

Do Director Elections Matter?

Abstract

Using a hand-collected sample of more than 30,000 directors nominated for election over the period 2001-2010, we construct a novel measure of director exposure to labor market via annual elections—*Closeness-to-election*. We find that the closer is a director to her next election, the higher is CEO turnover-performance sensitivity. A one-year closer to director elections is associated with a 23% increase in CEO turnover-performance sensitivity. Two tests support the causal interpretation of the results. First, when we require directors to have a minimum tenure of three years, there is no material change in results, suggesting that matching between directors and boards is unlikely to drive the results. Second, we find similar results when we limit the analysis to a sample of firms with unitary boards where the variation in *Closeness-to-election* is driven by the director's *Closeness-to-election* on *other* boards. Cross-sectional variation tests suggest that when other governance mechanisms are in place, CEO turnover-performance sensitivity is less affected by *Closeness-to-election*. We conclude that director elections have important corporate governance implications.

Keywords: agency problems; CEO turnover-performance sensitivity; corporate governance; director elections; classified boards

JEL Classification: G34; G38

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

In this paper we contribute to the literature by introducing a novel measure of director exposure to labor market via annual elections —*Closeness-to-election*. With unitary boards, directors are elected every year. With classified boards, directors are elected every three (and sometimes two) years. Thus, there is a temporal variation in a director's closeness to her next election if she sits on a classified board. For example, a director's closeness to the next election is the shortest in the year when she is nominated for re-election and the longest in the following year (after the election). Some directors also sit on multiple boards. We construct a measure to capture these features—*Closeness-to-election*, which is the average number of years from now to the next election across all board seats of a director, using a hand-collected sample of more than 30,000 directors nominated for election over the period 2001-2010.

A key role of the board of directors is to hire and fire the CEO. Using CEO turnover as an experimental setting, we examine the effect of director *Closeness-to-election* on CEO turnover-performance sensitivity. Using a large and comprehensive sample of directors and CEO turnover cases over the period 2001-2011, we find that the closer is a director to her next election, the higher is CEO turnover-performance sensitivity, suggesting that there is a significant effect of director elections on how the board makes the CEO turnover decision. In terms of economic significance, a one-year change in *Closeness-to-election* is associated with

23% change in CEO turnover-performance sensitivity. The results are almost unchanged when we include year, both industry and year, and industry times year fixed effects in the regression specifications.

The challenge in empirically identifying the causal effect of *Closeness-to-election* on CEO turnover policy is the possibility that an omitted variable drives the relation between *Closeness-to-election* and CEO turnover policy. For example, firms with weak governance could attract directors who prefer less monitoring, while directors who are more responsive in replacing badly-performing CEOs will self-select into firms with better 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 positive association between *Closeness-to-election* and the CEO turnover-performance sensitivity might be due to endogenous matching between firms with strong governance and better directors.

We perform two tests that support the causal interpretation of the relation. First, we require all sample directors to have a tenure of at least three years. This is to mitigate the concern that there is an endogenous contemporaneous matching between directors and the board that has implications for the CEO turnover-performance sensitivity. Now with every director having experienced at least one election cycle prior to the turnover event, it is highly unlikely that the endogenous matching, if there is any, between directors and the board that takes place at least three years ago, has any effect on the CEO turnover-performance sensitivity. We find no material change in the results. We then repeat the analysis while further restricting the sample of directors to those who have a tenure of at least six years and find similar results.

Second, to provide further support for the causal interpretation of the relation between *Closeness-to-election* and CEO turnover-performance sensitivity, we limit the analysis to a sample of firms with unitary boards. The main feature of this test is that the variation in

Closeness-to-election is driven by the director's *Closeness-to-election* on *other* boards. Therefore, it is less likely that the variation in the *Closeness-to-election* measure is driven by forces driving CEO turnover decisions. We find no significant change in the results, supporting the causal interpretation of the results.

We conduct a large number of tests to show the robustness of our results. First, we show that using alternative performance measures—stock returns, and both operating performance and stock returns—our main findings remain unchanged. Second, we show that results are robust to estimating the regressions at firm-year level instead of firm-director-year level. Third, we exclude from the sample event CEOs who are close to retirement (≥ 63 years old) to reduce the possibility that their turnover is due to age and not performance. Our main findings remain unchanged. Fourth, we show robustness of the results by restricting the analysis to S&P 1500 firms. Finally, we limit our sample period to end in 2008 because our director-level information is less comprehensive starting 2009. Our main findings remain unchanged across all these tests.

We next explore possible explanations for our findings. We begin by showing that directors of firms with CEO turnover events are more likely to retain seats on their boards relative to a sample of matched directors who do not experience CEO turnover events. Moreover, these directors are also more likely to gain other directorships relative to the sample of matched directors. Thus, CEO turnover events are associated with directors gaining board seats (relative to the sample of matched directors) both on the event firm board and on other boards. It is therefore plausible that because there is a labor market reward for disciplining the CEO, directors who are more sensitive to their labor market (because they are closer to elections) are more willing to fire the CEO after poor performance.

We also consider several alternative explanations. Fich and Shivdasani (2006) show that directors on busy boards where a majority of independent directors hold three or more directorships are not effective monitors. Could the relation between *Closeness-to-election* and

CEO turnover-performance sensitivity be due to the presence of busy directors/boards? We find that after controlling for busy directors/boards, there remains a positive effect of *Closeness-to-election* on CEO turnover-performance sensitivity. Another possible explanation for our findings is that more experienced directors may be more lenient to CEOs who experience temporary performance setback, leading to lower CEO turnover-performance sensitivity. Consistent with our conjecture, we find that more experienced directors are indeed associated with lower CEO turnover-performance sensitivity. Importantly, after controlling for director experience, there remains a positive effect of *Closeness-to-election* on CEO turnover-performance sensitivity. We conclude that neither busy directors (boards) nor director experience could explain our findings of higher CEO turnover-performance sensitivities when directors are closer to elections.

We conclude the analysis by studying cross-sectional variations in the effect of *Closeness-to-election* on CEO-turnover performance sensitivity. First, we find that for firms with high institutional ownership, there is no relation between *Closeness-to-election* and CEO turnover-performance sensitivity. In contrast, in firms with low institutional monitoring, we find a significant relation between *Closeness-to-election* and CEO turnover-performance sensitivity in all but one specification. Thus, when directors are monitored more closely by institutional shareholders, CEO turnover-performance sensitivity is the same when directors are close to or far away from elections. Second, we find that for large market cap firms, there is no relation between *Closeness-to-election* and CEO turnover-performance sensitivity. In contrast, for small cap firms we find a significant relation between *Closeness-to-election* and CEO turnover-performance sensitivity across all specifications. These results are consistent with directors on the board of large firms being under constant labor market pressure, possibly due to high visibility and prestige associated with those positions. Third, we find weaker results on the relation between *Closeness-to-election* and CEO turnover-performance sensitivity when only independent directors of event firms are considered. This is consistent

with director independence mitigating the role of *Closeness-to-election*. Overall, these results suggest that when directors' incentives are more aligned with shareholders (high institutional ownership, high job visibility and prestige, or director independence), CEO turnover-performance sensitivity is less affected by *Closeness-to-election*. Finally, we find larger effects for directors of the nomination committee, consistent with those directors facing more scrutiny over their decisions.

