

Does the Director Election System Matter? Evidence from Majority Voting*

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Abstract:

We examine the effect of a change in the director election system—the switch from a plurality voting standard to a more stringent standard known as majority voting (MV). Using a regression discontinuity design, we document abnormal returns of 1.43-1.60% around annual meeting dates where shareholder proposals to adopt MV are voted upon, suggesting that shareholders perceive the adoption of MV as value-enhancing. We document an increase in boards' responsiveness to shareholders at MV firms. In particular, relative to a propensity score-matched control sample, firms adopting MV exhibit an increase in the rate of implementation of shareholder proposals supported by a majority vote and in the responsiveness to votes withheld from directors up for election. Instead, we do not find a relation between votes withheld and subsequent director turnover, regardless of the election standard. Overall, it appears that, rather than a channel to remove specific directors, director elections are viewed by shareholders as a means to obtain specific governance changes and that, in this respect, their ability to obtain such changes is stronger under a MV standard.

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1. Introduction

Much of the corporate governance debate in the post-Enron period has focused on enhancing the accountability of boards of directors to shareholders through changes to the director election system (Bebchuk 2003; Kahan and Rock 2011). In this study we examine whether and how a specific change, the switch from a plurality voting standard to a majority voting standard, has affected the behavior of both shareholders and directors.

Under plurality voting—until recently the default standard under most state laws—the candidate with the most votes “for” is elected (a system that helps avoid the disruptive effects of failed elections). In uncontested elections, the plurality voting standard means that one vote “for” is sufficient for a nominee to be elected, irrespective of the number of votes “withheld” (under SEC rule 14a-4(b) shareholders can either vote “for” a director nominee or “withhold” their support). The plurality voting standard, combined with the paucity of contested elections (Bebchuk 2007), has led to the observation that “corporate democracy in America has most often been a lot like Soviet democracy: the votes didn't really matter, because only one candidate was on the ballot and was assured of winning, whatever the voters thought” (Norris 2004).

Starting in 2004, shareholder activists began submitting non-binding shareholder proposals under rule 14a-8 calling for firms' adoption of a majority voting (hereafter MV) standard.¹ Under a MV standard, even in uncontested elections a director is not elected unless the majority of votes are cast in her favor. Between 2004 and 2009 more than 500 proposals to adopt MV were submitted, averaging about 50% votes in favor—a level of support rarely enjoyed by shareholder proposals (Georgeson 2005-2010). Firms began to adopt this new practice, often in response to the

¹ Rule 14a-8 of the Securities Exchange Act of 1934 permits shareholders to submit non-binding proposals requesting that certain corporate matters be put to a vote at the company's next annual meeting. To be eligible to submit a proposal, a shareholder must be a beneficial owner of at least 1% or \$2,000 in market value of securities entitled to vote, have owned these securities for at least one year, and continue to own them through the date of the meeting.

vote or the mere filing of the proposal. In 2006, amendments to the Delaware Code and the Model Business Corporation Act facilitated the adoption of MV by corporations. By the end of 2007, about two thirds of the S&P 500 had adopted some form of MV (Allen 2007). The implementation of the MV standard, however, was not uniform across firms. Some firms, particularly among the early adopters, following the example of Pfizer, introduced a “plurality plus” standard (plurality plus mandatory resignation) whereby a director failing to win a majority vote is elected (hence, the plurality standard is maintained) but must resign, with the board deciding whether to accept her resignation. Other firms, following the example of Intel, adopted a “majority plus” standard (majority plus mandatory resignation). Under this system, a director failing to win a majority vote is not elected and must also tender her resignation, which the board may or may not accept; else, a statutory holdover rule would leave her on the board until the next meeting.

The widespread adoption of MV and the attention of policy-makers² call for an empirical examination of its impact. The relevance of such an examination is further enhanced by the recent court decision blocking the SEC proposed proxy access rule, viewed by some observers as a potentially more drastic and beneficial change to the director election system than the switch from a plurality to MV standard.³

Ex ante, the effect, if any, of a MV standard is not clear. On the one hand, proponents of mandatory MV argue that a greater threat of replacement will result in stronger alignment of interests between directors and shareholders, with beneficial effects on firm value (Lipschutz 2010). This argument would explain the large and continued shareholder support for proposals to

² A provision calling for mandatory adoption of MV by all US publicly traded firms was included in the Senate version of the financial reform bill, but eventually dropped in the final version of the Dodd-Frank Act passed in 2010.

³ In 2003 the SEC proposed a proxy access rule, that would have given shareholders (under certain conditions) the ability to put their nominees on the proxy ballot along with the board’s nominees—with the aim to increase board accountability to shareholders. The proposal was dropped amidst strong opposition from the business community. The activists’ campaign for a MV election standard was partly a response to this event. The SEC eventually adopted a new proxy access rule in 2010, which however has been successfully litigated in court by the Business Roundtable and the U.S. Chamber of Commerce. See Kahan and Rock (2011) and Fisch (2012) for a history of proxy access.

adopt MV. On the other hand, shareholders could withhold (or threaten to withhold) votes for reasons unrelated to shareholder value maximization (Bainbridge 2005). In addition, failure to elect a director may cause firms to fail to comply with SEC or exchange requirements (e.g. independence on key committees, etc.), with potentially negative net effects on firm value. A third possibility is that MV, as put into practice, is “little more than smoke and mirrors” since under both the “plurality plus” and the “majority plus” versions, as discussed earlier, the election outcome ultimately remains a board decision, protected by the business judgment rule (Sjostrom and Kim 2007). This lack of real “teeth” would explain its quick adoption by S&P 500 firms, usually reluctant to adopt governance provisions favored by activists (Ertimur, Ferri and Stubben 2010). However, it would be hard to reconcile with the continued and substantial shareholder voting support enjoyed by proposals to adopt MV (Georgeson 2005-2010).

To examine the economic consequences of the adoption of MV we perform three sets of tests. First, we gauge shareholders’ perception of the value of MV through an event study around the annual meeting date where shareholder proposals to adopt MV (MV proposals) are voted upon. Following Cuñat, Gine and Guadalupe (2012), we employ a regression discontinuity design, essentially comparing the stock price reaction to MV proposals that pass by a small margin to those that fail by a small margin, and find that the passing of a MV proposal generates a 1.43-1.60% abnormal return (depending on the specification used).

Second, we examine the effect of the adoption of MV on boards’ behavior, focusing on boards’ responsiveness to shareholder requests and concerns, a key objective behind the push toward the adoption of MV. In particular, we first analyze boards’ decision of whether or not to implement non-binding shareholder proposals that win a majority of the votes cast at the annual meeting (majority-vote shareholder proposals). This setting captures a clear divergence in

preferences between shareholders and boards, which opposed the proposal when presented and need to decide whether to follow or ignore shareholders' majority vote, and has been used in prior studies to assess boards' responsiveness to shareholders (e.g. Faleye (2007) documents a lower rate of implementation of majority-vote proposals in firms with classified boards).⁴ There is also a direct connection between the implementation of shareholder proposals and director elections: members of boards failing to implement a majority-vote shareholder proposal receive a negative recommendation from the proxy advisory firm Institutional Shareholder Services (ISS) when up for election, often resulting in high votes withheld.

Employing a difference-in-differences approach, we document a 26.3%-28.4% increase in the rate of implementation of majority-vote shareholder proposals for firms adopting a MV standard relative to a propensity score-matched sample of control firms. This result is robust to controlling for proposal and firm characteristics associated with the implementation decision.

We next examine boards' response to another voting outcome, a high percentage of votes withheld from directors up for election. Previous studies have shown that such displays of shareholder dissatisfaction are often followed by significant governance changes aimed at addressing shareholders' concerns (Del Guercio, Seery and Woidtke 2008; Cai, Garner and Walkling 2009; Ertimur, Ferri and Muslu 2011; Fischer, Gramlich, Miller and White 2009). Given the difficulty of identifying the reason behind each case of high votes withheld and subsequent firm response (if any), we introduce a simple and novel measure of responsiveness to director election votes, based on the change in the percentage of votes withheld from one year to the next.

⁴ This setting also alleviates the concern that any documented effect associated with the adoption of MV may be the result of factors leading to the adoption of MV rather than the adoption of MV per se. If the adoption of MV was simply a manifestation of greater responsiveness to shareholders, then we would expect MV firms to adopt or negotiate away the shareholder proposal when submitted, *before* the vote. Shareholder proposals voted upon at the annual meeting were and continue to be opposed by the board. Hence, an increase in the implementation rate of these proposals (relative to a proper control sample, as discussed in Section 3.1.1) is unlikely to simply reflect the governance orientation of the firm and more likely to capture the causal effect of the adoption of MV.

In other words, we assume that such change indicates the extent to which the board addressed shareholders' concerns (at least in the perception of voting shareholders). Using our difference-in-differences approach, we document a greater decrease in the percentage of votes withheld the year after a high vote withheld (defined as at least 20% votes withheld from at least one director) at MV firms relative to the sample of propensity-matched control firms, again consistent with the notion that the adoption of MV results in greater board responsiveness to shareholder pressure.

Our third set of tests examines the relation between votes withheld and subsequent director turnover. Previous studies find no relation between the percentage of votes withheld from a given director and the likelihood she will lose her seat under a plurality voting standard (Cai et al. 2009). However, Fischer et al. (2009) document a positive association between *firm-level* votes withheld and *board-level* turnover. That is, while high votes withheld from a given director do not increase the likelihood of that director losing her seat, firms where directors receive high votes withheld are more likely to experience board shake-ups.⁵ We re-examine these findings in the context of MV employing our difference-in-differences approach. We find no relation between votes withheld and *individual* director turnover, even under a MV standard. That is, even in the rare situations where directors fail to win a majority vote, turnover remains infrequent and is not driven by the voting outcome, regardless of the election standard. In these cases, rather than the removal of the director, the main effect of shareholder votes is to push boards to address the concerns behind the vote. As in Fischer et al. (2009), we find a positive association between *firm-level* votes withheld and *board-level* turnover, and the association is stronger after the adoption of MV.

