be attracted to firms with weak

governance, while more responsive directors who are replacing poorly 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 with directors up for election every year), then the association between *Years-to-election* and CEO turnover–performance sensitivity might not be due to what we hypothesize (*Years-to-election* leads to higher CEO turnover–performance sensitivity), but rather 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 carry out the analysis using a sample of directors with tenure for at least three years. This tenure requirement mitigates the concern that our results might be due to directors who prefer less monitoring and join a board contemporaneously with the CEO turnover event; their preference might be an omitted variable driving both their decision to join the board, *Years-to-election*, and the CEO turnover decision. By requiring that every director has experienced at least one election cycle prior to the turnover event, we reduce the possibility that a contemporaneous matching between the directors and the board will have 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, further requiring that the sample of directors have had tenure for 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 board is unlikely to drive the results. Furthermore, this set of tests mitigate concerns that our results might be driven by off-cycle director replacements around the time of the CEO turnover event since we impose tenure requirements.

[Insert Table 5 about here]

While the previous set of tests rule out the possibility that contemporaneous matching between directors and boards is driving the results, the concern remains that an endogenous cross-sectional matching between directors with certain monitoring preferences (i.e., director type) and boards with a certain level of governance (i.e., firm type) are driving the results. We perform two tests to address this concern and provide further support for a causal interpretation of our main findings.

We begin by repeating the analysis in Table 2 using each director's *Years-to-election* on *other* boards as a measure of her proximity to elections. The board-level *Years-to-election* is now constructed as the average of directors' modified *Years-to-election* excluding their home boards. 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. Panel A in Table 6 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.

It is important to note that the fact that this test relies on the variation in board *Years-to-election* derived from other boards and leads to minor changes in our results suggests that the variation in board *Years-to-election* derived from the within-board

nomination status is minor. For example, consider a staggered board with nine directors. Each year three directors are nominated for re-election; there is then no within-board variation in board *Years-to-election* if we only consider these directors' proximity to election on this particular board. Indeed, untabulated results show that the variation in board *Years-to-election* that is derived from the within-board nomination status does not affect CEO turnover decisions.

[Insert Table 6 about here]

Furthermore, we conduct an additional test to show that our results are not driven by directors' different preferences for staggered and unitary boards. To address the concern that our results are driven by directors who conduct less monitoring and self-select into firms with staggered boards, a practice that prior work shows is associated with poor 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, directors' preferences for staggered boards are unlikely to drive our results because those directors have chosen the same mix of board seats involving both a unitary and a staggered board and also have the same number of board seats (mitigating the concern that the number of seats the director has might affect the results). Further, the variation in board *Years-to-election* comes solely from the temporal variation in director *Years-to-election* on her outside staggered board, not from her home unitary board. Panel B in Table 6 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 are to their next elections on staggered boards, the higher CEO turnover–performance sensitivity

is.

The above tests mitigate the concern that either contemporaneous or cross-sectional matching between directors and boards is driving the relation between board *Years-to-election* and CEO turnover–performance sensitivity. A possibility remains, however, that there is a time trend in CEO turnover–performance sensitivity and that this trend is somehow related to board *Years-to-election*, leading to a spurious association between the two. While such a possibility is arguably unlikely, we nonetheless perform a test that directly addresses this concern. To perform the test, we define the first year that a firm’s ROA drops below the 40th percentile among all firms in that year as an event, which we term *First bad ROA*.¹⁹ We then add interactions between board *Years-to-election* and indicators for the first year of this poor performance and the three years prior to capture any possible time trend in CEO turnover–performance sensitivity. Table 7 presents the results.

[Insert Table 7 about here]

We first show that the coefficient on *First bad ROA* is positive and significant, suggesting that the probability of CEO turnover is significantly higher in the first bad ROA year. We further show that the coefficient on the interaction between *First bad ROA* and *Years-to-election* is negative and significant, suggesting that board *Years-to-election* has a significant effect on CEO turnover after poor performance. Finally, we show that none of the coefficients on the interactions between indicators for the three years prior to the first poor performance and board *Years-to-election* is statistically significant, suggesting that there is no common time trend in CEO turnover–performance sensitivity and the board *Years-to-election*

¹⁹ The results are similar if we use alternative cutoffs such as the 50th percentile.

measure, which provides additional support for a causal interpretation of the results.

5. The underlying mechanisms

Thus far we have established a robust and plausibly causal effect of board *Years-to-election* on CEO turnover–performance sensitivity: There is a significant increase in CEO turnover–performance sensitivity when directors are closer to their elections. What drives this result?

We argue that directors who are closer to elections (and therefore face greater exposure to their labor market) are more willing to fire a CEO following poor firm performance if there is increased shareholder attention to director elections at AGMs and/or there is a labor market reward for disciplining the CEO. We therefore investigate whether shareholders pay attention to director elections in general and around AGMs in particular, whether there are any labor market implications for disciplining a CEO after poor firm performance, and whether directors receive fewer negative recommendations in elections from proxy advisory firms of boards that fire their CEO after poor performance than those of boards that do not.

5.1. Do shareholders pay attention to director elections?

We start with a number of high-profile cases in which shareholders responded to boards' decisions to not fire a CEO after poor firm performance by voting against the directors. On February 17, 2015, activist hedge fund H Partners wrote to the board of struggling Tempur Sealy:

“In our view, the Board must immediately replace current CEO Mark Sarvary due to

his consistently poor performance and failure to deliver on his promises to shareholders. Unfortunately, it has become clear that the current Board lacks a shareholder-focused mindset, is unwilling to hold management or itself accountable.”

In its April 29, 2015 letter to shareholders, H Partners continued:

“The May 8, 2015 Annual Meeting of Tempur Sealy is only about a week away. We appreciate the tremendous support we continue to receive from shareholders in our campaign to reinvigorate leadership by voting “AGAINST” the three Board leaders most directly responsible for value destruction: Christopher A. Masto, P. Andrews McLane and Mark Sarvary (CEO).”²⁰

In the case of Ariad Pharmaceuticals, CNBC reported:

“Ariad Pharmaceuticals largest shareholder Sarissa Capital Management on Friday called for the replacement of CEO Harvey Berger. Sarissa, which holds a 6.9-percent stake in Ariad, said it was seeking to replace Berger and lead independent director Wayne Wilson on the board. The moves come after talks between the hedge fund and some of Ariad’s board members regarding Berger’s retirement stalled. Sarissa indicated that it was “extremely disturbed” by Ariad’s decision to renew Berger’s employment and that it could pursue court proceedings to remove one or more of the drugmaker’s directors.”²¹

Finally, in the case of Green Dot Corp. versus Jeffrey Osher, the Wall Street Journal reported:

“Investor Jeffrey Osher sat on his holdings in prepaid-debit-card issuer Green Dot Corp. for three years before he lost his patience. In December, following a string of disappointing earnings reports that left the company’s shares down sharply, the hedge-fund manager met with the board and asked directors to fire founder and Chief Executive Steven Streit, according to people familiar with the meeting. When the board refused, Mr. Osher’s Harvest Capital Strategies LLC did something it had never done before: It publicly threatened to run a campaign to oust the company’s directors.”²²

²⁰ See the full February 17, 2015 letter at:

http://www.fixtempursealy.com/wp-content/uploads/2015/04/LettertoBoard_2.17.15.pdf;

and see the full April 29, 2015 letter at:

<http://www.fixtempursealy.com/wp-content/uploads/2015/04/Letter-to-Shareholders-4.29.15.pdf>

²¹ See the story “Ariad’s largest shareholder calls for replacement of CEO” at:

http://www.firstwordpharma.com/node/1264636?tsid=28®ion_id=2#axzz3uGhwWDxQ

²² See the story “Don’t make me do this: Rise of the reluctant activist” at:

<http://www.wsj.com/articles/dont-make-me-do-this-rise-of-the-reluctant-activist-1455814599>

All these examples suggest that shareholders pay attention to boards' decisions after poor performance and rely on director elections to voice their dissatisfaction. The next example further shows that the labor market for directors is likely to aggregate information on directors' actions across the boards on which they sit.