Our paper contributes to the literature in a number of dimensions. First, the paper contributes to the small but growing literature that studies the role of director elections. Cai, Garner, and Walkling (2009) analyze uncontested director elections and show that while shareholder votes are significantly related to firm performance, directors do not appear to suffer reputational effects from low votes. However, they do show that even though the variation in director votes is small, fewer votes for compensation committee directors significantly impact subsequent abnormal CEO compensation, and fewer votes for independent directors impact subsequent CEO turnover. Our paper contributes to that literature by showing that the mere closeness to uncontested elections has a significant impact on CEO turnover-performance sensitivity.

Second, our paper contributes to the literature that studies the role of classified boards. A number of studies have established the negative association between the presence of classified boards and firm value as captured by Tobin's Q (Bebchuk and Cohen, 2005; Faleye, 2007; Bebchuk, Cohen, and Ferrell, 2009; Cohen and Wang, 2013).¹ The typical explanation for this finding is that classified boards protect management/boards from removal in either a hostile takeover or a proxy contest (Bebchuk, Coates, and Subramanian, 2002). Subsequent work provides some evidence on the sources of valuation destruction. Masulis, Wang, and Xie (2007) and Bates, Becher, and Lemmon (2008) show that acquirers with classified boards are associated with value-decreasing acquisitions, and that target firms with classified boards

¹ See a dissenting view from Cremers, Litov, and Sepe (2014) based on much longer time series evidence.

are associated with higher takeover premiums but also negatively associated with the likelihood of receiving a takeover bid. Faleye (2007) further shows that classified boards are associated with lower CEO pay-performance and turnover-performance sensitivities. We provide new insights into the underlying mechanism by showing that classified boards shield directors from being exposed to labor market for directorships which impedes shareholder democracy, leading to lower CEO turnover-performance sensitivity.

Our paper is also related to the literature that studies the labor market for corporate directors. Prior work has shown that better firm performance and directors rejecting antitakeover provisions are associated with more subsequent board seats (Brickley, Linck, and Coles, 1999; Ferris, Jagannathan, and Pritchard, 2003; Coles and Hoi, 2003). This is consistent with directors who establish reputations as good monitors being rewarded with additional board seats (Fama, 1980; Fama and Jensen, 1983).² In contrast, worse firm performance in the form of dividend cuts, CEO turnover, financial distress, proxy contests, and selling a company is associated with fewer subsequent board seats (Kaplan and Reishus, 1990; Gilson, 1990; Shivdasani, 1993; Farrell and Whidbee, 2000; Harford, 2003; Yermack, 2004; Fos and Tsoutsoura, 2014). Further, directors associated with firms engaged in earnings restatement (Srinivasan, 2005), class action lawsuits (Helland, 2006) and financial fraud – firms facing shareholder class action lawsuits (Fich and Shivdasani, 2007) are shown to have fewer subsequent board seats.³ Similar to Farrell and Whidbee (2000), we show evidence consistent with positive labor market consequences for directors of firms that experience

² Levit and Malenko (2014) argue that directors care about two conflicting types of reputation, and which type of reputation is rewarded more in the labor market depends on the aggregate quality of corporate governance. If the aggregate quality of corporate governance is strong and boards of other firms protect the interests of their shareholders, then building a reputation for being shareholder-friendly can help in obtaining more directorships. Conversely, if the aggregate quality of corporate governance is weak and boards of other firms are captured by their managers, who want to maintain power, then having a management-friendly reputation can be more useful in getting additional board seats.

³ Harford and Schonlau (2013) find that in the case of acquisitions, 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 experience and ability in the director labor market.

CEO turnover.

Finally, we contribute to the CEO turnover literature. Coughlan and Schmidt (1985) and Warner, Watts, and Wruck (1988) are the first to show empirically that boards control top management behavior by making compensation and management termination decisions based on firm performance. Other studies further note that firms with outsider-dominated boards, lower managerial ownership, and outside blockholders are significantly more likely than firms with insider-dominated, higher managerial ownership, and a lack of outside blockholders to remove their CEOs on the basis of poor performance (Weisbach, 1988; Denis, Denis, and Sarin, 1997; Jenter and Kanaan, 2010; Gao, Harford, and Li, 2014). We contribute to that literature by introducing *Closeness-to-election* as a novel factor that affects the CEO turnover-performance sensitivity.

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

2. Data

Data are compiled from several sources. Basic director-level data come from BoardEx, which provides director profiles for over 9,000 US public and private firms, tracks directors across firms and over time, and provides information on number of directorships at public firms as well as private firms. Our BoardEx sample covers the period 2001-2010. Data on board structure (unitary or staggered) are hand collected from proxy statements available through EDGAR. For companies with staggered board structure, we further hand collect firm-director-year level information on which year the director is in her term and whether this is a nomination year for her or not. This information is matched to BoardEx data by company affiliation and director name. Data on firm characteristics and stock returns come from

COMPUSTAT and CRSP. Data on institutional ownership come from Thomson-Reuters Institutional Holdings Database. Data on CEO turnover events come from merging CEO turnover cases in 2001 (Jenter and Kanaan, 2010), between 2002-2009 (Peters and Wagner, 2014), and in 2010 (Jenter and Lewellen, 2014). Throughout our empirical analyses, we remove firm-director-year observations if the director is the CEO who experiences the turnover event. The final sample contains 4,048 firms, 30,867 directors, and 878 CEO turnover events over the period 2001-2010.

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

Table 1 provides descriptive statistics of our sample. Panel A presents director characteristics. Across the entire sample of directors, our key variable of interest—*Closeness-to-election*—has a sample mean of 0.5 years, which means on average, a director is expected to be voted on in about half a year. When we limit the sample to firms with staggered boards, the average *Closeness-to-election* is close to one year.⁴ Importantly, there is a substantial variation in the *Closeness-to-election* measure: The standard deviation is 0.71 in the full sample. When we consider other director characteristics, we find that three quarters of the directors in our sample are independent (note that our sample period is after the adoption of the SOX). The average (median) number of directorships is 2.8 (2.0). The

⁴ Note that when we consider directors of firms with staggered boards, some directors have directorships in firms with unitary board structure. Therefore the average *Closeness-to-election* is below one and half years.