⁵ Fischer et al. (2009) conjecture that votes withheld are a measure of (perceived) board performance. Consistent with this conjecture, they find that higher votes withheld is associated with lower stock price reaction to subsequent announcements of management turnovers as well as greater likelihood of subsequent forced CEO turnover, reductions in CEO pay, fewer (more) and better-received acquisitions (divestitures) and greater board turnover. Under this view, while high votes withheld may not be the direct cause of director turnover (through the director election process), they are symptoms of perceived performance that eventually will result in board turnover.

Collectively, our findings suggest that the adoption of MV is value-enhancing and that one source of this value creation is the greater responsiveness of boards to shareholder concerns under a MV standard, in particular through the adoption of majority-supported shareholder proposals (which on average improve firm value; e.g. Cuñat et al. 2012) and other governance changes (which have been shown to have beneficial effects; e.g. Del Guercio et al. 2008; Ertimur et al. 2011) requested by shareholders withholding votes from directors. Instead, even under a MV standard, there is no association between votes withheld from a director and director turnover. Overall, it appears that, rather than a channel to remove specific directors, director elections are viewed by shareholders as a means to obtain specific governance changes and that, in this respect, their ability to obtain such changes is stronger under a MV standard.

Our study contributes to the accounting and finance literature on the functioning of the board of directors (e.g. Adams and Ferreira, 2008; Gul, Srinidhi and Ng, 2011; Masulis, Wang and Xie, 2012; Larcker, So and Wang, 2013) by focusing on director elections. Previous studies on director elections have examined the economic consequences of votes withheld from directors under the plurality voting standard (Del Guercio et al. 2008; Cai et al. 2009; Ertimur et al. 2011; Fischer et al. 2009) and the stock price reaction around legislative events surrounding the SEC-proposed proxy access rule (Larcker, Ormazabal and Taylor 2011; Cohn, Gillan and Hartzell 2011; Becker, Bergstresser and Subramanian 2010). We extend this literature by examining the impact of a change in the director election standard. In particular, we present the first evidence on the positive impact of MV on firm value,⁶ and on boards' behavior, focusing on direct and observable

⁶ Sjostrom and Kim (2007) and Cai, Garner and Walkling (2011) perform event studies around the announcement of the adoption of MV and the proxy filing (annual meeting) date where shareholder proposals are submitted (voted upon) and find no significant stock price reactions, concluding that the trend toward the adoption of MV is little more than “smoke and mirrors” (Sjostrom and Kim 2007). However, as noted by Gillan and Starks (2007), event studies focused on these dates are plagued by a number of problems (e.g. contaminated events), which our regression discontinuity design mitigates.

measures of board responsiveness to shareholders' requests. In doing so, we extend the literature on how boards respond to shareholder votes (e.g. Del Guercio et al. 2008; Ferri and Sandino, 2009; Ertimur et al. 2010, 2011; Ferri and Maber 2013).

Shareholder votes capture investor perceptions of board performance and are incrementally informative over other performance measures such as stock market and operating performance (Fischer et al. 2009). Hence, by showing how the adoption of MV enhances the effectiveness of shareholder votes, our study also relates to the literature on performance measurement and the design of control systems to align incentives and ensure accountability (Ittner and Larcker 2001).

Finally, our work contributes to the literature on the value relevance of governance arrangements (e.g. Gompers, Ishii and Metrick 2003; Larcker, Richardson and Tuna, 2007; Cremers and Ferrell 2010), and in particular to the body of research on the effect of specific governance provisions—e.g. classified boards or say on pay (Bebchuk, Cohen and Ferrell 2009; Bebchuk, Cohen and Wang 2011; Ferri and Maber 2013; Cai and Walkling 2011).

2. Does Majority Voting Affect Firm Value?

Our first research question is whether shareholders perceive the adoption of a MV standard as a value-enhancing change in governance. Previous studies address this question with standard event studies around either the adoption of a MV standard or the filing/voting of a shareholder proposal to adopt MV, generally concluding that there is no market reaction around these events.⁷ Such event studies have well known limitations (Gillan and Starks 2007). Proxy statements contain information other than a specific shareholder proposal, making it difficult to interpret the reaction around proxy filing dates (contaminated event problem). In addition, most MV proposals are filed

⁷ Sjostrom and Kim (2007) find insignificant returns around the announcement of adoption of MV for a sample of 116 firms between September 2004 and October 2006, regardless of the form of MV. Cai et al. (2011) find insignificant returns for a larger sample of 481 adopters between 2004 and 2007. Cai et al. (2011) also report positive 3-day mean (median) abnormal returns of 0.46% (0.23%) around the proxy filing date for firms targeted by a shareholder proposal to adopt MV, while they report insignificant returns around the annual meeting date where the proposal is voted upon.

by union pension funds that release the list of target firms well before the proxy filing dates; hence it is unclear whether the proxy contains any new information (anticipated event problem). Similarly, the stock price reaction around the shareholder vote reflects other information released at the annual meeting (e.g. votes on other matters) and depends on investor expectations about the voting outcome and, given the non-binding nature of these proposals, the likelihood of adoption conditional on the voting outcome. These expectations hinge on observable and unobservable firm characteristics, giving rise to an endogeneity concern that makes it difficult to attribute the market reaction to the voting outcome per se.

Announcement dates of adoptions also present a number of problems. First, investors may expect the adoption. This is particularly true in the case of MV, since a large fraction of firms (60.6% in our sample) “voluntarily” adopted MV in response to a shareholder proposal or the ensuing vote. Second, not all firms announced the adoption of MV. Sjostrom and Kim (2007) find that only 116 of the 250 adopting firms in their sample announced the adoption of MV through a press release or an 8-K filing. Besides, a number of these firms also announced other potentially value-relevant events on the same date (Allen 2007). Finally, there is the endogeneity concern: does the stock price reaction reflect (only) the merits of the MV standard or (also) observable/unobservable firm characteristics that lead to the adoption?

To overcome or, at least, alleviate these problems, we follow Cuñat et al. (2012), who focus on the market reaction to the outcomes of governance-related shareholder proposals using a regression discontinuity design (RDD).⁸ In essence, this approach compares the stock price reaction to proposals that pass by a small margin to the reaction to proposals that fail by a small margin. For these close-call proposals, passing is akin to an independent random event (it is

⁸ A growing number of studies rely on RDD in a variety of contexts to address endogeneity concerns that arise in observational data. Imbens and Lemieux (2008) review some of the practical and theoretical issues in implementing RDD. Lee and Lemieux (2010) provide an introduction and user guide to RDD.

“locally” exogenous) and, therefore, uncorrelated with firm characteristics, alleviating endogeneity concerns.⁹ Also, by design, the RDD is immune to omitted variable bias and other confounding factors as long as their effect is continuous around the threshold (Cuñat et al. 2012).

A key assumption for applying RDD in our setting is that the passing of a proposal results in a significant, discrete jump in the probability of its implementation (even though the proposal is not binding), and, thus, for close-call proposals the vote contains substantial information not already incorporated in prices, alleviating concerns with prior expectations. Empirical evidence supports this assumption. In a broad sample of governance-related shareholder proposals, Ertimur et al. (2010) report that the probability of implementation for proposals that pass is 31.1% versus 3.2% for proposals that fail to pass, with most of the jump occurring around the passing threshold. Ertimur et al. (2011) find similar results for a large sample of compensation-related shareholder proposals. Cuñat et al. (2012) estimate that passing a governance-related proposal leads to a discrete 31% increase in the probability of implementation. In our sample of proposals to adopt MV, the rate of implementation increases by 25% around the threshold (from 65% for proposals in the 48-50% voting range to 90% for proposals in the 50-52% voting range).

Applying a RDD to a large sample of governance-related shareholder proposals voted upon between 1997 and 2007, Cuñat et al. (2012) find that passing a governance-related proposal generates a 1.3% positive abnormal return, an effect mostly driven by proposals to remove anti-takeover defenses (e.g. declassify the board and remove poison pills). We apply this technique to our sample to obtain an estimate of shareholders’ perception of the value of a MV standard.

2.1. Research Design

⁹ To validate this assumption of the RDD approach, Cuñat et al. (2012) show that firms targeted by proposals that pass by a small margin do not differ from firms targeted by proposals that fail by a small margin along a number of dimensions (performance, growth, governance characteristics, etc). In Section 2.2, we perform a similar validity test.

Our sample consists of 278 shareholder proposals to adopt MV voted upon at S&P 1500 firms over the 2005 – 2010 period. We obtain the sample from ISS and Georgeson, which collect data on shareholder proposals and their voting results for S&P 1500 firms. The voting outcome for these 278 proposals ranges between 12.2% and 96.0%, with mean (median) voting support of 47.6% (50.4%). Similar to Cuñat et al. (2012) we estimate the following regression for increasingly small intervals around the passing threshold:¹⁰

$$Abnormal\ Returns = \alpha + \beta Pass + Year\ Fixed\ Effects + \varepsilon \quad (1)$$

Abnormal Returns is the abnormal returns on the meeting date, computed using Fama and French (1996) and momentum factors (Carhart 1997).¹¹ The variable of interest, *Pass*, is an indicator variable that is equal to one if the voting support for the proposal exceeds 50%, the passing threshold for all firms in our sample. As we reduce the interval around the threshold over which we estimate Eq. (1), it becomes more likely that the assignment of observations into treatment (i.e. proposals that pass the threshold) and control (i.e., proposals that fail to pass the threshold) is random and we are able to get an unbiased estimate of the value of MV.

The drawback of this approach is that the sample size becomes smaller and smaller. Thus, to be able to use our entire data and increase efficiency, following Cuñat et al. (2012), we assume that we can approximate the underlying relation between abnormal returns and votes in favor of the proposal by a polynomial in the vote share (i.e. the percentage of votes in favor). This polynomial flexibly captures the underlying relationship between the vote share and the outcome

¹⁰ We estimate t-statistics based on robust standard errors. Our results are qualitatively similar if we cluster standard errors by meeting date.