Dimensional Fund Advisors, the eighth largest US mutual fund firm with \$398 billion in assets, has been sending warning letters to companies whose stock it owns and who have adopted poison pills without shareholder approval. Importantly, Dimensional Fund Advisors has vowed to vote against directors who approved those pills – not just at the company with the poison pills, but at every company on whose board those directors serve.²³ Although this example involves boards' decisions to adopt a poison pill, there is no *a priori* reason to believe that the labor market for directors functions differently when boards' decisions to fire a CEO are involved.

Another piece of suggestive evidence comes from the timing of CEO turnover announcements in our sample. Figure C1 Panel A plots the frequency of CEO turnover cases in different months relative to the month of AGMs. Had shareholders been oblivious of director elections at AGMs, we would have expected a relatively constant frequency of CEO turnover cases throughout the year. Instead, we find a spike in the frequency of CEO turnover announcements in the month during which AGMs are held. Panel B plots the frequency of non-retirement related CEO turnover cases in different months relative to the month of AGMs. When we compare the number of announcements in the AGMs month and the number of announcements in the surrounding four-month window (i.e., up to the two months

²³ See the story “Big fund firm blacklists directors who support poison pills” at: <http://www.reuters.com/article/dfa-poisonpills-boards-idUSL1N0X11RY20150429>

before and the two months after the AGMs), the difference is statistically significant at the 1% (10%) level when all (non-retirement related) CEO turnover cases are concerned. Overall, Figure C1 provides further support that shareholders do pay close attention to director elections at AGMs.

So far, we have provided largely anecdotal evidence that shareholders pay attention to director elections. We next provide further evidence of shareholder attention through media coverage. Our primary data source is Factiva, a global news database. To analyze the media coverage, we manually collect information from Factiva on director coverage by the media.²⁴ For each director we create a measure of the number of articles in a year that cover the director and the firm. The observation is at the director-firm-year level; we then take the mean across all directors of a firm to obtain the media coverage measure at the firm-year level. At the director level, over a third of our sample directors (i.e., 11,238 out of 30,867 directors) have at least one news article covering them, and on average each director has 0.52 news articles covering her. At the firm level, over 80% of our sample firms (i.e., 3,364 out of 4,048 firms) have at least one director with media coverage, and on average each firm has 0.40 news articles covering its directors.

To examine the relation between media coverage, firm performance, and board *Years-to-election*, we estimate the following regression:

$$\begin{aligned}
 \text{News coverage}_{it} = & \eta_t + \eta_j + \eta_{jt} + \beta_1 \text{ROA}_{it} + \beta_2 \text{Years - to - election}_{it} \\
 & + \beta_3 \text{ROA}_{it} * \text{Years - to - election}_{it} + X_{it}'\gamma + \varepsilon_{it},
 \end{aligned} \tag{2}$$

²⁴ For each director, we search for articles mentioning her and we count the resulting number of articles per month. We use two different search criteria, generating two count measures. The first criterion searches for articles that include both the director's name and the firm's name and the words "board member", "board members", "director", or "directors". The second criterion searches for articles that include only the director's name and the firm's name. For our analysis we use the first criterion. The results are similar when we use the second. After we generate the count at the monthly level we aggregate it to the year level, so that we have the number of articles at the director-firm-year level.

where the dependent variable $News\ coverage_{it}$, is the average of director media coverage across all directors of firm i . 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, and X_{it} is a vector of firm-level controls including Size (as measured by $\log(\text{Sales})$), Sales growth, and Leverage. Table 8 presents the results.

[Insert Table 8 about here]

In column (1), the coefficient on ROA shows a negative and significant association between firm performance and director media coverage, which indicates that directors seem to receive more attention when their firm has experienced poor performance. Furthermore, the coefficient on board *Years-to-election* is negative and significant, suggesting that the closer directors of a board are to their next elections, the more news coverage they will receive. Finally, the coefficient on the interaction between ROA and board *Years-to-election* is negative and significant, indicating even greater news coverage on directors closer to elections when their firm has experienced poor performance. The results are robust to adding year fixed effects in column (2) and industry and year fixed effects in column (3).²⁵ Overall, the results in Table 8 indicate one potential mechanism that drives our results: Directors closer to elections receive more media coverage, especially when their firm performed poorly. Given that our measure of media coverage includes news articles by all major news outlets to which shareholders have easy access, these results provide further support for the basic

²⁵ In unreported results, we also add industry-times-year fixed effects, and our main findings remain unchanged.

premise of our paper that shareholders pay attention to what directors are doing on *other* boards.

5.2. Labor market implications for disciplining a CEO

In Section 5.1 we have presented several pieces of largely anecdotal evidence as well as evidence based on media coverage consistent with the notion that shareholders pay attention to boards' decisions. We next examine whether director labor market outcomes are affected by boards' decisions to discipline a CEO after poor firm performance.

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 regression model:

$$Board\ seat_{idt} = \eta_t + \eta_{id} + \beta_1 Post_{idt} + X_{it}' \gamma + \varepsilon_{idt}, \quad (3)$$

where the dependent variable is the number of seats director d of firm i holds on the event firm board in 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 the 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 $\log(\text{Sales})$), Sales growth, and Leverage. The coefficient on $Post_{idt}$ captures the abnormal change in directorships over the three-year period after the 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.²⁶ Table 9 Panel A presents the results.

[Insert Table 9 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 their own boards relative to the sample of matched directors who do not experience such events.

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 Panel A in Table C9. 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

²⁶ The specification in Equation (3) 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.

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 (3) 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 9 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 Panel B in Table C9, 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 a 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).²⁷ 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).

²⁷ The extent of board seat losses is of similar magnitude to that of incumbent directors in proxy contest-target firms (Fos and Tsoutsoura, 2014).

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 are consistent 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 finding 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 fire their CEOs.²⁸

In summary, 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.

²⁸ 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.

This test provides strong support for our premise that shareholders pay attention to what directors are doing on other boards and that they take this information into account when electing directors. Our findings echo 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, and anecdotal evidence in Section 5.1 suggesting that the labor market for directors works across firms to directly affect director behavior. As such, our paper contributes to the literature on CEO turnover by introducing director *Years-to-election* as a new factor that affects CEO turnover–performance sensitivity.