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

Panel B presents board characteristics. Half of the sample firms have adopted staggered boards, with 49% of them using the three-year election cycle while two percent of them using the two-year election cycle. We consider boards busy if more than half of the board members are busy directors. About 7% of boards are busy, suggesting that busy boards are not as common as in the mid-1990's (Fich and Shivdasani (2006) report that over a fifth of Forbes 500 firms had busy boards in the mid-1990's). The average (median) board size is about 8 directors.

Panel C presents firms characteristics. The firm characteristics are fairly representative of COMPUSTAT firms. It is worth noting that the sample average (median) institutional ownership is 54% (57%).⁵

[Insert Table 1 about here]

3. Main results

3.1. Closeness to elections and the sensitivity of CEO turnover to performance

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

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

⁵ In unreported analyses, we find that there is no high correlation among board, director, and firm characteristics.

where the dependent variable is $CEO\ turnover_{idt}$, 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, $Closeness - to - election_{idt}$ is a measure of firm i director d 's closeness to election, and X_{it} is the vector of firm-level controls including Size (as measured by $\log(\text{Sales})$), Sales growth, Leverage, and Institutional ownership. All variables are defined in Table A1. The main variable of interest is the interaction term, which captures the effect of *Closeness-to-election* on the sensitivity of CEO turnover to firm performance.

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

[Insert Table 2 about here]

In addition to our main findings above, we also find that firms with large sales, low sales growth, low leverage, and strong institutional presence are more likely to experience CEO turnover. All of these findings are consistent with prior literature (Huson et al., 2001; Gao et al., 2014).

We next show that the results are robust to inclusion of year, both industry and year,

and industry times year fixed effects. First, the results in column (2) show that when augmenting the regression with year fixed effects, there is no material change in the results. It implies that aggregate time-series factors do not drive the results. Further, the results in column (3) indicate that the results almost do not change at all when we augment the regression with both industry and year fixed effects, implying that industry-specific variables are not driving the results. Finally, we replace industry and year fixed effects with industry time year fixed effects. The evidence in column (4) indicates that the results are robust for controlling for any (either observable or unobservable) time-varying industry-level variables. The coefficient on the interaction term remains positive and significant, both statistically and economically: A one-year change in *Closeness-to-election* is associated with 18% change in CEO turnover-performance sensitivity while holding other variables at their sample averages.

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

3.2. Addressing endogeneity

The challenge in empirically identifying the causal effect of *Closeness-to-election* on CEO turnover policy is the possibility that an omitted variable drives the relation between *Closeness-to-election* and CEO turnover policy. For example, firms with weak governance could attract directors who prefer less monitoring, while directors who are more responsive in replacing badly-performing CEOs will self-select into firms with better governance. If the quality of corporate governance correlates with director election cycles (i.e., firms with weak governance have staggered boards with a three-year election cycle while firms with strong governance have unitary boards where directors are up for election every year), then the positive association between *Closeness-to-election* and the CEO turnover-performance

sensitivity might not be due to what we purport (*Closeness-to-election* leads to higher CEO turnover-performance sensitivity), but due to endogenous matching between firms with strong governance and better directors. We perform two tests to address this concern and help establish causality.

First, we require all sample directors to have tenure of at least three years. This is to mitigate the concern that there is an endogenous contemporaneous matching between directors and the board that has implications for the CEO turnover-performance sensitivity. Now with every director having experienced at least one election cycle prior to the turnover event, it is highly unlikely that the endogenous matching, if there is any, between directors and the board that takes place at least three years ago, has any effect on the CEO turnover-performance sensitivity. Panel A in Table 3 presents the results. We find that across all specifications, the coefficients on the interaction between ROA and *Closeness-to-election* are positive and significant at the 1% level, suggesting a strong effect of director election cycles on CEO turnover-performance sensitivity. We then repeat the analysis while further restricting the sample of directors to those who have tenure of at least six years. Panel B in Table 3 shows that our main results continue to hold. Given that there is at least a six-year gap between a director's decision to join the board and the board's decision to turnover a CEO, the evidence in Table 3 suggests that the endogenous matching between directors and the board is not likely to drive the results. Of course a caveat of this analysis is that the decision to keep these directors on the board for this long period is not exogenous, but the analysis mitigates concerns created from directors joining the board contemporaneously with the decision to fire the CEO after bad performance.

[Insert Table 3 about here]

Finally, to further support the causal interpretation of the relation between

Closeness-to-election and CEO turnover-performance sensitivity, we limit the analysis to a sample of firms with unitary boards. The main feature of this test is that the variation in *Closeness-to-election* is driven by the director's nomination status on *other* boards. Therefore, it is less likely that the variation in the *Closeness-to-election* measure is driven by factors that impact CEO turnover decisions. Table 4 presents the results. We find that the coefficients on the interaction between firm operating performance and *Closeness-to-election* are positive and significant at the 10% or lower level, supporting the causal interpretation of the results.

[Insert Table 4 about here]

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

3.3. Robustness Tests

Next we conduct a number of robustness tests. First, in addition to operating performance, the board also has access to stock market performance.⁶ Panel A in Table 5 shows that when we use stock returns as the performance measure, the coefficient on the interaction between stock market performance and *Closeness-to-election* is positive and significant. Thus, our result is robust to using an alternative performance measure. Further, Panel B in Table 5 shows that when we include both ROA and stock returns (and their interactions with *Closeness-to-election*) in the regression, there remains strong relation

⁶ We use ROA as the main measure of firm performance because stock prices are forward-looking and they might have already incorporated the market expectation of a forthcoming CEO turnover.

between *Closeness-to-election* and CEO turnover-performance sensitivity. The coefficients on both ROA and stock returns are negative and significant, suggesting that underperforming CEOs are more likely to be fired. More importantly, the coefficients on the interactions between ROA and *Closeness-to-election* and between stock returns and *Closeness-to-election* are positive and significant (with one exception for the interaction between stock returns and *Closeness-to-election* when we include industry-year fixed effects), suggesting that the closer is a director from facing an election, the higher is the CEO turnover-performance sensitivity.

[Insert Table 5 about here]

In Table 6 we analyze whether the results are robust to estimating the regressions at firm-year level. To perform the analysis at firm-year level, we aggregate the *Closeness-to-election* variable to firm-year level. In Table 6 we present the results aggregating the *Closeness-to-election* variable in different ways. In Column 1 *Closeness-to-election* is the mean of *closeness-to-election* across all board members in a given year. In Columns 2, 3, and 4 *Closeness-to-election* is the mean of *closeness-to-election* across the six, four, and two board members with the max *closeness-to-election* in a given year, respectively. In Column 5 we set *Closeness-to-election* to be the maximum of the *Closeness-to-election* variable across all board members. We find that the main results are not affected by estimating the regressions at firm-year level. The coefficient on ROA remains negative and significant while the coefficient on the interaction term remains positive and significant.