¹¹ The estimation period for the Fama and French (1996) and Carhart (1997) factors ends 15 trading days prior to the event date; the length of the estimation period is 200 trading days, and we require at least 15 days with returns for a firm to be included in the sample.

variable, such that the effect of any discontinuous jump at the threshold is captured by β . Specifically, we estimate the following regression:¹²

$$\begin{aligned} \text{Abnormal Returns} = & \alpha + \beta \text{Pass} + \gamma_1 \text{Votes For}_R + \gamma_2 \text{Votes For}_R^2 + \gamma_3 \text{Votes For}_R^3 \quad (2) \\ & + \gamma_4 \text{Votes For}_R^4 + \gamma_5 \text{Votes For}_R^5 + \gamma_6 \text{Votes For}_L + \gamma_7 \text{Votes For}_L^2 \\ & + \gamma_8 \text{Votes For}_L^3 + \gamma_9 \text{Votes For}_L^4 + \gamma_{10} \text{Votes For}_L^5 + \text{Year Fixed Effects} + \varepsilon \end{aligned}$$

In Eq. (2), $\text{Votes For}_{R(L)}$ is the voting support for the proposal when support is more (less) than 50%; the other variables are defined as in Eq. (1).

2.2 Validity of RDD: Distribution of Votes and Preexisting Differences

A key assumption underlying RDD in our setting is that around the 50% threshold, the passing of a proposal is akin to random assignment. A standard test of this assumption evaluates whether the distribution of votes is continuous around the majority threshold. Figure 1 reports the histogram of the votes in favor for the 278 shareholder proposals to adopt MV. The histogram shows that there are more proposals that fall below the threshold (say, between 46% and 50%) than above the threshold (say, between 50% and 54%), raising the concern that the assignment of firms around the 50% threshold is not random.

The pattern in Figure 1 does not invalidate the use of RDD in our setting for three reasons. First, management or shareholder influence over the assignment variable does not invalidate RDD as long as they are unable to *precisely* manipulate the assignment variable (Lee and Lemieux 2010; Armstrong, Gow and Larcker 2012). In our setting, it is unlikely that management or certain shareholders (e.g. those who submitted the proposal) have *precise* control over the assignment variable—both sides will try to influence voting decisions, but they do not control them. This is in

¹² Throughout the analyses we use a polynomial of order five on either side of the threshold. As Cellini, Ferreira and Rothstein (2010) discuss, assuming that the conditional expectation of the unobservable determinants of the dependent variable (in our case, abnormal returns) given the realized vote share is continuous, one can approximate it by a polynomial of order g and the approximation will become arbitrarily accurate as $g \rightarrow \infty$. As in Cuñat et al. (2012), the results are robust to using lower and higher order polynomials.

contrast with management proposals where management might have some control over the assignment variable (e.g. not submit proposals when there is uncertainty about the voting outcome). Perhaps not surprisingly, we observe a sharp discontinuity around the threshold in the case of management proposals (see Figure 2), similar to Listokin (2008). The much less pronounced discontinuity in our sample suggests that management's control over the assignment variable is far from precise in the case of shareholder proposals.

Second, there is no reason to expect management to have greater control over the assignment variable for proposals to adopt MV than for other shareholder proposals. Hence, if management control over the assignment variable was the reason for the discontinuity, we would expect other types of proposals to exhibit the same type of discontinuity. Instead, in untabulated analysis, we find that the voting outcome distribution for other types of shareholder proposals with a meaningful sample size (at least 200 observations) is smoother. For example, in the case of proposals to declassify the board, there are 26 proposals between 50% and 54% and 28 proposals between 46% and 50%. Declassifying the board is certainly an extremely important issue for management, and if management had control over the assignment variable we would expect to see the same (or perhaps even higher) degree of discontinuity as for MV proposals.

Finally, if management had precise control over the assignment variable, we would expect management to systematically win at firms with two or more close-call shareholder proposals (i.e. all the close-call proposals fall below the threshold). To examine this hypothesis, using Voting Analytics, we identify 56 firm-meetings where there is more than one shareholder proposal with 46% - 54% voting support over the 2001 – 2010 period. We find that, out of these 56 cases, in 25 cases all proposals fail, in 21 cases at least one fails and at least one wins, and in 10 cases all

proposals win, suggesting that management's and shareholders' degree of control over the assignment variable is limited (results not tabulated).

Another key assumption of the RDD is that prior to the vote, there are no systematic differences in the characteristics of firms that fall on either side of the threshold. To validate this assumption, similar to Cuñat et al. (2012), for the sample of firms with MV proposals, we run a series of regressions where the dependent variable is a firm characteristic of interest—growth (Tobin's Q), performance (return on assets, one-year stock returns) and governance (institutional ownership, entrenchment index, number of other shareholder proposals)—and the independent variable is the indicator variable *Pass* (Model 1) or *Pass* plus the polynomial in the vote share (Model 2). Table 1, Model (1), shows that the only significant difference is that firms where the MV proposal passes have higher institutional ownership. This is not surprising given the positive relation between institutional ownership and voting support for governance proposals (Gillan and Starks 2000; Ertimur et al. 2010). However, once we control for the polynomial and *Pass* captures the effect around the threshold, the difference in institutional ownership disappears (see Model 2), providing support for the RDD's identifying assumption that the characteristics of firms with MV proposals just above and below the threshold are not significantly different.¹³

2.3 Results

Table 2, Panel A, shows the results of estimating Eq. (1). When we include all MV proposals, regardless of the voting outcome, we find that the coefficient on *Pass* (Model 1) is insignificant. As discussed earlier, it is difficult to interpret the relation between passing the threshold and returns because the passing of a proposal is an endogenous outcome that the market can partially anticipate. To deal with this problem, we employ the RDD and re-estimate the

¹³ To further check the validity of this assumption, in untabulated analysis we estimate Eq. (2) after including the same set of firm characteristics in Table 1 as covariates. Our results are qualitatively similar to those reported in Table 2.

regression for increasingly small intervals around the passing threshold (50% votes for). For example, $[-5,+5]$ indicates that we include only MV proposals that received between 45% and 55% of votes for ($\pm 5\%$ around the 50% threshold). As the interval narrows, increasing the probability that the classification of observations in passed and failed proposals is random, we find that the coefficient on *Pass* increases and becomes significantly positive. For example in Model (3), when the voting window is $[-2,+2]$ (i.e. proposals receiving between 48% and 52% votes for), the coefficient on *Pass* is 0.0116 (significant at 5%) and in Model (4), when the window is $[-1,+1]$, it becomes 0.0177 (significant at 1%). In other words, close-call governance proposals that pass lead to positive abnormal returns on the day of the vote relative to those that do not pass.

As we narrow the window, though, the sample size becomes smaller and smaller (31 observations in Model 3 and 17 in Model 4), reducing the efficiency of the coefficient estimates. In Model (5) we estimate Eq. (2), where we introduce a polynomial of order five in the vote share as additional independent variables and use the full sample of MV proposals. When we do so, the coefficient on *Pass* remains positive at 0.0143 (significant at the 5% level), implying that the passing of a MV provision generates a 1.43% abnormal return.

To increase our confidence in the results, we perform a number of robustness tests. First, we implement the non-parametric local linear regression approach (Lee and Lemieux, 2010). We use a triangular kernel for estimation and, similar to Armstrong et al. (2012), we report the results for a bandwidth of 0.02 (which we label 100), a shorter bandwidth (0.01, which we label 50) and a wider bandwidth (0.04, which we label 200). The results in Table 2, Panel B are similar to the results in Panel A. The magnitude of the causal effect ranges between 1.57% and 1.72%. The coefficient is significant for bandwidths 100 and 200 (at 10% and 1% level, respectively), but is insignificant for bandwidth 50 (p-value = 0.20). We provide plots of the data and fitted curve for

bandwidth 200 in Figure 3. The regression lines show a clear discontinuity at 50% (which corresponds to 0 in the plot).

Second, to determine whether our finding is specific to the event date, we re-estimate Model (5) with abnormal returns on days +1, +2, +3, +4 and +5 (relative to the meeting date) as the dependent variable. In all the five regressions, the coefficient of *Pass* is insignificant, ranging from -0.0030 (t-statistic=-0.38) to 0.0055 (t-statistic=0.64).

Third, to determine whether our finding is specific to the 50% voting threshold, we compare the abnormal returns in adjacent voting outcome bins of 2% (e.g. 32-34% votes in favor versus 30-32% votes in favor, 33-35% votes in favor versus 31-33% votes in favor, and so on), for all bins with more than 10 observations, essentially examining the difference in abnormal returns around a series of pseudo-thresholds. The mean difference in abnormal returns is 0.02% (the highest being 0.95%), with a standard deviation of 0.72%. In contrast, the difference in returns between the 50-52% and 48-50% bucket is 1.26% (that is, 1.75 standard deviations from the mean). Results are similar when we repeat the analyses for adjacent voting outcome bins of 1% (e.g. 32-33% votes in favor versus 31-32% votes in favor). Consistent with these findings, when we redefine *Pass* around each pseudo-threshold and re-run the regressions in Model (3-5), we find that the coefficient of *Pass* is not significant for any of the pseudo-thresholds.

Fourth, we visually inspect the distribution of abnormal returns around the threshold to ensure the results are not driven by outliers.

Fifth, we repeat the analyses in Table 2, Panel A for abnormal returns calculated based on the market model (rather than the four-factor model). Our results are generally unchanged and the coefficient of *Pass* is positive and significant in Models (3) and (5). The coefficient is marginally

insignificant in Model (4) when we limit the sample to the 17 firms where the voting outcome falls in the [-1,+1] window (p-value=0.125).

Finally, because Cuñat et al. (2012) find positive returns around the passing of governance proposals (particularly those related to anti-takeover measures), we examine whether our results are driven by the presence of other governance-related shareholder proposals (particularly close-call proposals) at firms targeted by MV proposals. First, we repeat the analysis in Panel A for firms where no other shareholder proposal received between 45% and 55% of the votes in favor (untabulated). Our results and inferences are unchanged (though the sample size is smaller, with N=28 in Model 3 and N=16 in Model 4). Second, in Panel C we explicitly control for the presence and passing of other proposals, splitting them into *Anti-Takeover* proposals (e.g. declassification of the board, removal of poison pills) and all other governance proposals (*Other*). The coefficient on our variable of interest (*Pass*) remains positive (at 0.0160 in Model 5) and significant.¹⁴

Overall, depending on the specification used, our analyses indicate that the passing of a MV provision generates a 1.43-1.60% abnormal return consistent with shareholders viewing a MV standard as value-enhancing and in contrast to the conclusions of no value effects in Sjostrom and Kim (2007) and Cai et al. (2011). Moreover, our estimate of the impact of MV compares favorably with the estimates in Cuñat et al. (2012) for a broad sample of governance-related shareholder proposals (1.3%) and a subset of proposals to remove anti-takeover provisions (1.7%).