5.3. Disciplining a CEO and ISS recommendations

Recent evidence shows that proxy advisory firms play an important role in corporate governance through their recommendations for shareholder voting (Yermack, 2010; Malenko and Shen, 2016). In this section we investigate whether the recommendations by one of the largest proxy advisory firms, the Institutional Shareholder Services (ISS), vary for firms that fire their CEO after poor firm performance relative to firms that do not.

At annual director elections, ISS issues a “for”, “against”, or “withhold” recommendation for each nominated director. An ISS recommendation is considered negative if it recommends to vote “against” or “withhold” the vote. At the firm-year level, *ISS Negative* is the frequency of receiving negative ISS recommendations across all nominated directors.

For each event firm, we obtain control firms matched by firm performance in the year prior to the CEO turnover event. We then use the difference between an event firm’s *ISS Negative* recommendations and its matching cohort’s average *ISS Negative* recommendations

to measure (abnormal) changes in the ISS recommendations for the event firm over the seven-year period centered on the event year.

We estimate the following regression model:

$$ISS\ Negative_{it} = \eta_t + \eta_i + \beta_1 Post_{idt} + X_{it}' \gamma + \varepsilon_{idt}, \quad (4)$$

where the dependent variable is the difference in the frequency of receiving negative ISS recommendations between firms that experience a CEO turnover and their control firms. $Post_{idt}$ is an indicator variable that takes a value of one for the three-year period after a CEO turnover (and zero otherwise), η_t are event-year fixed effects, η_i are firm 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 the frequency of receiving negative ISS recommendations over the three-year period after a CEO turnover relative to their matched firm cohorts. Table 10 presents the results.

[Insert Table 10 about here]

In column (1), the coefficient on $Post$ indicates that after a CEO turnover event, event firms are 3% less likely to receive negative ISS recommendations 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 (controlling for time-invariant characteristics as well as aggregate trends), firm fixed effects (controlling for firm time-invariant characteristics), and firm-level controls. We conclude that proxy advisory firms are less harsh in their recommendations when boards have fired their CEOs following poor firm performance.

6. Alternative explanations, additional investigation, and discussion

6.1. The role of other governance mechanisms

Fich and Shivdasani (2006) show that directors on busy boards are ineffective 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. Table C10 presents the results.

We find that while busy boards are positively and significantly associated with the frequency of CEO turnover events, there is no significant effect of busy boards on CEO turnover–performance sensitivity. This is consistent with the observation that, due to the ineffective monitoring by such boards, firms with busy boards are more likely to experience negative corporate events such as a 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.

Prior literature also suggests that outsider-dominated boards are associated with stronger CEO turnover–performance sensitivity (Weisbach, 1988; Guo and Masulis, 2015). We expect that director independence might mitigate their agency incentives, in that they might put their own interests ahead of those of their shareholders. In Table C11 we augment the main specification in Equation (1) with a measure of high board independence and its interaction with firm performance. We find that while board independence is associated with a higher likelihood of CEO turnover, it has no significant effect on CEO turnover–

performance sensitivity.²⁹ 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.

We conclude that busy boards and board independence are unlikely to explain our findings of higher CEO turnover–performance sensitivities when directors are faced with imminent elections.

6.2. Additional investigation and discussion

So far, we have shown that board *Years-to-election* strengthens CEO turnover–performance sensitivity. This begs the question whether greater sensitivity of CEO turnover to performance is always desirable. On the one hand, stronger incentives could be beneficial for shareholders if they incentivize the CEO to exert more effort—the incentive alignment viewpoint of Jensen and Meckling (1976), Holmström (1979), and Jensen and Murphy (1990). On the other hand, stronger incentives could be bad for shareholders if they incentivize the CEO to focus on short-term performance at the expense of long-term value—the short-termism perspective of Stein (1988, 1989).

One way to address this question is to examine whether long-term-oriented

²⁹ In recent years, particularly over our sample period, with more scrutiny over busy directors (see, for example, the recommendation by the Council of Institutional Investors that directors should sit on no more than two boards, and the NYSE Corporate Governance Guide, 2014), the fraction of busy directors (boards) has declined drastically. In Fich and Shivdasani (2006), half of the outside directors in Forbes 500 firms were busy, and a fifth of the boards were busy over the period 1989–1995. In contrast, over our sample period 2001–2010, we show that only a tenth of directors are busy and 7% of boards are busy. Similarly, public pressure and regulatory requirements have led firms to have majority-outsider boards. In Weisbach (1988), 50% of the directors of half of the NYSE firms in 1980 were independent, and more than 70% of the directors of less than a tenth of the NYSE firms were independent. Due to regulation changes (see, for example, SOX’s requirement that at least 50% of directors be independent) and increased scrutiny, boards over our sample period have a much higher percentage of independent directors and less variation across boards: 90% of our sample firms have more than 50% of directors to be independent. As both non-busy boards and board independence become commonplace nowadays, there is no longer sufficient variation to explore the differential effects of busy boards and board independence on CEO turnover–performance sensitivity.

shareholders affect CEO turnover decisions in a similar way as board *Years-to-election*. Following Gaspar et al. (2005) and Cella et al. (2013), an investor's horizon is measured by its portfolio turnover (i.e., the churn ratio), and at the firm-year level, the investor horizon is the weighted average of the churn ratios of a firm's institutional investors. We sort the sample firms into firms with more (above median) and firms with fewer (below median) long-term-oriented institutional investors, and augment the main specification in Equation (1) with a measure of investor long-term orientation as well as its interaction with firm operating performance. Table 11 presents the results.

[Insert Table 11 about here]

Confirming evidence from existing literature in which Bushee (1998) shows myopic managerial decisions in the presence of transient investors, and Parrino, Sias, and Starks (2003) find that the presence of transient investors exacerbates any short-term performance decline, we find that when shareholders are more long-term oriented, the sensitivity of CEO turnover to performance increases. Thus, the presence of long-term shareholders and the pressure from board members induced by their closeness to elections generate similar changes in the sensitivity of CEO turnover to performance. We interpret this result as evidence against the short-termism perspective.

Does the increase in the sensitivity of CEO turnover to performance lead to better performance? To explore that possibility, we run a regression of operating performance on board *Years-to-election* and other controls. Table 12 presents the results.

[Insert Table 12 about here]

We show that when directors are closer to elections, firm performance improves. Further, the performance effect is stronger when we use the variation in board *Years-to-election* that comes from *other* boards, indicating that the effect is likely to be causal. This result by itself has an important implication for corporate governance, as it suggests that annual director elections do play an important governance role. We hope that the corporate governance literature will take a note of our findings in this paper and study the role of monitoring induced by directors' closeness to elections in other corporate decisions.³⁰

Our paper and its findings contribute to the long-standing debate on whether staggered boards are a desirable governance practice.³¹ Our paper highlights a novel role played by staggered boards. Although almost the entire literature focuses on the role of staggered boards in increasing the costs of proxy contests and hostile takeovers, we use staggered boards to tease out the effect of *Years-to-election* on the strength of incentives faced by CEOs, pointing out an additional factor that firms should consider when deciding on board structure: directors' closeness to elections. More broadly, the choice of governance mechanisms including staggered boards differs across firms, depending on firm-specific circumstances (Adams, Hermalin, and Weisbach, 2010). All firms should consider these

³⁰ A plausible interpretation of the results is that the increased sensitivity of CEO turnover to performance leads to better performance. Alternatively, board *Years-to-election* could have a direct effect on firm performance. In either scenario, the results indicate that annual director elections play an important governance role.