[Insert Table 6 about here]

Next, we check that the results are not driven by voluntary CEO turnover cases. To

reduce the possibility that a turnover case is due to CEO age and not due to poor firm performance, we exclude from the sample of CEO turnover events when CEOs are close to retirement (63 years old or older). The results are reported in the Appendix (Panel A in Table A2). We find that the coefficient on the interaction term remains negative and significant, both economically and statistically, suggesting that voluntary CEO turnovers are not likely to drive the results.

The sample of CEO turnover events comes from S&P 1500 firms. The main sample in which we perform the analysis is the universe of all directors covered by BoardEx with firm-level information available from COMPUSTAT. We include all public firm directors in the analysis to capture the variation in *Closeness-to-election*. Since we do not capture CEO turnover events outside S&P 1500 firms, CEO turnover cases are under-counted. Further given that typically governance quality in SP1500 firms is better than outside SP1500 firms, we would expect that if we limit our analysis to be within S&P 1500 firms, the CEO turnover-performance sensitivity would be stronger. Moreover, S&P 1500 firm directors have bigger labor market concerns given visibility and prestige, thus we would expect a stronger role of closeness to election on CEO turnover-performance sensitivity. We therefore perform an additional robustness test in which we restrict the analysis to S&P 1500 firms. The results are reported in the Appendix (Panel B in Table A2) and show that CEO turnover-performance sensitivity is indeed larger when limited to S&P 1500 firms. Also, we find that the relation between *Closeness-to-election* and CEO turnover-performance sensitivity remains positive and significant (with one exception for the interaction between ROA and *Closeness-to-election* when we include industry-year fixed effects).

We conclude the series of robustness tests with the analysis limiting the sample period to 2001-2008. This robustness test is motivated by the fact that BoardEx coverage is less comprehensive starting 2009. The results are reported in the Appendix (Panel C in Table A2). We find that the main results are almost unchanged in this specification. CEO

turnover-performance sensitivity as well as the relation between *Closeness-to-election* and CEO turnover-performance sensitivity remain significant (and keep their original sign) in this specification.

4. The underlying mechanism

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

4.1. Director labor market experience after CEO turnover

In this section we propose a mechanism that is consistent with greater CEO turnover-performance sensitivity when directors are closer to election. Specifically, we argue that directors who are closer to elections (therefore are more sensitive to their labor market) are more willing to fire the CEO after poor performance if there is a labor market reward for disciplining the CEO. We therefore ask whether there are labor market implications for disciplining the CEO.

Following (Harford, 2003; Fos and Tsoutsoura, 2014), we match directors of CEO-turnover firms in the year prior to CEO turnover to control-director cohorts from the universe of BoardEx with the same age, the number of directorships, and firm-level operating performance. For each cohort, we calculated the average number of directorships per year over the six-year period centered around the event year. Then we use the difference between a director's number of directorships and her matching cohort's number of directorships to measure the labor market experience of event directors relative to their peers. We follow Fos

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

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

where the dependent variable is the number of seats director d of firm i holds in the event firm during year t (either 1 or 0) minus the average number of seats held by matched directors (between 0 to 1), $Post_{idt}$ is an indicator variable that takes a value of one for the three-year period after CEO turnover (and zero otherwise), η_{id} are firm-director fixed effects, η_t are event-year fixed effects, and X_{it} is the vector of firm-level controls including Size (as measured by $\log(\text{Sales})$), Sales growth, Leverage, and Institutional ownership. The coefficient on $Post_{idt}$ captures the abnormal change in directorships over the three-year period relative to the sample of matched directors. The sample covers all BoardEx director-year observations of CEO event firms from three years before to three years after the CEO turnover. Panel A in Table 7 presents the results.

[Insert Table 7 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 seat relative to their matched peers. Evidence in columns (2) to (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 director and firm time-invariant heterogeneity as well as for the endogenous matching between directors and firms), and firm-level controls. Thus, there is evidence that directors of firms with CEO turnover events are more likely to retain seats on their boards relative to the sample of matched directors who do not experience CEO-turnover events.

To show how incumbent directors gain seats relative to their peers over time, we replace $Post_{dit}$ with indicators of one-, two-, and three-years after the event. The results are

reported in the Appendix (Panel A in Table A3). We find that one year after a CEO turnover event, directors of event firms are 14% more likely to retain their seat relative to the sample of matched directors. The effect increases to 27% by the third year after the event. The results are robust to a variety of fixed effects and firm-level controls.

Next we examine the directors' labor market experience on *other* boards. We replace the dependent variable in Equation (2) with the number seats directors hold on other boards minus the number of seats held on other boards by matched directors. Panel B in Table 7 reports the results. Column (1) shows that after experiencing a CEO turnover, directors are more likely to gain other directorships *relative* to the sample of matched directors. The coefficient on *Post* shows that on average, directors gain 0.35 outside directorships in the three years following the turnover event relative to the sample of matched directors. Across all specifications, the relative gain varies from 0.35 to 0.79 seats on other boards. The economic magnitude of the result is significant given that an average director in our sample holds close to three board seats. In the Appendix (Panel B in Table A3) we provide evidence for the year-to-year change in directorships on other boards.

To illustrate labor market implications of CEO turnover events, Panel A in Figure 1 plots the total number of directorships in a three-year window centered around the CEO turnover event. 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 directors involved in CEO turnover, the average number of seats on all boards drops from about 3.5 seats in the event year to about 2.5 seats three years after the event (a 29% reduction).⁷ Interestingly, matched directors experience even larger reduction in the number of seats they hold: The total number of directorships held by matched directors decreases from about 3.5 seats to about 1.5 seats (a 57% reduction). Similar results are evident from Panel B where we plot the number of other directorships in a three-year window

⁷ The extent of board seat losses is of similar magnitude to that of targeted directors in proxy contests (Fos and Tsoutsoura, 2014).

centered around the CEO turnover event.

[Insert Figure 1 about here]

These results help clarify how our findings fit with prior findings that worse 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). It turns out that in our case, the treatment (CEO turnover event) is highly correlated with firm performance—our baseline CEO-turnover regression in Equation (1) clearly shows the strong association between poor firm performance and CEO turnover (Table 2). Therefore, if we do not control for performance, the omitted variable bias drives the established findings that poor firm performance associated with CEO turnover leads to fewer 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. We find that while directors of poorly-performing firms lose seats, directors who fire the CEO lose fewer seats. That is, they lose fewer seats relative to directors who do not pull the trigger to fire the CEO.