2.4 Interpretation of the Event Study Results

Because of the non-binding nature of shareholder proposals, the market reaction around the passing of the proposal does not capture the full value of the proposal. As noted by Cuñat et al. (2012), the full value estimate must take into account the probability of immediate adoption as a

¹⁴ Note that in Models (3) and (4) we cannot estimate a coefficient on *Other Pass*, because in those sub-samples we do not have any case of *Other* proposals that passed.

result of the passing of the proposal as well as the probability that the proposal will be resubmitted, passed and implemented in the future.¹⁵ In other words:

$$\bar{W} = \frac{Z}{p^I + \sum_{i=1}^{\infty} \delta^i p_{t+i}^p}$$

where \bar{W} is the full value of the proposal, Z is the market reaction around the threshold, p^I is the change in probability of immediate adoption as a result of the passing of the proposal, and $\sum_{i=1}^{\infty} \delta^i p_{t+i}^p$ is the discounted value of future proposals to adopt MV being passed and implemented (in the event that the current proposal is not implemented) as a result of the current MV proposal passing. To proxy for investors' ex ante expectations about the cumulative change in the probability of future adoption as a result of the current proposal passing (the denominator), we use the 50% estimate derived by Cuñat et al. (2012) for a large sample of governance-related shareholder proposals (see Table 7, Model 1 in their paper). Ignoring discounting, this 50% figure results in a full value estimate of 1.43%/50%=2.86%. This estimate, while large in magnitude, is in line with Cuñat et al. (2012), who estimate the full value of the governance-related shareholder proposals in their sample at 2.8% (5.2% for anti-takeover proposals). As shown in Section 3, we find that the adoption of MV is associated with an increase in the rate of implementation of those proposals. Hence, expected greater responsiveness to other value-enhancing shareholder proposals can account for a substantial portion of our estimate of the full value of MV.

Extracting the full value of the MV proposals is a complex exercise that is sensitive to assumptions about unobservable and possibly time-varying investor expectations about changes in probability of immediate or future implementation around the threshold. Hence, while our event

¹⁵ Previous studies show that proposals that receive high voting support (but are not adopted) are resubmitted in the future and that the probability of implementation increases with the number of majority-votes in favor of the proposals (Ertimur et al. 2010).

study shows that the adoption of MV results in a statistically and economically significant positive effect on the stock price, one should exercise caution in quantifying the value of a MV standard.

Another issue raised by our event study is that the positive market reaction we document may seem at odds with the voting outcome of MV proposals. While support for MV proposals is fairly high relative to most shareholder proposals (Ertimur et al. 2010) and has increased from 43.6% to 57.2% during our sample period as this new type of proposal gained ground among shareholders, given the favorable market reaction, one may wonder why proposals to adopt MV do not receive greater support. This apparent inconsistency between the favorable market reaction and the voting outcome may reflect differences between the marginal investor (who determines the stock price) and the median voter (who determines the outcome of the vote), as suggested by Listokin (2009). Also, our event study estimate captures an average effect and voting shareholders may view the adoption of MV as beneficial only in some firms or contingent upon certain factors.¹⁶ Finally, and most importantly, different shareholders have different objectives and therefore may cast their votes for reasons unrelated to the merits of the proposal. Previous studies find that certain shareholders may vote in favor or against management because of conflicts of interest (Brickley, Lease and Smith 1988; Davis and Kim 2007; Agrawal 2011), while other shareholders tend to side with management because they prefer “quiet” diplomacy over confrontation, or “exit” over “voice”, when dissatisfied. Issues of strategic voting further complicate the interpretation of voting outcomes in terms of valuation effects (Maug and Rydqvist 2009; Matvos and Ovstrovksi 2010). Quite tellingly, even proposals to declassify the board—arguably the governance change most strongly associated with value creation (e.g.

¹⁶ This would explain the significant variation in voting outcomes for MV proposals: for example, 3.2% of the MV proposals in our sample received less than 25% support and 8.3% received more than 75% support. This variation is common to many other types of shareholder proposals (e.g. proposals to declassify the board).

Bebchuk and Cohen 2005; Faleye 2007; Bebchuk et al. 2009; Cohen and Wang 2013)—do not receive unanimous support and exhibit variation in their voting outcome.¹⁷

Our evidence also raises the question of identifying the channels through which the positive effect of MV materializes. Put it differently, and more generally, what are the economic consequences of MV on firm's behavior? We turn to this question in the next section.

3. Does Majority Voting Affect Board Behavior?

The analysis of the stock price response to MV proposals in Section 2 provides important evidence on the value of MV. However, these results should be interpreted with caution because the inferences are based on a subset of firms targeted by MV proposals and may not be generalizable to the broader sample of MV adopters or a larger set of firms.¹⁸ In addition, the stock price reaction represents shareholders' perception of the value of a new, untested governance provision whose expected effects may or may not materialize. Hence, it is important to examine the economic consequences of MV in terms of its impact on the behavior of adopting firms. As mentioned earlier, this analysis also sheds light on the channels through which a MV standard may have the beneficial effect suggested by the event study presented in Section 2.

3.1 Responsiveness to the Voting Outcome of Shareholder Proposals

We first examine the impact of the MV standard on boards' responsiveness to non-binding shareholder proposals that receive a majority of the votes cast at the annual meeting.¹⁹ This setting is appealing for a number of reasons. First, it focuses on a directly observable board action, not

¹⁷ Between 2005 and 2010 voting support for the 334 proposals to declassify the board ranged between 16.8% and 98.9% with mean (median) voting support of 67% (64.5%).

¹⁸ A comparison of firms targeted by MV proposals (whether or not with a close vote) to other S&P 1500 firms in terms of size, performance, institutional ownership, entrenchment index and Tobin's Q reveals that the only significant difference is that firms targeted by MV proposals are larger, consistent with prior evidence that activists tend to submit proposals at larger, more visible firms (Gillan and Starks 2000; Ertimur et al. 2010).

¹⁹ We focus our analysis on shareholder proposals that receive a majority of the votes cast at the annual meeting, because, as mentioned in Section 2, board responsiveness to shareholder proposals that fail to receive the majority of the votes cast is low (Ertimur et al. 2010; Ertimur et al. 2011; Cuñat et al. 2012).

obfuscated by other factors (e.g. in contrast to firm performance, which is the result of numerous firm-specific, industry and macro-economic factors). Second, shareholder proposals supported by a majority of the votes cast are an expression of shareholder preferences. Hence, the implementation decision speaks to the key issue underlying the push for MV: increasing board responsiveness to shareholder concerns through a stronger accountability mechanism. Finally, this setting alleviates the concern that any documented effect associated with the adoption of MV may be the result of factors leading to the adoption of MV rather than the adoption of MV per se. For example, if adopting firms are well-governed, a finding that, say, CEO pay becomes more sensitive to performance at these firms may reflect their superior governance quality rather than the adoption of MV. Our setting is unique for the following reason: if the adoption of MV was simply a manifestation of greater responsiveness to shareholders, then we would expect these firms to adopt or negotiate away the shareholder proposal when submitted, avoiding the vote at the annual meeting. By definition, all shareholder proposals voted upon at the annual meeting were and continue to be opposed by the board (which also suggests that these proposals are economically relevant to the firm).²⁰ However, some of these (non-binding) proposals win a majority vote, forcing the board to decide whether or not to adopt them (Levit and Malenko, 2011). Hence, an increase in the implementation rate of these proposals (relative to a proper control sample, as discussed below) is unlikely to simply reflect the governance orientation of the firm and more likely to capture the causal effect of the adoption of MV. A similar measure is used by Faleye (2007) who documents that some of the value reduction associated with classified boards can be attributed to the lower rate of implementation of shareholder-approved proposals in firms with classified boards.

²⁰ The proxy statement includes a section where the board presents its arguments against the shareholder proposal and recommends shareholders to vote against it.

There is also a direct connection between implementation of shareholder proposals and director elections. Institutional Shareholder Services (ISS), the most influential proxy advisory firm,²¹ recommends withholding votes from directors who fail to implement a shareholder proposal approved by shareholders.²² Based on data from ISS, failure to implement such proposals was the reason behind 25% of the withhold recommendations issued between 2003 and 2010 and, in such cases, on average 30% of votes were withheld from the directors. Hence, boards under a MV standard are likely to carefully evaluate their implementation decisions. Besides, Ertimur et al. (2010) find that directors who are less responsive to majority-vote shareholder proposals experience higher turnover and are more likely to lose their seats on other boards.

3.1.1 Research Design

To examine the effect of the MV standard on boards' responsiveness to shareholder proposals, we are unable to use the RDD approach because the number of firms that fall around the threshold is too small and becomes even smaller after imposing the data requirements for the board responsiveness tests.²³ Instead, we use a difference-in-differences design, comparing the change in the rate of implementation of majority-vote shareholder proposals for firms adopting a MV standard to a propensity-matched sample of control firms (while acknowledging that propensity score matching mitigates concerns arising from *observable*, but not *unobservable*, differences between MV and non-MV firms).

²¹ A number of studies show a strong association between ISS recommendations and voting outcomes (e.g. Cai et al. 2009; Ertimur, Ferri and Maber 2013). For a review, see Ferri (2012).

²² More precisely, ISS recommends withholding votes from the entire board of directors (except new nominees, who are considered on a case-by-case basis) if (i) the board failed to act on a shareholder proposal that received the support of a majority of the shares *outstanding* the previous year; or (ii) if the board failed to act on a shareholder proposal that received the support of a majority of shares *cast* in the last year and one of the two previous years. Starting in the 2013 proxy season, ISS will tighten the policy and recommend withholding votes if the board fails to act on a shareholder proposal that received the support of a majority of shares *cast* in the previous year.

²³ There is also a conceptual drawback to using RDD in this analysis. Since only a subset of firms that adopt MV do so in response to a shareholder proposal to adopt MV, we would be estimating the impact of MV on firms' subsequent actions only for a potentially biased subset of MV adopters, making it difficult to generalize our findings to the broader population of MV adopters.