³¹ On the one hand, critics of staggered boards point out that staggered boards help insulate directors from the threat of quick removal and such insulation is undesirable as it diminishes the accountability of directors (and managers), encouraging moral hazards such as shirking, empire building, and private benefits extraction by insiders (Manne, 1965; Jensen, 1988, 1993). In the cross-section, Bebchuk and Cohen (2005) and Faleye (2007) show that staggered boards tend to have a lower firm value as measured by Tobin's Q. On the other hand, proponents of staggered boards suggest that staggered boards are a means to encourage boards to pursue long-term value creation and avoid situations in which impatient shareholders may pressure management to overinvest in short-term projects at the expense of long-term firm value (Stein, 1988, 1989; Bebchuk and Stole, 1993; Cremers et al., 2016). Further, because directors who serve on staggered boards are elected for a relatively long term—usually three years—they can arguably develop a deeper knowledge of the firm and its operating environment and focus on long-term strategies. Finally, staggered boards help outside directors to be independent of management and thus reduce agency costs and improve the corporate governance of a firm (Cremers et al., 2016).

factors—including the one we highlight in our paper—to decide on board structure.

7. Conclusion

Director elections are a fundamental feature of corporate governance. A great deal of research has focused on the effects of board size and composition 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 show that the closer directors of a board are to their next elections, the higher CEO turnover–performance sensitivity is. We further show that the results are driven by directors likely to influence CEO turnover decisions, such as the Chairman of the Board and members of the nomination committee.

A series of tests supports a causal interpretation of the results. First, when we require that directors have a minimum tenure of three years, there is no material change in our results, suggesting that the contemporaneous matching between directors and boards at the time of a CEO turnover event is not driving 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, as evidenced by their sitting on only one unitary board and additionally on one staggered board, we find no material change in our results, suggesting that director self-selection into

firms with different board structures does not drive the results. Finally, we find no association between board *Years-to-election* and CEO turnover–performance sensitivity in the years before poor firm performance.

We conclude that director elections have important implications for corporate governance.

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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).

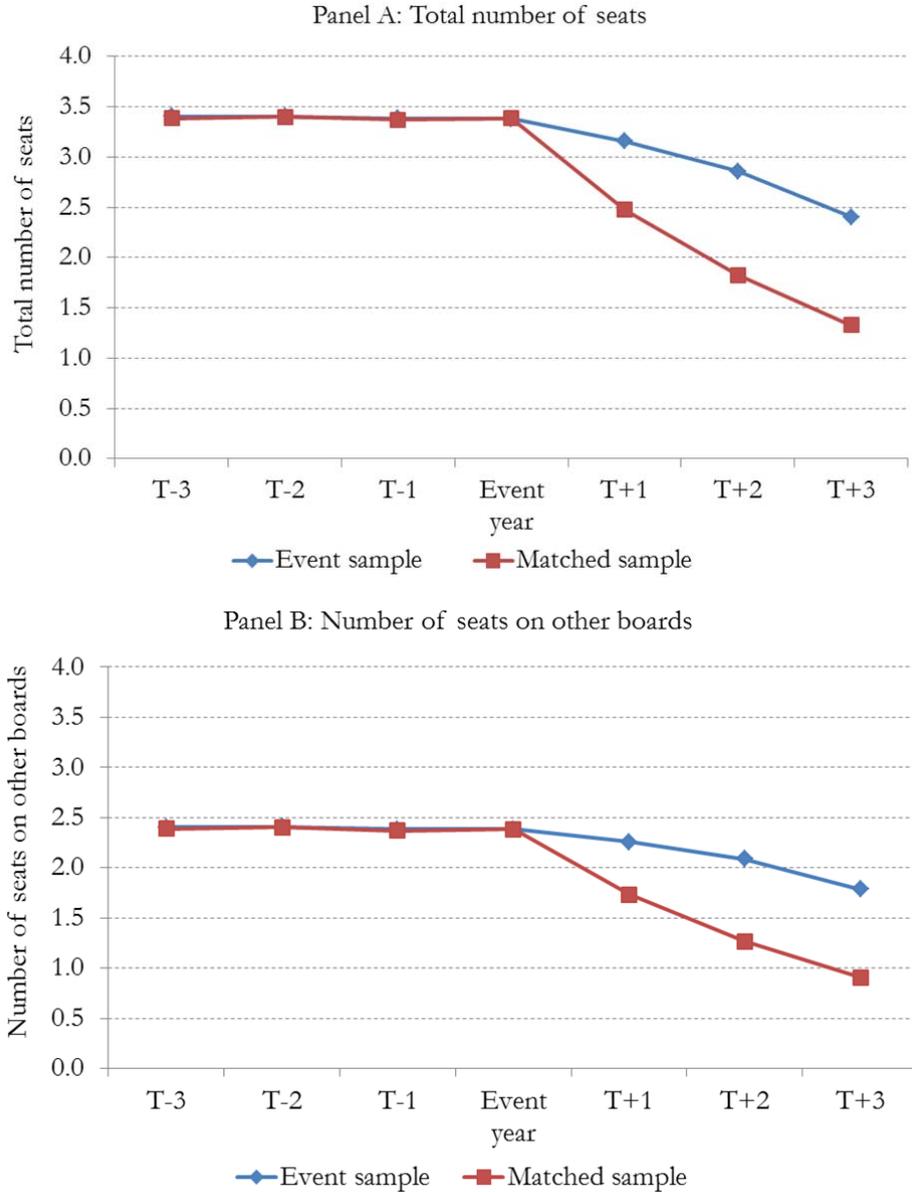


Table 1
Summary statistics

Panel A reports summary statistics for director characteristics. The unit of observation is director–year. Panel B reports summary statistics for board and firm characteristics. The unit of observation is firm–year. Definitions of the variables are provided in Appendix B. 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)
<i>Panel A: Director characteristics</i>						
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
<i>Panel B: Board and firm characteristics</i>						
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
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
CEO-COB duality	26,791	0.000	1.000	1.000	0.558	0.497
Board size	22,856	5.000	8.000	13.000	8.423	2.627
Board independence	21,298	0.000	1.000	1.000	0.896	0.606
Busy board	19,710	0.000	0.000	1.000	0.070	0.255
ROA	22,003	-0.220	0.095	0.289	0.081	0.155
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
First bad ROA	22,003	0.000	0.000	1.000	0.105	0.307