Overall, the evidence suggests that CEO turnover events are associated with directors gaining board seats (relative to the sample of matched directors) both on the event firm board and on other boards.

4.2. Alternative explanations

Fich and Shivdasani (2006) show that directors on busy boards where a majority of independent directors hold three or more directorships are not effective monitors. Could the weakened CEO turnover-performance sensitivity be due to the presence of busy directors/boards? To address this question, we first augment the main specification in

Equation (1) with measures of director business, as well as its interaction with firm operating performance. We consider a director busy if she serves on three or more boards. Table 8 present the results. We find that the presence of busy directors is positively and significantly associated with the frequency of CEO turnover but there is no significant effect of busy directors on CEO turnover-performance sensitivity. The former finding is consistent with the observation that due to the lack of effective monitoring by the boards, firms with busy directors are more likely to experience negative corporate events such as CEO turnover. Importantly, after controlling for busy directors, we find that the coefficient on the interaction between *Closeness-to-election* and firm operating performance is positive and significant.

[Insert Table 8 about here]

Second, we also augment the main specification in Equation (1) with measures of board business, as well as its interaction with firm operating performance. We consider a board busy if more than half of the board members are busy directors. Table 9 present the results. Similarly to the effects of busy directors, we find that while busy boards are positively and significantly associated with the frequency of CEO turnover, there is no significant effect of busy boards on CEO turnover-performance sensitivity. This is consistent with the observation that due to the lack of effective monitoring by the boards, firms with busy boards are more likely to experience negative corporate events such as CEO turnover. Importantly, after controlling for busy boards, we find that the coefficient on the interaction between *Closeness-to-election* and firm operating performance is positive and significant. Thus, the effect of director *Closeness-to-election* on CEO turnover-performance sensitivity is incremental to the effects of busy directors and busy boards on CEO turnover decisions.

[Insert Table 9 about here]

Another possible explanation for our findings is that more experienced directors may be more tolerant of CEOs who experience temporary performance setback, leading to lower CEO turnover-performance sensitivity. To examine this possibility, we add to our baseline specification a measure of director experience—director tenure and its interaction with firm operating performance. For each director-year, director tenure is the average tenure across all the boards where a director sits. Table 10 presents the results. Consistent with our conjecture, we find that the presence of more experienced directors is associated with lower CEO turnover-performance sensitivity. Importantly, after controlling for director experience, there remains a negative and significant relation between *Closeness-to-election* and CEO turnover-performance sensitivity.

[Insert Table 10 about here]

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

5. Cross-sectional variation tests

In this section, we analyze cross-sectional variations in the effect of *Closeness-to-election* on CEO-turnover performance sensitivity.

First, we sort the sample firms into high (above median) versus low (below median) institutional ownership. The sample median institutional ownership is 57%. Table 11 presents

the results. Panel A reports the results for firms with large institutional ownership and Panel B reports the results for firms with small institutional ownership. We find that for firms with high institutional ownership, there is no relation between *Closeness-to-election* and CEO turnover-performance sensitivity. In contrast, in firms with less institutional monitoring, we find a significant relation *Closeness-to-election* and CEO turnover-performance sensitivity in all but one specification. Thus, when directors are monitored more closely by institutional shareholders, CEO turnover-performance sensitivity is the same when directors are close to or far away from elections.

[Insert Table 11 about here]

Second, we sort sample firms into large cap firms (top tercile) and the rest. We run the baseline regression on the two subsamples. Table 12 present the results. Panel A reports the results for firms with large market capitalization and Panel B reports the results for firms with small market capitalization. We find that for large market cap firms, there is no relation between *Closeness-to-election* and CEO turnover-performance. In contrast, for small cap firms we find a significant relation *Closeness-to-election* and CEO turnover-performance across all specifications. These results are consistent with directors on board of large firms being under constant labor market pressure, possibly due to high visibility and prestige associated with these positions. In contrast, directors on boards of small firms can “afford” lower CEO turnover-performance sensitivity when they are further away from elections.⁸

[Insert Table 12 about here]

⁸ This finding is consistent with Harford and Schonlau (2013) that large acquisitions are associated with significantly higher numbers of subsequent board seats for CEOs and directors involved, irrespective of the performance of the deal. They conclude that the director labor market rewards experience in large deals.

Among the directors, the members of the nomination committee are those that have responsibility over board composition and corporate governance policies (most boards have a joint nomination and corporate governance committees). These directors might face more scrutiny from the labor market over their decision to fire the CEO. In Table 14 we split directors of event firms into members of nomination committee and the rest. Panel A reports results for members of nomination committee of event firm and Panel B for non-members of nomination committee of event firm. We observe that the coefficient on *Closeness-to-election* is statistically significant in both cases but it's large in magnitude for directors members of the nomination committee.

[Insert Table 13 about here]

Existing literature suggests that outsider-dominated boards are associated with stronger CEO turnover-performance sensitivity (Weisbach (1988)). We expect that director independence might mitigate their agency incentives—putting own interests ahead of their shareholders'. Therefore, we split directors of event firms into independent and insider directors. Table 14 present the results. Panel A reports the results for independent directors of event firms and Panel B reports the results for non-independent directors of event firms. Consistent with our conjecture, we find weaker results on the relation between *Closeness-to-election* and CEO turnover-performance sensitivity when only independent directors of event firms are considered.

[Insert Table 14 about here]

In summary, our results suggest that there are a number of mechanisms that could potentially affect the role of *Closeness-to-election* in CEO turnover policy—firm visibility, institutional ownership, nomination committee membership and director independence.

6. Conclusion

Using a hand-collected sample of more than 30,000 directors nominated for election over the period 2001-2010, we construct a novel measure of shareholder monitoring via director elections—Closeness-to-election. We find that the closer is a director to her next election, the higher is CEO turnover-performance sensitivity. A one-year closer to director elections is associated with a 23% increase in CEO turnover-performance sensitivity. Two tests support the causal interpretation of the results. First, when we require directors to have a minimum tenure of three years, there is no material change in results, suggesting that contemporaneous matching between directors and boards is unlikely to drive the results. Second, we find similar results when we limit the analysis to a sample of firms with unitary boards where the variation in Closeness-to-election is driven by the director's Closeness-to-election on other boards. Cross-sectional variation tests suggest that when other governance mechanisms are in place, CEO turnover-performance sensitivity is less affected by Closeness-to-election. We conclude that director elections have important corporate governance implications.