To ensure availability of data on shareholder proposals and other variables required in the analysis, we focus on S&P 1500 firms and proceed as follows. First, using the list provided in Allen (2007) (hereafter the Allen Report), we identify 474 (S&P 1500) firms that adopted a MV standard (hereafter MV firms) by the end of 2007.²⁴ Of these 474 firms, we are able to obtain the financial and governance data required for the propensity score algorithm for 398 firms. Second, we estimate yearly logistic regressions where the dependent variable is equal to one if the firm adopts the MV standard in that year and zero if the firm has not adopted MV as of 2007. Following Cai et al. (2011), as determinants of the probability of MV adoption we include size, book-to-market ratio, ROA, one-year size-adjusted stock returns, institutional ownership, entrenchment index, CEO tenure, board size and number of directors sitting on the boards of other firms that adopted MV. Table 3, Panel A, reports the aggregate estimates for the yearly logistic regressions. The first column presents the averages of the annual coefficient estimates, and the second column presents an aggregate z-statistic, calculated as the sum of individual annual z-statistics divided by the square root of the number of years. Adopting firms are larger, have worse operating stock performance, shorter CEO tenure and more directors sitting on the boards of firms that already adopted MV. The pseudo R^2 for the yearly logistic regressions ranges between 21.5% and 31.1%. Next, we match each of the 398 MV firms to a control firm with the closest propensity score in the adoption year with replacement (resulting in 208 distinct control firms, hereafter non-MV firms).²⁵

²⁴ The report, prepared by Claudia H. Allen at Neal, Gerber & Eisenberg LLP, provides a list of firms that adopted a MV standard between September 2004 (the first case of adoption) and November 2007, with the adoption date and details about the specifics of the MV provision. The initial report was released in February 2006 and subsequently updated a number of times up to November 2007. The report also lists 107 firms that had MV in place prior to the push toward a MV standard (i.e. prior to 2004). We exclude these 107 firms from the analysis. Sjoström and Kim (2007) and Cai et al. (2011) also use the Allen Report as a source to identify MV adopters.

²⁵ In robustness tests, we (i) match each MV firm to three firms in the same year with the closest propensity score (resulting in 413 control firms), (ii) limit the propensity-matched sample to firms that received shareholder proposals to adopt MV, and, thus, likely considered its adoption. The results presented in Sections 3 and 4 are robust to using these alternative control samples.

The objective of the propensity score matching procedure is to identify control firms that differ from the treatment sample in terms of actual adoption of MV, but are similar in terms of likelihood of adopting MV (that is, in terms of the firm characteristics that drive the adoption of MV). Table 3 suggests that the procedure is reasonably successful. When compared to all non-MV firms, MV firms are significantly larger (\$8.1 billion versus \$1.6 billion in market value of equity), have worse operating and stock performance, shorter CEO tenure, larger boards, lower institutional holdings and more directors sitting on the board of other MV firms (Panel B). Most of these differences disappear after the matching procedure (Panel C). MV firms continue to be somewhat larger (\$8.1 billion versus \$6.5 billion in market value of equity) and are now more profitable (in terms of operating performance) than the propensity-matched non-MV firms, but the differences are economically small.²⁶ We control for firm size and profitability in our multivariate analyses, alleviating concerns that these residual differences across MV and non-MV firms could be driving the documented differences in responsiveness.

For the combined sample of MV firms and propensity-matched non-MV firms, we then obtain data on governance-related shareholder proposals and their voting outcome for the period 1997-2008 (source: ISS shareholder proposal dataset). Over this period, 158 of the 398 MV firms (39.7%) and 92 of the 208 non-MV firms (44.2%) had at least one shareholder proposal winning a majority vote at the annual meeting, for a total of 458 majority-approved shareholder proposals at MV firms and 196 at non-MV firms. Next, following Ertimur et al. (2010), for each majority-approved proposal, we determine if it was implemented by reading the proxy statement from the year subsequent to the vote. Finally, we estimate the following proposal level logistic regression:

²⁶ Due to data availability, some of the subsequent tests use a subset of the MV and propensity-matched non-MV firms. We continue to find that MV and non-MV firms are generally very similar in those cases.

$$\begin{aligned} \text{Implemented} = & \alpha + \beta_1 \text{Non-MV Firm-Post} + \beta_2 \text{MV Firm-Pre} \\ & + \beta_3 \text{MV Firm-Post} + \delta \text{Control Variables} + \varepsilon \end{aligned} \quad (3)$$

The dependent variable, *Implemented*, is an indicator equal to one if the majority-approved proposal is implemented within one year of the annual meeting during which it is voted upon, and zero otherwise. *MV Firm-Pre (Post)* is an indicator variable that is equal to one for MV firms before (after) the adoption of MV, and zero otherwise.²⁷ *Non-MV Firm-Post* is an indicator variable that is equal to one for non-MV firms after the adoption of MV by the MV firm to which they are matched. Following Ertimur et al. (2010), we control for the percentage of votes cast in favor of the proposals (*% Votes For*), include indicators for the type of proposals (*Defense Proposal*, equal to one for proposals that request the removal of anti-takeover defenses, such as proposals to declassify the board; *Shareholder Rights Proposal*, equal to one for proposals to strengthen shareholder rights, such as the right to call a special meeting) and the identity of the proponent (*Union Proponent*, equal to one if the proposal is submitted by union pension funds; *Institution Proponent*, equal to one if the proposal is submitted by other institutional investors), as well as an indicator for *After 2001*, to capture the increase in responsiveness to shareholder proposals after the Enron-type scandals of 2001-2002 (Thomas and Cotter 2007).

3.1.2 Results

Table 4, Panel A presents the univariate results. Before the adoption of MV, the rate of implementation of majority-vote shareholder proposals does not differ significantly between MV and non-MV firms (33.5% versus 27.1%), and is in line with the evidence in Ertimur et al. (2010) for the period 1997-2004. After the adoption of MV, the likelihood of implementation increases from 33.5% to 62.0% for MV firms (a difference significant at the 1% level), while it remains flat

²⁷ In untabulated tests, we find that board responsiveness to shareholders does not differ with the version of MV adopted (“majority plus” versus “plurality plus”). This is consistent with the conjecture that in practice the two versions of MV are similar in that whether a director that fails to receive majority support from shareholders remains on the board is ultimately a board decision under both majority plus and plurality plus (Sjostrom and Kim 2007).

for non-MV firms (~ 27%). The difference-in-differences is statistically significant at the 1% level. To ensure the result does not reflect a trend that started before the adoption of MV (e.g. an increase in the responsiveness of MV firms over time, regardless of MV), we also divide the pre-adoption period into two sub-periods, 1997-2001 and 2002-2004. While the implementation rate increases after 2001 for both MV and non-MV firms (consistent with Ertimur et al. 2010), the difference-in-differences is not significant (untabulated). Hence, it does not appear that MV firms had become more responsive in the years leading to the adoption of MV.

Ertimur et al. (2010) document that the likelihood of implementation is positively associated with the percentage of votes cast in favor of the proposals (*% Votes For*) and is higher for proposals that request the removal of anti-takeover defenses (*Defense*) and proposals to strengthen shareholder rights (*Shareholder Rights*). Thus, the higher implementation rate at MV firms may be a reflection of higher voting support and greater incidence of proposals more likely to be implemented, rather than the adoption of a MV standard. We examine this possibility in the multivariate test in Panel B, Model (1). Similar to Ertimur et al. (2010), we find that proposals with a higher voting support as well as *Defense* and *Shareholder Rights* proposals are more likely to be implemented, but the increase in rate of implementation for MV firms remains significantly larger than for non-MV firms.²⁸ The result continues to hold in Model (2), where we also control for size, performance and a number of governance characteristics (CEO-Chairman duality, board independence and ownership, entrenchment index, and ownership by activist public pension funds). In particular, the difference-in-differences translates to a 28.4% (26.3%) increase in the rate of implementation for majority-vote *Shareholder Rights (Defense)* proposals presented at MV

²⁸ In untabulated tests we find that the voting support for majority-approved shareholder proposals is similar for MV firms and non-MV firms at around 65-67% both before and after the adoption of MV. As for the type of proposals, their distribution among MV and non-MV firms is similar in the period before adoption of MV. After adoption of MV, proposals related to shareholder rights (anti-takeover defenses) comprise a larger (smaller) fraction of the total set of majority-approved proposals at MV firms.

firms relative to non-MV firms subsequent to the adoption of MV. Note that *Entrenchment Index* captures the existence of classified boards, among other provisions. When, instead of *Entrenchment Index*, we include an indicator variable that captures the existence of a classified board in Model (2), its coefficient is negative and significant at the 10% level, consistent with the univariate results reported in Faleye (2007).

Overall, our analyses suggest that subsequent to the adoption of MV, firms become more responsive to majority-vote shareholder proposals. Recall that Cuñat et al. (2012) find positive abnormal returns around the passage of governance-related shareholder proposals (reflecting the higher probability of their implementation). Hence, our evidence of a positive reaction around the passage of proposals to adopt MV may be interpreted as reflecting investors' expectations that MV firms will implement value-creating governance-related shareholder proposals.

3.2 Responsiveness to Voting Outcome of Director Elections

Our second set of tests focuses on boards' responsiveness to votes withheld from directors up for election, a manifestation of shareholder dissatisfaction with board performance. In a famous speech, Grundfest (1993) argued that a high percentage of votes withheld from directors, while a symbolic act unlikely to affect the outcome of the election under plurality voting, could act as a catalyst for governance and operating changes, because "symbols have consequences". Since then, "vote-no" campaigns targeted at individual directors, entire committees or the full board have been increasingly popular (Del Guercio et al. 2008). Prior studies show that boards, concerned with protecting their reputation, tend in fact to respond to shareholder votes. High votes withheld are associated with subsequent changes in governance, disciplinary CEO turnover, reductions in CEO excess pay and changes in operations (acquisitions, divestitures) (Del Guercio et al. 2008; Cai et al. 2009; Ertimur et al. 2011; Fischer et al. 2009). In this section we examine whether the adoption

of MV is associated with an increase in the responsiveness to votes withheld. A MV standard may exacerbate the reputation concerns associated with a high percentage of votes withheld. Failure to act may result in more than 50% votes withheld in the future, triggering director resignations and forcing boards to make difficult and highly scrutinized decisions on whether to accept them.