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

This table examines the relation between board *Years-to-election* and CEO turnover–performance sensitivity using a linear probability model in Equation (1). Definitions of the variables are provided in Appendix B. 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*** [0.0094]	-0.0702*** [0.0095]	-0.0709*** [0.0099]
Years-to-election	-0.0020 [0.0024]	-0.0030 [0.0024]	-0.0004 [0.0024]
ROA * Years-to-election	0.0282** [0.0123]	0.0279** [0.0123]	0.0259** [0.0122]
Sales (log)	0.0156*** [0.0007]	0.0158*** [0.0007]	0.0156*** [0.0007]
Sales growth	-0.0042*** [0.0011]	-0.0051*** [0.0011]	-0.0052*** [0.0012]
Leverage	-0.0192*** [0.0060]	-0.0193*** [0.0060]	-0.0150** [0.0069]
Constant	-0.0416*** [0.0032]	-0.0425*** [0.0048]	-0.0429*** [0.0049]
<i>R</i> -squared	0.027	0.028	0.033
<i>N</i>	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 examines whether different roles of directors change the effect of board *Years-to-election* on CEO turnover–performance sensitivity using a linear probability model in Equation (1). In columns (1)-(3), board *Years-to-election* is the average of director *Years-to-election* across the COB and members of the nomination committee. In columns (4)-(6), board *Years-to-election* is the average across board members who are neither the COB nor members of the nomination committee. F-tests compare coefficients on $ROA * Years-to-election$ in columns (1)-(3) to those in columns (4)-(6). Definitions of the variables are provided in Appendix B. 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:	<i>Chairman of the Board and nomination committee</i>			<i>Other board members</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
ROA	-0.0772*** [0.0106]	-0.0787*** [0.0106]	-0.0784*** [0.0112]	-0.0625*** [0.0110]	-0.0641*** [0.0111]	-0.0707*** [0.0115]
Years-to-election	-0.0007 [0.0023]	-0.001 [0.0023]	0.001 [0.0023]	0.0006 [0.0024]	0.0003 [0.0024]	0.0022 [0.0024]
ROA * Years-to-election	0.0365*** [0.0118]	0.0357*** [0.0118]	0.0335*** [0.0117]	0.0086 [0.0123]	0.0093 [0.0123]	0.0080 [0.0122]
R-squared	0.029	0.03	0.035	0.027	0.028	0.034
N	20,968	20,968	20,968	17,650	17,650	17,650
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes
Industry FE	No	No	Yes	No	No	Yes
F-test						
F-statistic	3.85**	3.86**	3.58*			
p-value	0.0497	0.0495	0.0584			

Table 4**The role of director elections: Does CEO-COB duality matter?**

This table examines whether CEO-COB duality changes the effect of board *Years-to-election* on CEO turnover–performance sensitivity. In Panel A, the analysis is limited to firms with a separate CEO and COB. In Panel B, the analysis is limited to firms with a common CEO and COB. Definitions of the variables are provided in Appendix B. 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)
<i>Panel A: Firms with a separate CEO and COB</i>			
ROA	-0.0890*** [0.0148]	-0.0916*** [0.0148]	-0.0891*** [0.0152]
Years-to-election	0.0000 [0.0036]	-0.0010 [0.0036]	0.0040 [0.0038]
ROA * Years-to-election	0.0541*** [0.0193]	0.0538*** [0.0193]	0.0503*** [0.0193]
R-squared	0.036	0.038	0.046
N	13,806	13,806	13,806
<i>Panel B: Firms with a common CEO and COB</i>			
ROA	-0.0448*** [0.0106]	-0.0467*** [0.0107]	-0.0461*** [0.0119]
Years-to-election	-0.0015 [0.0030]	-0.0022 [0.0030]	-0.0017 [0.0031]
ROA * Years-to-election	-0.0015 [0.0145]	-0.0019 [0.0145]	-0.0009 [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 Appendix B. 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)
<i>Panel A: Directors with at least three years of tenure</i>			
ROA	-0.0690*** [0.0095]	-0.0715*** [0.0095]	-0.0727*** [0.0100]
Years-to-election	-0.0010 [0.0023]	-0.0020 [0.0023]	0.0000 [0.0023]
ROA * Years-to-election	0.0319*** [0.0118]	0.0312*** [0.0117]	0.0297** [0.0117]
R-squared	0.026	0.028	0.032
N	23,933	23,933	23,933
<i>Panel B: Directors with at least six years of tenure</i>			
ROA	-0.0662*** [0.0098]	-0.0688*** [0.0099]	-0.0712*** [0.01040]
Years-to-election	-0.0010 [0.0022]	-0.0020 [0.0022]	0.000 [0.0023]
ROA * Years-to-election	0.0252** [0.0117]	0.0244** [0.0117]	0.0230** [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
Using years-to-election on other boards

This table addresses concerns about some unobservable factors that influence the CEO turnover decision in the event firm that might also affect board *Years-to-election*, leading to a spurious association. In Panel A, we use board *Years-to-election* based on director elections on other boards. In Panel B, we perform the analysis at the director-year level and restrict the sample of directors to those who serve on one unitary and one additional staggered board, i.e., directors with the same number and type of board seats. Definitions of the variables are provided in Appendix B. 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)
<i>Panel A: Years-to-election on other boards</i>			
ROA	-0.0648*** [0.0084]	-0.0677*** [0.0084]	-0.0700*** [0.0089]
Years-to-election	0.0030 [0.0029]	0.0020 [0.0029]	0.0020 [0.0029]
ROA * Years-to-election	0.0245** [0.0124]	0.0244** [0.0124]	0.0266** [0.0126]
R-squared	0.025	0.026	0.031
N	21,644	21,644	21,644
<i>Panel B: Directors who seat on one unitary and one additional staggered board</i>			
ROA	-0.1034*** [0.0252]	-0.1099*** [0.0252]	-0.1346*** [0.0285]
Years-to-election	-0.0058 [0.0077]	-0.008 [0.0077]	-0.0097 [0.0076]
ROA * Years-to-election	0.0671* [0.0380]	0.0696* [0.0380]	0.0747* [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**Any time trend in CEO turnover–performance sensitivity?**

This table addresses concerns about any pre-existing time trend in CEO turnover–performance sensitivity that might be correlated with the board *Years-to-election* measure, leading to a spurious association. To examine whether there is any relation between board *Years-to-election* and CEO turnover–performance sensitivity in the years leading to the first poor performance, we employ a regression specification that includes interactions of board *Years-to-election* and indicators for the year of and the three years prior to the first poor performance. Definitions of the variables are provided in Appendix B. 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** [0.0081]	0.0209** [0.0085]	0.0224*** [0.0086]
Years-to-election	0.0005 [0.0043]	0.0000 [0.0041]	0.0019 [0.0044]
First bad ROA (t) * Years-to-election	-0.0229** [0.0095]	-0.0226** [0.0094]	-0.0202** [0.0095]
First bad ROA (t-1)	-0.0057 [0.0110]	-0.0046 [0.0110]	-0.0052 [0.0110]
First bad ROA (t-1) * Years-to-election	-0.0086 [0.0136]	-0.0091 [0.0135]	-0.0103 [0.0138]
First bad ROA (t-2)	-0.0154 [0.0115]	-0.0148 [0.0115]	-0.0141 [0.0115]
First bad ROA (t-2) * Years-to-election	0.0348 [0.0242]	0.0357 [0.0242]	0.0309 [0.0242]
First bad ROA (t-3)	-0.0185* [0.0110]	-0.0182* [0.0110]	-0.0193* [0.0110]
First bad ROA (t-3) * Years-to-election	0.0249 [0.0218]	0.0252 [0.0218]	0.0245 [0.0215]
R-squared	0.030	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**Media coverage, firm performance, and director elections**