References:

- Bates, T., D. Becher, and M. Lemmon, 2008. Board classification and managerial entrenchment: Evidence from the market for corporate control, *Journal of Financial Economics* 87 (3), 656-677.
- Bebchuk, L., J. Coates, and G. Subramanian, 2002. The powerful antitakeover force of staggered boards: Theory, evidence, and policy. *Stanford Law Review* 54, 887-951.
- Bebchuk, L., and A. Cohen, 2005. The costs of entrenched boards. *Journal of Financial Economics* 78 (2), 409-433.
- Bebchuk, L., A. Cohen, and A. Ferrell, 2009. What matters in corporate governance? *Review of Financial Studies* 22 (2), 783-827.
- Bebchuk, L.A., and J.M. Fried, 2004. *Pay without Performance: The Unfulfilled Promise of Executive Compensation*, Cambridge, MA: Harvard University Press.
- Brickley, J., J. Coles, and J. Linck, 1999. What happens to CEOs after they retire? New evidence on career concerns, horizon problems, and CEO incentives, *Journal of Financial Economics* 52 (3), 341-378.
- Cai, J., Garner, J., and R. Walkling, 2009. Electing directors, *Journal of Finance* 64 (5), 2389-2421.
- Cohen, A., and C.C.Y. Wang, 2013. How do staggered boards affect shareholder value? Evidence from a natural experiment, *Journal of Financial Economics* 110 (3), 627-641.
- Coles, J.L., and C.K. Hoi, 2003. New evidence on the market for directors: Board membership and Pennsylvania senate bill 1310, *Journal of Finance* 58 (1), 197-230.

- Coughlan, Anne, and Ronald Schmidt, 1985. Executive compensation, management turnover, and firm performance: An empirical investigation, *Journal of Accounting and Economics* 7 (1-3), 43-66.
- Cremers, K.J.M., L. Litov, and S. M. Sepe, 2014. Staggered boards and firm value, revisited, University of Notre Dame working paper.
- Denis, D.J., D.K. Denis, and A. Sarin, 1997. Ownership structure and top executive turnover, *Journal of Financial Economics* 45 (1), 193-222.
- Faleye, O., 2007. Classified boards, firm value, and managerial entrenchment, *Journal of Financial Economics* 83 (2), 501-529.
- Fama, E., 1980. Agency problems and the theory of the firm, *Journal of Political Economy* 88 (2), 288-307.
- Fama, E., and M. Jensen, 1983. Separation of ownership and control, *Journal of Law and Economics* 26 (2), 301-325.
- Farrell, K.A., and D.A. Whidbee, 2000. The consequences of forced CEO succession for outside directors, *Journal of Business* 73 (4), 597-627.
- Ferris, S.P., M. Jagannathan, and A.C. Pritchard, 2003. Too busy to mind the business? Monitoring by directors with multiple board appointments, *Journal of Finance* 58 (3), 1087-1111.
- Fich, E.M., and A. Shivdasani, 2006. Are busy boards effective monitors? *Journal of Finance* 61 (2), 689-724.
- Fos, V., 2015. Disciplinary effects of proxy contests, working paper.

- Fos, V., and M. Tsoutsoura, 2014. Shareholder democracy in play: Career consequences of proxy contests, *Journal of Financial Economics* 114 (2), 316-340.
- Gao, H., J. Harford, and K. Li, 2014. CEO turnover-performance sensitivities in private firms, Nanyang Technological University working paper.
- Gilson, S.C., 1990. Bankruptcy, boards, banks, and blockholders: Evidence on changes in corporate ownership and control when firms default, *Journal of Financial Economics* 27(2), 355-387.
- Harford, J., 2003. Takeover bids and target directors' incentives: The impact of a bid on directors' wealth and boardseats, *Journal of Financial Economics* 69(1), 51-83.
- Harford, J., and R.J. Schonlau, 2013. Does the director labor market offer ex post settling-up for CEOs? The case of acquisitions, *Journal of Financial Economics* 110 (1), 18-36.
- Helland, E., 2006. Reputational penalties and the merits of class action securities litigation, *Journal of Law and Economics* 49 (2), 365-395.
- Huson, Mark R., Robert Parrino, and Laura T. Starks, 2001. Internal monitoring mechanisms and CEO turnover: A long term perspective, *Journal of Finance* 56 (6), 2265-2297.
- Jenter, D., and F. Kanaan, 2010. CEO turnover and relative performance evaluation, *Journal of Finance* forthcoming.
- Jenter, D., and K. Lewellen, 2014. Performance-induced CEO turnover, Stanford University working paper.
- Kaplan, S., and D. Reishus, 1990. Outside directorships and corporate performance, *Journal of Financial Economics* 27 (2), 389-410.

- Levit, D., and N. Malenko, 2014. The labor market for directors and externalities in corporate governance, University of Pennsylvania working paper.
- Masulis, R., C. Wang, and F. Xie, 2007. Corporate governance and acquirer returns, *Journal of Finance* 62 (4), 1851-1889.
- Peters, F.S., and A.F. Wagner, 2014. The executive turnover risk premium, *Journal of Finance* 69, 1529-1563.
- Shivdasani, A., 1993. Board composition, ownership structure, and hostile takeovers, *Journal of Accounting and Economics* 16 (1-3), 167-198.
- Srinivasan, S., 2005. Consequences of financial reporting failure for outside directors: evidence from accounting restatements, *Journal of Accounting Research* 43 (2), 291-334.
- Taylor, Lucian A., 2010. Why are CEOs rarely fired? Evidence from structural estimation, *Journal of Finance* 65 (6), 2051-2087.
- Warner, Jerold B., Ross L. Watts, and Karen H. Wruck, 1988. Stock prices and top management changes, *Journal of Financial Economics* 20 (1-2), 461-492.
- Weisbach, Michael S., 1988. Outside directors and CEO turnover, *Journal of Financial Economics* 20 (1-2), 431-460.
- Yermack, D., 2004. Remuneration, retention, and reputation incentives for outside directors, *Journal of Finance* 59 (5), 2281-2308.

Appendix:
Table A1
Definitions of variables

Variable	Definition
----------	------------

Panel A: Director Characteristics

Closeness-to-election	The average number of years from now to 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 of the number of years a director has served across all directorships
Age	Director age

Panel B: Board Characteristics

Classified board (two-year cycle)	An indicator of a staggered board where all directors serve a two-year term
Classified board (three-year cycle)	An indicator of a staggered board where all directors serve a three-year term
Busy board	An indicator of a board with more than half of its directors being busy
Board size	The number of directors

Panel C: Firm Characteristics

ROA	Return on assets, computed as earnings before interest, taxes, depreciation, and amortization divided by total assets
Stock return	Twelve-month stock return as of fiscal year end
Sales (\$m)	Annual sales, in millions of dollars
Assets (\$m)	Total assets, in millions of dollars
Sales growth	The percentage change in annual sales
Leverage	Book leverage ratio, computed as book value of debt divided by book value of debt and book value of equity.
Institutional ownership	The proportion of outstanding shares held by institutional investors

Table A2**The role of director elections: Additional robustness tests**

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

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

Table A2 – cont.