Similar to majority-approved shareholder proposals, this setting alleviates concerns that evidence of an increase in responsiveness may be due to the factors leading to the adoption of MV rather than the adoption of MV per se. If MV firms were simply firms more responsive to shareholders (hence the adoption of MV), then they would not face high votes withheld in the first place. Since many of them do (as shown below), the key question is whether, *conditional* on shareholder pressure, MV firms are more responsive than non-MV firms.

3.2.1 Research Design

To examine the effect of MV on boards' responsiveness to shareholder votes on director elections, as in Section 3.1, we compare the change in the rate of responsiveness between MV and propensity-matched non-MV firms subject to shareholder pressure (difference-in-differences).

As a proxy for shareholder pressure we use the presence of at least one director with at least 20% votes withheld. We use 20% as threshold because academics and practitioners view it as an indication of substantial shareholder dissatisfaction. For example, Del Guercio et al. (2008) document a higher rate of adoption of shareholders' requests of governance changes when directors receive more than 20% of votes withheld. Using data from the ISS Voting Analytics (VA) dataset between 2003 (earliest year of VA coverage) and 2007, we find that 163 of the 398 MV firms (40.1%) and 61 of the 208 non-MV firms (29.3%) had at least one such director.

As a proxy for responsiveness, we compute the change in the percentage of votes withheld from one year to the next. Unlike the case of majority-approved shareholder proposals, measuring

responsiveness to votes withheld is not straightforward, since the issue or issues behind the vote are not easily observable. Even if they were observable, classifying a firm as responsive would be somewhat subjective (e.g. a firm may address only some of the issues; also, there may be more than one way to address a given issue and be ‘responsive’). Hence, rather than trying to directly examine firms’ responses, we introduce a novel ex post measure of responsiveness, based on the change in the percentage of votes withheld from one year to the next, essentially viewing the magnitude of the decrease in votes withheld as an indication of the extent to which shareholders are satisfied with the firm’s response to the issue behind the previous year’s vote.

For the sample of MV firms and the propensity-matched non-MV firms with at least one director with at least 20% votes withheld, we estimate the following firm level OLS regression over the 2004 – 2008 period:

$$\begin{aligned} \text{Change in Votes Withheld} = & \alpha + \beta_1 \text{Non-MV Firm-Post} + \beta_2 \text{MV Firm-Pre} \\ & + \beta_3 \text{MV Firm-Post} + \delta \text{Control Variables} + \varepsilon \end{aligned} \quad (4)$$

The dependent variable, *Change in Votes Withheld*, is defined as the firm-level decrease in the maximum percentage of votes withheld from directors from the year $t-1$ to the year t annual meeting such that greater values correspond to greater levels of responsiveness. For example, if 35% of the votes are withheld from a director and then only 10% of the votes are withheld next year, *Change in Votes Withheld* is 25%. The variables of interest, *MV Firm-Pre (Post)* and *Non-MV Firm-Post*, are defined as in Eq. (3).

Similar to the analysis of implementation of majority-vote shareholder proposals, we control for size, performance and a number of governance characteristics that may be associated with responsiveness to shareholder pressure (CEO-Chairman duality, board independence and ownership, entrenchment index and ownership by activist public pension funds; see the notes to Table 5 for detailed variable descriptions). We also control for classified boards, to account for the

fact that at firms with classified boards the directors receiving high votes withheld may not be up for re-election, biasing in favor of detecting a greater decline in votes withheld at the firm level.²⁹

3.2.2 Results

Table 5, Panel A presents the univariate tests of the responsiveness to votes withheld from directors, before and after the adoption of MV, for MV and non-MV firms. Before the adoption of MV, we do not observe a statistically significant difference in responsiveness between MV and non-MV firms. The mean *Change in Votes Withheld* is similar across the two groups, a 15.3% drop for MV firms compared to a 13.5% drop for non-MV firms. After the adoption of MV, MV firms are more responsive, with a 18.4% decrease in votes withheld versus a decrease of 10.6% for non-MV firms. The difference-in-differences for *Change in Votes Withheld* is approximately 6% and significant at 10% level. Note that the difference-in-differences seems to be driven by an increase in responsiveness for MV firms subsequent to the adoption of MV combined with a decrease in responsiveness for the matched non-MV firms (neither statistically significant).

Panel B displays the results for the multivariate analyses. Model (1) presents the results from the estimation of Eq. (4) where the dependent variable is *Change in Votes Withheld*. Consistent with the univariate analysis, the results point to greater responsiveness at MV firms subsequent to the adoption of MV relative to the matched non-MV firms. Specifically, following an annual meeting where there is at least 20% votes withheld from at least one director at the firm, the decrease in votes withheld is 8.3% higher at MV firms relative to non-MV firms in the post-adoption period ($\chi^2 = 10.88$, significant at 1% level). The difference-in-differences of 7.1% is positive and significant at the 5% level.

²⁹ In untabulated tests, we find that the percentage of firms with a classified board is similar in the MV and non-MV samples both before and after the adoption of MV (and increase over time in both groups); hence the existence of classified boards is unlikely to affect our inferences.

In order to alleviate the concern that the results in Model (1) may partially be driven by systematic differences in initial voting dissent across MV and non-MV firms,³⁰ we estimate an alternative version of Eq. (4) where the dependent variable is *% Change in Votes Withheld* (defined as *Lag Max Votes Withheld* less *Max Votes Withheld* scaled by *Lag Max Votes Withheld*). The results, presented in Model (2) of Panel B, are similar to the results in Model (1).

The analysis in Table 5 restricts the sample to firms where at least 20% of the votes are withheld from at least one director receives at the year $t-1$ meeting. In untabulated tests, we repeat the analysis for alternative samples using, respectively, a 15% and a 25% threshold. In both cases, the difference-in-differences remains statistically significant at the 5% level for both Models (1) and (2). More importantly, the magnitude of the difference-in-differences increases as we increase the threshold for votes withheld from directors at year $t-1$ meeting, from 5.1% for the 15% sample to 9.8% for the 25% sample. The results for the control variables across the four models in Panel B suggest that firms with a greater percentage of independent directors on board, better performing firms and smaller firms are less responsive.

Taken together with the results in Tables 4 and 5 provide support for the notion that firms become more responsive to shareholder concerns and requests after the adoption of MV. It should be noted that 240 of the 398 MV firms (about 60%) in our sample face either a majority-vote shareholder proposal or a substantial percentage of votes withheld (>20%), hence our results are reasonably generalizable to the broad sample of MV firms.

4. Does Majority Voting Affect Director Turnover?

4.1 Relation between Votes Withheld and Subsequent Turnover at the Director Level

³⁰ Univariate analysis (not tabulated) shows that *Lag Max Votes Withheld* is not significantly different across MV and non-MV firms in the pre- and post-adoption periods, and the difference-in-differences is not significant either.

Under the plurality voting standard, in uncontested elections any nominee is elected as long as she receives one vote in favor, no matter how many votes are withheld. Nonetheless, boards may interpret a high percentage of votes withheld as an indication of shareholder dissatisfaction with the performance or qualifications of a given nominee and subsequently remove her from the board (either by asking her to resign or by not nominating her for re-election the subsequent year).

Cai et al. (2009) examine this possibility and find no relation between the percentage of votes withheld from a director and the likelihood of subsequent (one-year) turnover under plurality voting. In this section we examine whether the adoption of a MV standard results in a positive relation between votes withheld and subsequent director turnover. While a director receiving, say, 30-40% of votes withheld is technically elected even under a MV standard, boards may feel pressured to replace her to avoid future increases in votes withheld above the 50% threshold.

4.1.1 Research Design

We estimate the following director level logistic regression for our sample of MV and propensity-matched non-MV firms to examine the relation between votes withheld from individual directors over 2003 – 2007 and the subsequent director turnover over 2004 – 2008:

$$\begin{aligned}
 \text{Director Turnover} = & \alpha + \beta_1 \text{Non-MV Firm-Post} + \beta_2 \text{MV Firm-Pre} & (5) \\
 & + \beta_3 \text{MV Firm-Post} + \gamma_1 \text{Non-MV Firm-Pre} \times \text{Lag Votes Withheld} \\
 & + \gamma_2 \text{Non-MV Firm-Post} \times \text{Lag Votes Withheld} \\
 & + \gamma_3 \text{MV Firm-Pre} \times \text{Votes Lag Withheld} \\
 & + \gamma_4 \text{MV Firm-Post} \times \text{Votes Lag Withheld} \\
 & + \delta \text{Control Variables} + \text{Year \& Industry Fixed Effects} + \varepsilon
 \end{aligned}$$

The dependent variable, *Director Turnover*, is an indicator variable that is equal to one if the director turns over at the year t annual meeting. *MV Firm-Pre (Post)* and *Non-MV Firm-Post*, are defined as in Eq. (3). *Lag Votes Withheld* is the percentage of votes withheld from the director at the year $t-1$ annual meeting. The focus is on the interaction between *Lag Votes Withheld* and the

indicators denoting MV firms and non-MV firms before and after the adoption of MV. Similar to prior studies (e.g. Yermack 2004; Ertimur et al. 2012), we control for director (tenure, age, gender, independence, meeting attendance, number of other seats held, equity ownership, key committee membership) and firm (size, performance, CEO turnover, indicator for classified boards, change in institutional holdings) characteristics. We also include year and industry fixed effects. The notes to Table 6 provide details on variable definitions and data sources.

4.1.2 Results

Table 6, Panel A shows the results. The first model confirms the general finding in Cai et al. (2009): in the pooled sample of MV and non-MV firms there is no significant association between past votes withheld from a director and the likelihood of director turnover in the subsequent year. Model (2) shows that even under a MV standard there is no significant association between votes withheld and subsequent director turnover. In untabulated tests we repeat this analysis after restricting the sample to only outside (non-employee) directors (15,506 observations compared to 18,398 in Panel A). Again, we find no association between votes withheld and subsequent turnover even under a MV standard. As for the control variables, similar to prior evidence, there is a higher likelihood of director turnover after a change in CEO, when the director is older than 65 years and has longer tenure, and lower likelihood when the director is the CEO of the firm or sits on key committees, for new, and more independent, directors and in firms with classified boards.