This table examines the relation between firm performance, board *Years-to-election*, and media coverage of directors using a regression model in Equation (2). Definitions of the variables are provided in Appendix B. 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: Media coverage			
	(1)	(2)	(3)
ROA	-0.2268*** [0.0340]	-0.2030*** [0.0334]	-0.2280*** [0.0347]
Years-to-election	-0.0424*** [0.0072]	-0.0363*** [0.0071]	-0.0266*** [0.0071]
ROA *Years-to-election	-0.1268*** [0.0409]	-0.1215*** [0.0402]	-0.1426*** [0.0395]
Sales (log)	0.0550*** [0.0035]	0.0524*** [0.0034]	0.0558*** [0.0039]
Sales growth	-0.0019 [0.0028]	0.0052* [0.0027]	0.0028 [0.0029]
Leverage	-0.0830*** [0.0172]	-0.0811*** [0.0169]	-0.1042*** [0.0193]
<i>R-squared</i>	0.072	0.097	0.121
<i>N</i>	24,287	24,287	24,287
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table 9**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 using a regression model in Equation (3). 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, the 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 Appendix B. 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 board seats					
	(1)	(2)	(3)	(4)	(5)

<i>Panel A: The number of seats on event firm board</i>					
Post	0.1835*** [0.0086]	0.2094*** [0.0087]	0.2095*** [0.0095]	0.2095*** [0.0095]	0.1523*** [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
<i>Panel B: The number of seats on other boards</i>					
Post	0.3543*** [0.0362]	0.3693*** [0.0347]	0.7851*** [0.0380]	0.7851*** [0.0380]	0.5457*** [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 10**ISS recommendations after CEO turnover**

This table reports changes in the frequency of receiving negative ISS recommendations in director elections between firms that experience CEO turnover after poor performance and their control firms using a regression model in Equation (4). An ISS recommendation is considered negative if it recommends to vote “against” or “withhold” the vote. The dependent variable, *ISS Negative*, is defined as the difference in the frequency of receiving negative ISS recommendations between firms that experience CEO turnover and their control firms. For each event firm, we identify a cohort of matching firms in the year prior to the event based on firm performance (as measured by ROA). *Post* indicates the three years after CEO turnover. Definitions of the variables are provided in Appendix B. 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: ISS Negative					
	(1)	(2)	(3)	(4)	(5)

Post	-0.0318***	-0.0310***	-0.0322***	-0.0313***	-0.0266***
	[0.0079]	[0.0080]	[0.0079]	[0.0080]	[0.0086]
R-squared	0.005	0.021	0.014	0.03	0.302
N	3,665	3,665	3,644	3,644	3,644
Controls	No	No	Yes	Yes	Yes
Event Year FE	No	Yes	No	Yes	Yes
Firm FE	No	No	No	No	Yes

Table 11**The role of long-term investor orientation in CEO turnover–performance sensitivity**

This table examines the relation between the long-term orientation of institutional investors and CEO turnover–performance sensitivity. Definitions of the variables are provided in Appendix B. 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	-0.0380*** [0.0129]	-0.0402*** [0.0130]	-0.0496*** [0.0134]
Years-to-election	-0.0015 [0.0026]	-0.0019 [0.0026]	0.0009 [0.0026]
ROA * Years-to-election	0.0330** [0.0136]	0.0324** [0.0136]	0.0284** [0.0134]
Long-term investor orientation	-0.0106*** [0.0028]	-0.0120*** [0.0028]	-0.0121*** [0.0028]
ROA * Long-term investor orientation	-0.0405*** [0.0132]	-0.0378*** [0.0131]	-0.0288** [0.0133]
<i>R</i> -squared	0.027	0.029	0.034
<i>N</i>	20,544	20,544	20,544
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table 12**The role of director elections in firm performance**

This table examines the relation between board *Years-to-election* and firm performance. In Panel A, we use board *Years-to-election* based on director elections on all board seats. In Panel B, we use board *Years-to-election* based on director elections on *other* board seats. Definitions of the variables are provided in Appendix B. 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: ROA			
	(1)	(2)	(3)

<i>Panel A: Years-to-election based on all board seats</i>			
Years-to-election	-0.0101**	-0.0106**	-0.0060
	[0.0041]	[0.0041]	[0.0040]
R-squared	0.242	0.248	0.328
N	18,996	18,996	18,996
<i>Panel B: Years-to-election based on other board seats</i>			
Years-to-election (other boards)	-0.0930***	-0.0993***	-0.0951***
	[0.0251]	[0.0255]	[0.0228]
R-squared	0.241	0.244	0.331
N	10,090	10,090	10,090
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Appendix A.

An example to construct director *Years-to-election*

General Richard Myers is a retired four-star general who served as the 15th Chairman of the Joint Chiefs of Staff.

In 2008, General Myers sat on 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)

His *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, General Myers sat on 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)

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

In 2010, General Myers sat on the following boards:

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

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

As the example shows, within-director exogenous variation in the measure is due to the passage of time.

Appendix B. Definitions of variables

Variable	Definition
<i>Panel A: Director characteristics</i>	
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 her directorships
Age	Director age
<i>Panel B: Board and firm characteristics</i>	
Years-to-election	The average Years-to-election across board members
Years-to-election on other boards	The average Years-to-election on other boards across board members
Staggered board (two-year cycle)	An indicator of a classified board on which all directors serve a two-year term (i.e., two classes of directors)
CEO-COB duality	An indicator of a CEO who serves as a COB
Board size	The number of directors on a 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 its fraction of independent directors above median
Long-term investor orientation	An indicator of a firm with its institutional investors' investment horizon above median
ROA	Return on assets, computed as earnings before interest, taxes, depreciation, and amortization divided by total assets
Returns	Stock returns in the last fiscal year
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.
First bad ROA	An indicator of the first year when a firm's ROA drops below the 40 th percentile.
Media coverage	The average of director newspaper coverage across all directors of a firm.

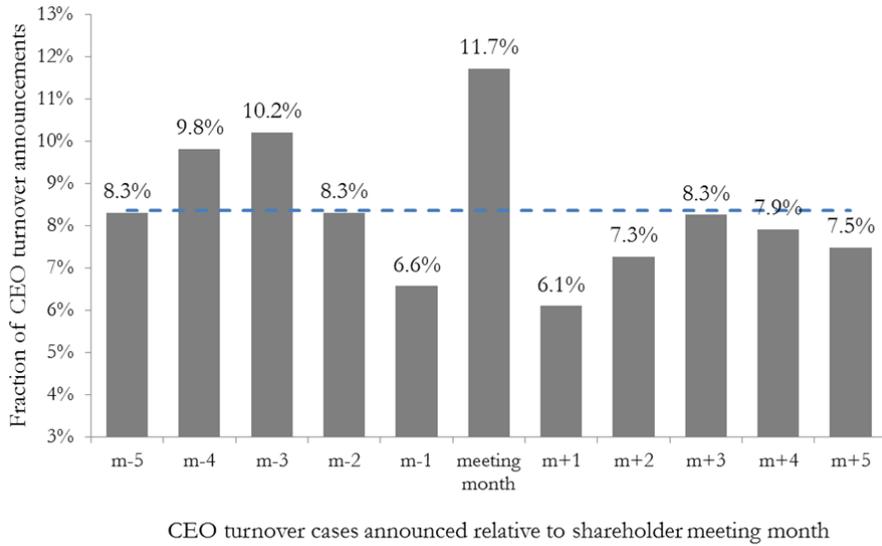
Appendix C.