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

Panel C: Pre-2009 period

ROA	-0.0520*** [0.0045]	-0.0539*** [0.0045]	-0.0641*** [0.0048]	-0.0600*** [0.0049]
Closeness-to-election	-0.0015** [0.0007]	-0.0017** [0.0007]	-0.001 [0.0007]	-0.001 [0.0007]
ROA * Closeness-to-election	0.0111** [0.0046]	0.0104** [0.0046]	0.0106** [0.0046]	0.0103** [0.0045]
R-squared	0.030	0.031	0.038	0.073
N	134,172	134,172	134,172	134,172
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

Table A3**Director career consequences after CEO turnover: Robustness tests**

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

Dependent variable: the number of seats					
Variable	(1)	(2)	(3)	(4)	(5)
<i>Panel A: The number of seats in event firms</i>					
Post (t+1)	0.14*** [0.01]	0.18*** [0.01]	0.16*** [0.01]	0.16*** [0.01]	0.11*** [0.01]
Post (t+2)	0.21*** [0.01]	0.25*** [0.01]	0.22*** [0.01]	0.22*** [0.01]	0.18*** [0.01]
Post (t+3)	0.27*** [0.01]	0.32*** [0.01]	0.29*** [0.01]	0.29*** [0.01]	0.23*** [0.02]
R-squared	0.066	0.142	0.108	0.108	0.071
N	18,602	18,602	18,602	18,602	15,891
<i>Panel A: The number of seats on other boards</i>					
Post (t+1)	0.19*** [0.04]	0.22*** [0.04]	0.55*** [0.04]	0.55*** [0.04]	0.42*** [0.04]
Post (t+2)	0.52*** [0.05]	0.54*** [0.04]	0.88*** [0.05]	0.88*** [0.05]	0.65*** [0.05]
Post (t+3)	0.71*** [0.05]	0.75*** [0.05]	1.13*** [0.05]	1.13*** [0.05]	0.90*** [0.06]
R-squared	0.013	0.02	0.105	0.105	0.069
N	21,339	21,339	21,339	21,339	17,354
Controls	No	No	No	No	Yes
Event Year FE	No	Yes	No	Yes	Yes
Firm-Director FE	No	No	Yes	Yes	Yes

Figure 1

Director career consequences after CEO turnover

Panel A presents the total number of seats held by the board members of firms that experience CEO turnover (blue line) and held by matched board members (red line). For each board member that experiences a CEO turnover event, we identify a matching director from the cohort of 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). Panel B repeats the analysis for the number of seats held on other boards.

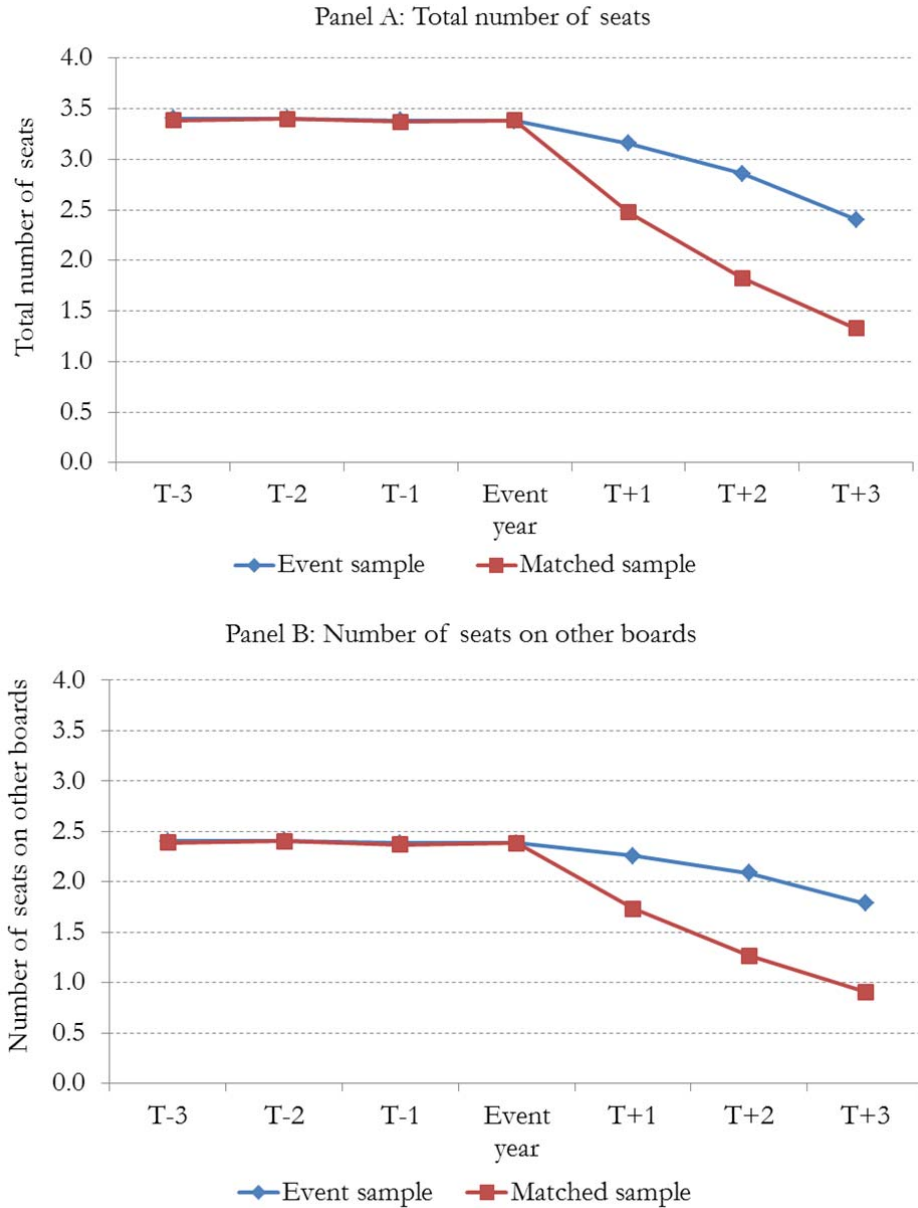


Table 1**Summary statistics**

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

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

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

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

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

Table 3**The role of director elections: Predetermined elections**

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

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

Panel A: Directors with at least three years of tenure

ROA	-0.048***	-0.052***	-0.052***	-0.057***
	[0.004]	[0.004]	[0.004]	[0.004]
Closeness-to-election	-0.001	-0.001*	-0.000	-0.001
	[0.001]	[0.001]	[0.001]	[0.001]
ROA * Closeness-to-election	0.017***	0.015***	0.016***	0.015***
	[0.004]	[0.004]	[0.004]	[0.004]
R-squared	0.029	0.031	0.033	0.036
N	118,129	118,129	118,129	118,129