4.1.3 Do Directors Failing to Receive a Majority of the Votes Cast Lose Their Seat?

It is possible that there is director turnover in response to director elections only when the percentage of votes withheld is higher than 50%, particularly for MV firms. For plurality voting firms, in uncontested elections a director is technically elected even if a majority of votes is

withheld (as long as one vote is cast in favor). For MV firms, depending on the version adopted (plurality plus or majority plus), the director may or may not be technically elected, but has to tender her resignation, leaving the board with the decision of whether to accept it or not (and justify such decision to shareholders). Repeating the analysis in Table 6 for the cases of greater than 50% votes withheld, however, is not possible due to the paucity of these occurrences.³¹

Hence, to better examine the link between director elections and director turnover, we expand the sample as follows. From the ISS VA dataset, for all S&P 1500 firms, we identify any instance of uncontested director elections where more than 50% of the votes are withheld from a director between January 2003 (initial year of VA coverage) and December 2010. For each of these cases, we collect the following information: director election standard at the time of the vote (from the proxy statement), whether or not the director is still on the board the following year (from the proxy statement), percentage of votes withheld from the director if up for re-election the following year (only for firms with annual election of directors) and any discussion provided by the board regarding the high votes withheld and the decision to keep the director on the board.

We find 220 directors with votes withheld greater than 50% (at 110 unique firms). Of these cases, 211 occur at firms with plurality voting, and only 9 at MV firms. At firms with plurality voting, we find 20 cases of turnover, but 11 are clearly unrelated to the voting outcome (e.g. turnover due to death, mandatory retirement age, firm being acquired, etc.). For the other 9 cases, the board does not re-nominate the director for election (6 cases, with no explanation) or the director resigns (3 cases, no further detail). As for the 9 cases at MV firms, at all of them the board declined to accept the directors' resignations after the vote. In 2 of these cases, the director

³¹ In our sample, there are only 9 cases where a director fails to receive the majority of the votes in favor: 7 cases in plurality voting firms and 2 in MV firms. In only one case (a MV firm), the director is no longer on the board the year after a majority of the votes is withheld from her.

eventually lost the seat (in one case he resigned again few months after the vote, in the other case the board did not re-nominate him for re-election the following year).

Thus, both for plurality voting and MV firms there is not a single case where turnover is explicitly linked to the voting outcome of the election. If resignations/lack of re-nomination in the subsequent year capture a softer form of election-induced turnover (e.g. the board and the director agree to a graceful exit before next year's meeting) then our data suggest that election-related turnover is (at most) 4.3% (=9/211) in plurality voting firms and 11.1% (=2/11) in MV firms. But the sample size is too small to reliably infer the effect of the adoption of MV.³²

The expanded sample confirms the conventional wisdom that “directors lose elections, but not seats” (Lublin 2009). A potential reason for this apparent lack of accountability, as suggested by our analysis in Section 3.2, is that boards respond to the high percentage of votes withheld by addressing the underlying concerns rather than by removing a director. Consistent with this notion, we find that only 16% of the directors failing to win a majority of the votes cast fail to do so again next year (if up for re-election), while all others experience on average less than 20% dissent. Also, we find 17 plurality voting firms that explicitly discuss the voting outcome in a subsequent filing and state that the board has addressed the governance problem causing the high votes withheld. In these cases, the directors received more than 90% of the votes in favor at the next annual meeting. Similarly, MV firms declining to accept the resignations often justify their choice noting that they were addressing the problem underlying the vote.

Overall, our analyses suggest that high votes withheld do not increase the likelihood of a director losing their seat but often cause boards to respond to the governance problems underlying

³² The sample size is also too small for a meaningful time-series comparison. We find only 6 cases of directors failing to receive a majority vote in plurality firms that would eventually adopt MV (i.e. pre-adoption MV firm). None of them experiences director turnover the subsequent year.

the vote, suggesting that perhaps director elections are viewed by shareholders as a means to obtain specific governance changes rather than a channel to remove a director.

4.2 Relation between Votes Withheld and Subsequent Turnover at the Board Level

The results in Section 4.1.2 show that, similar to the findings in Cai et al. (2009), there is no relation between the percentage of votes withheld from a director and the likelihood of her departure in the following year (even under a MV standard). However, Fischer et al. (2009) document a positive association between *firm-level* votes withheld and *board-level* turnover. That is, while high votes withheld from a given director do not increase the likelihood of that director losing her seat, board shake-ups are more likely at firms where directors receive high votes withheld. Essentially, Fischer et al. (2009) conjecture that votes withheld are a measure of (perceived) board performance. Consistent with this conjecture, they find that higher votes withheld predict lower stock price reactions to subsequent announcements of management turnovers as well as higher subsequent forced CEO turnover, reductions in CEO pay, fewer (more) and better-received acquisitions (divestitures) and higher board turnover. This effect is incremental to other measures of performance (stock returns, operating performance and change in institutional holdings). Put differently, Fischer et al. (2009) suggest that while high votes withheld are not the direct cause of director turnover (through the director election process), they are symptoms of perceived poor performance that eventually will result in board turnover.

Under this view, high votes withheld are an indication of more serious concerns with board performance. The threat of failing to receive a majority vote should cause directors of MV firms to be particularly responsive to shareholders and avoid high votes withheld in the first place. Hence, upon occurrence of high votes withheld, we expect boards of MV firms to be more responsive and “self-police” by replacing some directors and bringing in new directors with fresh ideas.

To examine whether the association between votes withheld and subsequent board turnover is stronger under MV, we make three modifications to Eq. (5). First, following Fischer et al. (2009) we redefine the dependent variable as *Board Turnover*, the number of directors that turn over during the year subsequent to the vote divided by the number of seats up for election.³³ Second, we measure votes withheld at the firm level as the highest percentage of votes withheld from any of the firm’s directors (*Lag Max Votes Withheld*). Third, we do not include the director-level variables (e.g. gender, age, etc.).

Table 6, Panel B presents the results. In Model (1) we estimate a benchmark regression and, similar to Fischer et al. (2009), find a positive association between votes withheld from directors and subsequent board turnover—the coefficient of *Lag Max Votes Withheld* is positive and significant at the 5% level—suggesting a positive association between shareholder dissatisfaction with directors and subsequent board shake-ups. Then, in Model (2), we estimate our modified version of Eq. (5) and find an increase in the sensitivity of board turnover to votes withheld at MV firms *after* the adoption of MV relative to non-MV firms. The difference-in-differences is positive and significant at the 5% level, suggesting that the threat of a ‘tougher’ election system makes boards more willing to change their composition when facing greater shareholder pressure.³⁴

5. Conclusion

We examine the economic consequences of a change in the director election system from a plurality voting standard to a majority voting (MV) standard. First, using a regression discontinuity design that mitigates the issues commonly associated with interpreting investor response to voting

³³ The rationale for the choice of this denominator in Fischer et al. (2009) is that directors “are unlikely to resign prior to the completion of their term due to the psychic or reputation costs associated with an early departure” (p.182). Hence, if one used board size as denominator, firms with staggered boards would appear to have lower turnover.

³⁴ Additional analyses (not tabulated) suggest that this result is driven by firms that adopted a majority plus standard.

results at annual meetings, we document abnormal returns of 1.43-1.60% on annual meeting dates where shareholder proposals to adopt MV standard are voted upon. This result suggests that for firms targeted by proposals to adopt a MV standard, shareholders perceive the adoption of MV as a value-enhancing change in governance.

Second, we examine the impact of MV on board decisions. Employing a difference-in-differences approach that compares the change in the rate of implementation of majority-vote shareholder proposals for firms adopting a MV standard to a propensity-score matched sample of control firms, we document a 26.3%-28.4% increase in the rate of implementation for MV firms relative to non-MV firms subsequent to the adoption of MV. Also, in a sample of firms experiencing high votes withheld from directors, we document a greater decrease in the percentage of votes withheld the year after a high vote withheld (defined as more than 20% votes withheld) at MV firms relative to the sample of propensity-matched control firms, again consistent with the notion that adoption of MV results in greater board responsiveness to shareholder pressure.

Finally, we examine the relation between high votes withheld and subsequent director turnover. We find no relation between votes withheld and *individual* director turnover, even under a MV standard and even when directors fail to win a majority vote (a relatively rare occurrence). However, as in Fischer et al. (2009), we find a positive association between firm-level votes withheld and *board* turnover, and the association is stronger as a result of the adoption of MV.

Collectively, our findings suggest that the adoption of MV is value-enhancing and that one source of this value creation is the greater propensity of boards to respond to shareholder pressure under a MV standard. Our study contributes to the growing literature on the director election system and, more generally, on the economic relevance of governance arrangements.

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Figure 1 Distribution of Vote Share in Favor of Shareholder Proposals to Adopt MV

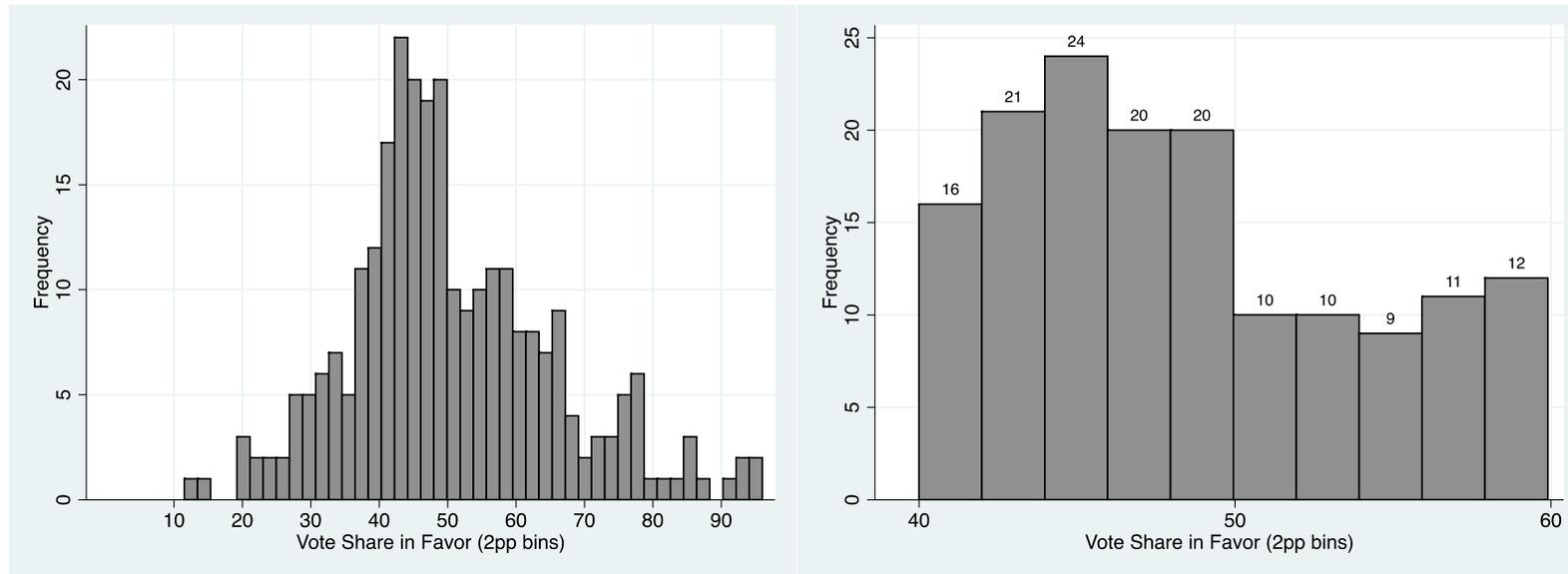


Figure 1 reports the distribution of votes cast in favor of the 278 shareholder proposals to adopt MV voted upon over the 2001 – 2010 period (source: Voting Analytics). The left panel reports the entire distribution. The right panel focuses on the proposals where the voting outcome falls in the 40 – 60% range. The numbers at the top of the bars represent the frequency of the corresponding bar.