Figure C1

Timing of CEO turnover announcements around the annual general meetings of shareholders

This figure presents the fraction of CEO turnover announcements in each month around the annual general meetings of shareholders (meeting month). The dashed line indicates the average fraction of CEO turnover cases over the period examined. Panel A plots announcements of all CEO turnover cases. Panel B plots announcements of non-retirement related CEO turnover cases.

Panel A: Full sample of CEO turnover cases



Panel B: Sample of non-retirement related CEO turnover cases

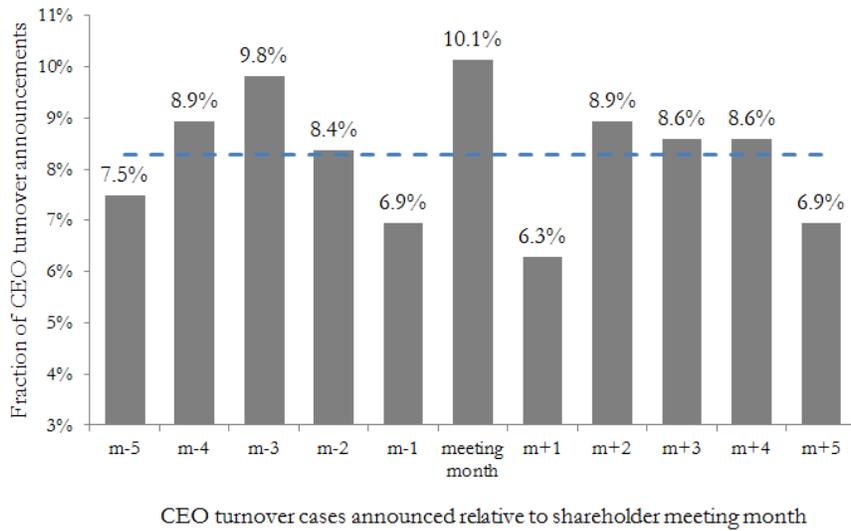


Table C1
Using a logit model

This table estimates Equation (1) using a logit probability model and reports odds ratios. Definitions of the variables are provided in Appendix B. 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	-1.2144** [0.5767]	-1.2166** [0.5941]	-1.7175*** [0.5619]
Years-to-election	-0.0070 [0.1212]	-0.0320 [0.1223]	0.0360 [0.1155]
ROA * Years-to-election	1.6296** [0.7619]	1.6320** [0.7707]	1.3410* [0.7140]
<i>R</i> -squared	0.090	0.096	0.110
<i>N</i>	24,287	24,287	24,031
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table C2**Separating a Chairman of the Board and nomination committee members**

This table examines whether the different roles of directors change the effect of board *Years-to-election* on CEO turnover–performance sensitivity using a linear probability model in Equation (1). In columns (1)-(3), board *Years-to-election* is the COB’s *Years-to-election*. In columns (4)-(6), board *Years-to-election* is the average of director *Years-to-election* across members of the nomination committee. Definitions of the variables are provided in Appendix B. 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:	<i>Chairman of the Board</i>			<i>Nomination committee</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
ROA	-0.0813*** [0.0134]	-0.0836*** [0.0134]	-0.0823*** [0.0141]	-0.0681*** [0.0091]	-0.0706*** [0.0092]	-0.0716*** [0.0098]
Years-to-election	-0.0003 [0.0024]	-0.0004 [0.0024]	0.0017 [0.0024]	-0.0013 [0.0023]	-0.0019 [0.0023]	-0.0003 [0.0023]
ROA * Years-to-election	0.0340*** [0.0123]	0.0331*** [0.0124]	0.0315** [0.0123]	0.0301*** [0.0116]	0.0300*** [0.0116]	0.0285** [0.0117]
R-squared	0.036	0.038	0.046	0.028	0.029	0.034
N	13,807	13,807	13,807	23,506	23,506	23,506
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes
Industry FE	No	No	Yes	No	No	Yes

Table C3**Controlling for industry-time-year and industry-times-ROA fixed effects**

Panel A estimates Equation (1) controlling for industry-times-year fixed effects. Panel B estimates Equation (1) controlling for industry-times-ROA fixed effects. In column (1), board *Years-to-election* is the average of director *Years-to-election* across all board members. In column (2), board *Years-to-election* is the average of director *Years-to-election* across the COB and members of the nomination committee. In column (3), board *Years-to-election* is the average of director *Years-to-election* across board members who are neither the COB nor members of the nomination committee. Definitions of the variables are provided in Appendix B. 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:	<i>All board members</i>	<i>Chairman of the Board and nomination committee</i>	<i>Other board members</i>
	(1)	(2)	(3)
<i>Panel A: Industry-times-year fixed effects</i>			
ROA	-0.0697*** [0.0101]	-0.0735*** [0.0104]	-0.0687*** [0.0118]
Years-to-election	-0.0005 [0.0025]	-0.0001 [0.0023]	0.0017 [0.0024]
ROA * Years-to-election	0.0237* [0.0125]	0.0304** [0.0123]	0.0042 [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
<i>Panel B: Industry-times-ROA fixed effects</i>			
Years-to-election	0.0000 [0.0025]	0.0015 [0.0024]	-0.0004 [0.0022]
ROA * Years-to-election	0.0277** [0.0131]	0.0372*** [0.0122]	0.0133 [0.0115]
R-squared	0.038	0.041	0.037
N	24,287	20,626	23,045
Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry *ROA FE	Yes	Yes	Yes

Table C4**Different types of independent directors**

This table examines whether the different roles of independent directors change the effect of board *Years-to-election* on CEO turnover–performance sensitivity using a linear probability model in Equation (1). In columns (1)–(3), board *Years-to-election* is the lead independent director’s *Years-to-election*. In columns (4)–(6), board *Years-to-election* is the average across all other independent directors who are not the lead independent director. Definitions of the variables are provided in Appendix B. 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:	<i>Lead independent director</i>			<i>Other independent directors</i>		
	(1)	(2)	(3)	(4)	(5)	(6)