Panel B: Directors with at least six years of tenure

ROA	-0.054***	-0.059***	-0.060***	-0.065***
	[0.005]	[0.005]	[0.005]	[0.006]
Closeness-to-election	-0.002**	-0.002***	-0.001	0.001*
	[0.001]	[0.001]	[0.001]	[0.001]
ROA * Closeness-to-election	0.013**	0.012**	0.013**	0.011**
	[0.005]	[0.005]	[0.005]	[0.005]
R-squared	0.031	0.033	0.036	0.039
N	89,637	89,637	89,637	89,637

Controls	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

Table 4**The role of director elections: Event firms with unitary boards**

This table helps establish causality by restricting the sample of CEO turnover event firms to those with unitary board structure. In this sample the variation in director closeness-to-election is driven by seats on other boards. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1st and 99th percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

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

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

Table 5**The role of director elections: Stock returns as performance measure**

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

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

Table 6**The role of director elections: Firm-level analysis**

This table shows the robustness of the analysis in Table 2 by using firm-level data. In Column 1 Closeness-to-election is the mean of closeness-to-election across all board members in a given year. In Columns 2, 3, and 4 Closeness-to-election is the mean of closeness-to-election across the six, four, and two board members with the max closeness-to-election in a given year, respectively. In Column 5 Closeness-to-election is the maximum of closeness-to-election across all board members in a given year. Definitions of other variables are provided in Table A1. All continuous variables are winsorized at the 1st and 99th percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover					
	(1)	(2)	(3)	(4)	(5)
Definition of	All board				
closeness-to-election based on:	members	Max 6	Max 4	Max 2	Max
Variable					
ROA	-0.0696*** [0.0117]	-0.0735*** [0.0116]	-0.0738*** [0.0116]	-0.0746*** [0.0120]	-0.0766*** [0.0124]
Closeness-to-election	-0.0037 [0.0027]	-0.0015 [0.0023]	-0.002 [0.0019]	-0.002 [0.0015]	-0.002 [0.0015]
ROA * Closeness-to-election	0.0254* [0.0151]	0.0314** [0.0133]	0.0254** [0.0109]	0.0194** [0.0087]	0.0186** [0.0080]
Sales (log)	0.0118*** [0.0010]	0.0118*** [0.0010]	0.0118*** [0.0010]	0.0118*** [0.0010]	0.0118*** [0.0010]
Sales growth	-0.0062*** [0.0015]	-0.0062*** [0.0015]	-0.0062*** [0.0015]	-0.0062*** [0.0015]	-0.0062*** [0.0015]
Leverage	-0.0073 [0.0078]	-0.0073 [0.0078]	-0.0074 [0.0078]	-0.0074 [0.0078]	-0.008 [0.0078]
Institutional ownership	0.0421*** [0.0057]	0.0416*** [0.0057]	0.0418*** [0.0057]	0.0420*** [0.0057]	0.0420*** [0.0057]
Constant	-0.0413*** [0.0055]	-0.0419*** [0.0055]	-0.0415*** [0.0055]	-0.0412*** [0.0055]	-0.0409*** [0.0056]
R-squared	0.035	0.035	0.035	0.035	0.035
N	21,464	21,464	21,464	21,464	21,464
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes

Table 7**Director career consequences after CEO turnover**

This table reports changes in the total number of seats held by the board members of firms that experience CEO turnover (Equation (2)). In Panel A the dependent variable is the difference between the number of seats held in the event firm (either 1 or 0) and the number of seats held by matched directors in the same year. For each board member that experiences a CEO turnover event, we identify a matching director from the cohort of 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 on other boards. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1st and 99th percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

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

Panel A: The number of seats in event firms

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

Panel B: The number of seats on other boards

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

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

Table 8**Alternative explanations: Busy directors**

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

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

Table 9**Alternative explanations: Busy boards**

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

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

Table 10**Alternative explanations: Director experience**

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

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

Table 11**The role of director elections: Does institutional ownership matter?**

This table reports the cross-sectional variation in the main results based on the proportion of shares held by institutional investors. In Panel A the analysis is limited to firms with high institutional ownership (above the sample median). In Panel B the analysis is limited to firms with low institutional ownership (below the sample median). Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1st and 99th percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

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

Table 12**The role of director elections: Does firm size matter?**

This table reports the cross-sectional variation in the main results based on firm size. In Panel A the analysis is limited to firms with large market capitalization (above \$200 million). In Panel B the analysis is limited to the rest of the firms (below \$200 million). Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1st and 99th percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

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

Table 13**The role of director elections: Members of nomination committee**

This table repeats the analysis in Table 2 but restricting the sample to only members of nomination committee. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1st and 99th percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

Dependent variable: CEO turnover				
Variable	(1)	(2)	(3)	(4)
<i>Panel A: Members of the nomination committee</i>				
ROA	-0.0382*** [0.0035]	-0.0399*** [0.0035]	-0.0472*** [0.0038]	-0.0440*** [0.0039]
Closeness-to-election	-0.0019*** [0.0005]	-0.0021*** [0.0005]	-0.0016*** [0.0006]	-0.0016*** [0.0006]
ROA * Closeness-to-election	0.0102*** [0.0036]	0.0097*** [0.0036]	0.0091** [0.0036]	0.0086** [0.0036]
R-squared	0.021	0.022	0.027	0.053
N	138,592	138,592	138,592	138,592
<i>Panel B: Non-members of the nomination committee</i>				
ROA	-0.0511*** [0.0036]	-0.0530*** [0.0036]	-0.0580*** [0.0039]	-0.0533*** [0.0039]
Closeness-to-election	-0.0017*** [0.0006]	-0.0019*** [0.0006]	-0.0013** [0.0006]	-0.0012** [0.0006]
ROA * Closeness-to-election	0.0074** [0.0037]	0.0069* [0.0037]	0.0071* [0.0037]	0.0067* [0.0037]
R-squared	0.026	0.028	0.033	0.066
N	144,528	144,528	144,528	144,528
Controls	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No
Industry FE	No	No	Yes	No
Industry*Year FE	No	No	No	Yes

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

This table reports the cross-sectional variation in the main results based on event-firm director independence. In Panel A the analysis is limited to independent directors of event firms. In Panel B the analysis is limited to non-independent directors of event firms. Definitions of the variables are provided in Table A1. All continuous variables are winsorized at the 1st and 99th percentiles. Heteroskedasticity-robust standard errors (in parentheses) are clustered at the director level. ***, **, * correspond to statistical significance at the 1, 5, and 10 percent levels, respectively.

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