ROA	-0.0856***	-0.0890***	-0.0939***	-0.0703***	-0.0728***	-0.0717***
	[0.0171]	[0.0172]	[0.0185]	[0.0097]	[0.0098]	[0.0101]
Years-to-election	0.0029	0.0026	0.004	-0.003	-0.0036	-0.0015
	[0.0033]	[0.0033]	[0.0033]	[0.0025]	[0.0025]	[0.0025]
ROA * Years-to-election	0.0271*	0.0272*	0.0271*	0.0217*	0.0216*	0.0180
	[0.0158]	[0.0157]	[0.0161]	[0.0127]	[0.0127]	[0.0127]
<i>R</i> -squared	0.027	0.029	0.044	0.028	0.029	0.035
<i>N</i>	6,997	6,997	6,997	22,895	22,895	22,895
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes
Industry FE	No	No	Yes	No	No	Yes

Table C5
Using alternative performance measures

This table estimates Equation (1) using alternative performance measures. In Panel A, the performance measure is stock returns. In Panel B, the performance measure is lagged ROA. Definitions of the variables are provided in Appendix B. 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)
<i>Panel A: Stock returns</i>			
Returns	-0.0061** [0.0026]	-0.0072*** [0.0027]	-0.0083*** [0.0027]
Years-to-election	0.0009 [0.0030]	0.0004 [0.0030]	0.0039 [0.0030]
Returns * Years-to-election	0.0088** [0.0043]	0.0083* [0.0043]	0.0079* [0.0043]
R-squared	0.011	0.012	0.021
N	21,024	21,024	21,024
<i>Panel B: Lagged ROA</i>			
Lagged ROA	-0.0620*** [0.0093]	-0.0641*** [0.0093]	-0.0652*** [0.0095]
Years-to-election	-0.0014 [0.0024]	-0.0021 [0.0024]	0.0001 [0.0024]
Lagged ROA * Years-to-election	0.0291** [0.0129]	0.0290** [0.0129]	0.0269** [0.0128]
R-squared	0.026	0.028	0.032
N	24,313	24,313	24,313
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table C6
Using the minimum number of years to next election

This table examines the relation between board *Years-to-election* and CEO turnover–performance sensitivity using a linear probability model in 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 Appendix B. 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*** [0.0094]	-0.0700*** [0.0095]	-0.0708*** [0.0099]
Years-to-election	-0.002 [0.0024]	-0.003 [0.0024]	-0.0004 [0.0024]
ROA * Years-to-election	0.0280** [0.0124]	0.0276** [0.0123]	0.0256** [0.0123]
<i>R</i> -squared	0.027	0.028	0.033
<i>N</i>	24,878	24,878	24,878
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table C7**Removing CEOs close to retirement**

This table estimates Equation (1) by removing CEO turnover cases in which the CEO is close to retirement (63 years old or older). Definitions of the variables are provided in Appendix B. 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*** [0.0098]	-0.0674*** [0.0099]	-0.0714*** [0.0105]
Years-to-election	-0.0018 [0.0024]	-0.0023 [0.0024]	0.0007 [0.0025]
ROA * Years-to-election	0.0395*** [0.0128]	0.0394*** [0.0128]	0.0366*** [0.0127]
<i>R</i> -squared	0.023	0.024	0.030
<i>N</i>	20,448	20,448	20,448
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table C8
Controlling for board size

This table examines the relation between board *Years-to-election* and CEO turnover–performance sensitivity using a linear probability model in Equation (1). Definitions of the variables are provided in Appendix B. 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	-0.1132*** [0.0297]	-0.1131*** [0.0298]	-0.0538* [0.0295]
Years-to-election	-0.0008 [0.0025]	-0.0011 [0.0025]	0.0026 [0.0025]
ROA * Years-to-election	0.0312** [0.0127]	0.0310** [0.0127]	0.0254** [0.0128]
Board size	0.0027*** [0.0005]	0.0027*** [0.0005]	0.0052*** [0.0006]
Board size * Years-to-election	0.0183*** [0.0040]	0.0182*** [0.0040]	0.0084** [0.0040]
Constant	0.0060 [0.0045]	0.0057 [0.0058]	-0.0004 [0.0482]
<i>R</i> -squared	0.015	0.016	0.025
<i>N</i>	24,287	24,287	24,287
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table C9**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 using a regression model in Equation (3). 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, the 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 Appendix B. 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 board seats					
	(1)	(2)	(3)	(4)	(5)

<i>Panel A: The number of seats in event firms</i>					
Post (t+1)	0.1445*** [0.0098]	0.1764*** [0.0101]	0.1590*** [0.0103]	0.1590*** [0.0103]	0.1140*** [0.0108]
Post (t+2)	0.2143*** [0.0120]	0.2472*** [0.0121]	0.2227*** [0.0124]	0.2227*** [0.0124]	0.1810*** [0.0134]
Post (t+3)	0.2697*** [0.0128]	0.3176*** [0.0126]	0.2915*** [0.0129]	0.2915*** [0.0129]	0.2319*** [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
<i>Panel A: The number of seats on other boards</i>					
Post (t+1)	0.1888*** [0.0395]	0.2175*** [0.0381]	0.5493*** [0.0373]	0.5493*** [0.0373]	0.4152*** [0.0382]
Post (t+2)	0.5152*** [0.0460]	0.5375*** [0.0445]	0.8784*** [0.0463]	0.8784*** [0.0463]	0.6526*** [0.0484]
Post (t+3)	0.7131*** [0.0482]	0.7540*** [0.0463]	1.1335*** [0.0501]	1.1335*** [0.0501]	0.8964*** [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 C10**Other governance mechanisms: Do busy boards matter?**

This table examines whether the business of a board changes the effect of board *Years-to-election* on CEO turnover–performance sensitivity. Definitions of the variables are provided in Appendix B. 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*** [0.0090]	-0.0631*** [0.0088]	-0.0633*** [0.0094]
Years-to-election	-0.0018 [0.0027]	-0.0016 [0.0027]	0.0008 [0.0028]
ROA * Years-to-election	0.0283** [0.0117]	0.0281** [0.0117]	0.0255** [0.0115]
Busy board	0.0471*** [0.0100]	0.0479*** [0.0100]	0.0474*** [0.0100]
ROA * Busy board	-0.0117 [0.0434]	-0.0105 [0.0435]	-0.0109 [0.0430]
<i>R</i> -squared	0.031	0.032	0.037
<i>N</i>	21,365	21,365	21,365
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes

Table C11**Other governance mechanisms: Does board independence matter?**

This table examines whether board independence changes the effect of board *Years-to-election* on CEO turnover–performance sensitivity. Definitions of the variables are provided in Appendix B. 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	-0.0586*** [0.0162]	-0.0602*** [0.0163]	-0.0615*** [0.0167]
Years-to-election	-0.0011 [0.0025]	-0.0016 [0.0025]	0.0013 [0.0025]
ROA * Years-to-election	0.0366*** [0.0133]	0.0369*** [0.0134]	0.0338** [0.0133]
High board independence	0.0138*** [0.0031]	0.0101* [0.0058]	0.0085 [0.0058]
ROA * High board independence	-0.0088 [0.0158]	-0.0081 [0.0158]	-0.0114 [0.0161]
<i>R</i> -squared	0.023	0.025	0.032
<i>N</i>	19,107	19,107	19,107
Controls	Yes	Yes	Yes
Year FE	No	Yes	Yes
Industry FE	No	No	Yes