Figure 2 Distribution of Vote Share in Favor of all Management Proposals Excluding Director Elections

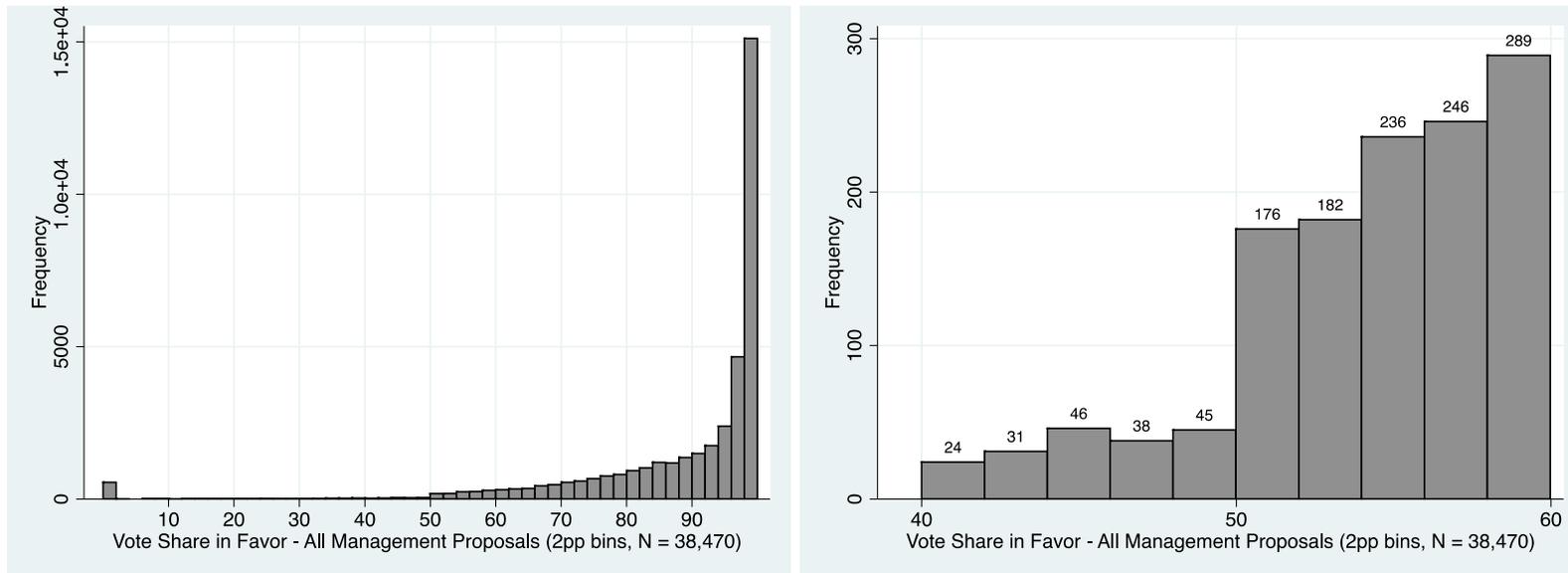


Figure 2 reports the distribution of votes cast in favor of the 38,470 management proposals voted upon over the 2001 – 2010 period (source: Voting Analytics). The left panel reports the entire distribution. The right panel focuses on the proposals where the voting outcome falls in the 40 – 60% range. The numbers at the top of the bars represent the frequency of the corresponding bar.

Figure 3 Regression Discontinuity Plots of Abnormal Returns

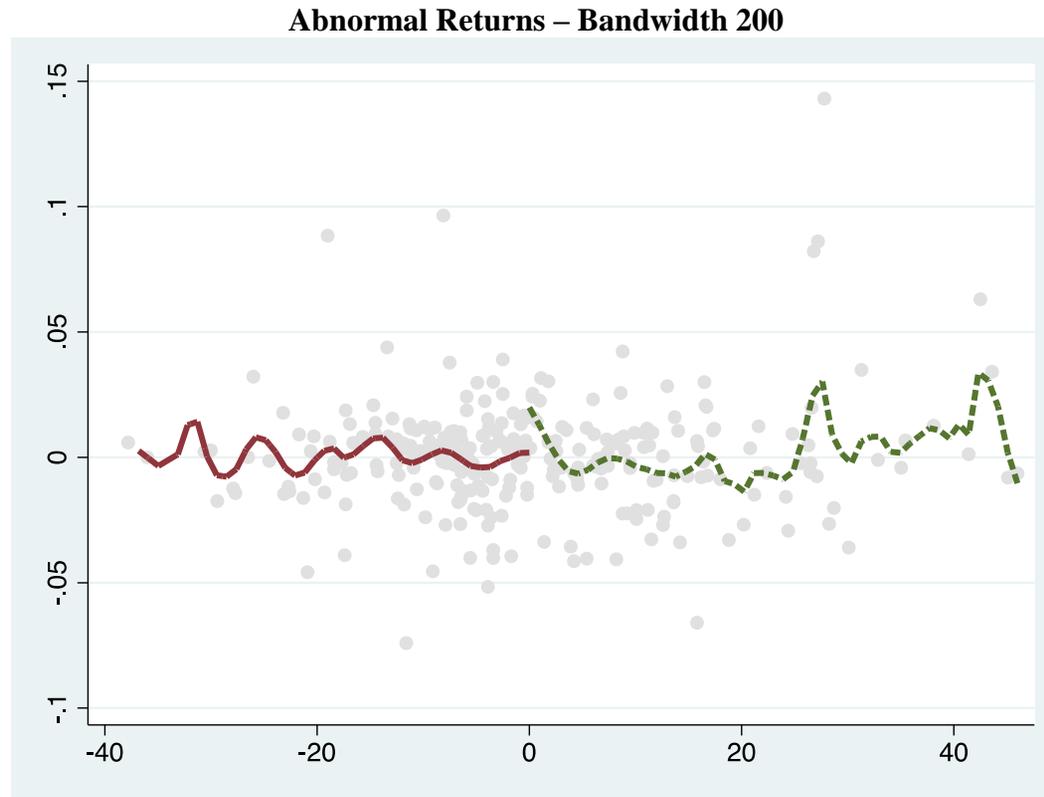


Figure 3 presents plots of the fitted values of local polynomial regressions on either side of the 50% discontinuity in the percentage of votes in favor of shareholder proposals to adopt majority voting for bandwidth 200. The dependent variable, *Abnormal Returns*, is abnormal returns on the meeting date computed using Fama and French (1996) and momentum factors (Carhart 1997). We use a triangular kernel for estimation.

Table 1 Differences in Firm Characteristics as a Function of the Voting Outcome

		Model (1)		Model (2)	
Firm Characteristic	Number of Observations	Coefficient of <i>Pass</i>	t-statistic	Coefficient of <i>Pass</i>	t-statistic
<i>Tobin's Q</i>	278	-0.1530	-1.63	0.5620	1.57
<i>Return on Assets</i>	278	-0.0014	-0.13	0.0028	0.08
<i>Abnormal Returns over 12 Months Prior to Meeting</i>	278	0.0294	0.70	0.1880	0.81
<i>% of Institutional Holdings</i>	278	0.0899	4.78 ***	-0.0670	-1.24
<i>Entrenchment Index</i>	269	-0.0121	-0.08	-0.6386	-1.00
<i>Number of Other Proposals</i>	278	-0.1492	-0.89	0.3369	0.63
Year Fixed Effects		Included		Included	
Polynomial in Vote Share		Not Included		Included	

Table 1 tests whether the passing a vote on proposals to adopt a majority voting standard is systematically related to firm characteristics prior to the meeting. Model (1) reports the results for a regression of the given firm characteristic on *Pass*, an indicator variable that is equal to one if the shareholder proposal to adopt a majority voting standard receives a percentage of votes in favor greater than 50% (the threshold for passing in our sample). Model (2) reports the results for a regression of the given firm characteristic on *Pass* after including a polynomial in vote share of order five in either side of the threshold. *Tobin's Q* is the market-to-book ratio as of the end of the fiscal year ending before the annual meetings (source: Compustat). *Return on Assets* is the firm's return on assets for the most recent fiscal year ending before the annual meeting, calculated as operating income before depreciation scaled by average total assets (source: Compustat). *Abnormal Returns over 12 Months Prior to Meeting* is size-adjusted returns for the 12-month period before the annual meeting (source: CRSP). *% of Institutional Holdings* is the percentage of equity owned by institutions based on 13-F filings (source: Thomson Reuters). *Entrenchment Index* counts how many of the following provisions are in place at the firm as of the annual meeting: chartered board, poison pill, golden parachute, requirement to approve merger, limited ability to amend charter and limits to amend bylaws (source: ISS Governance Dataset). *Number of Other Proposals* is the number of other governance-related shareholder proposals voted upon at the meeting (source: Voting Analytics). ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively. Reported t-statistics are based on robust standard errors estimated using the Huber (1967) – White (1980) procedure.

Table 2 Market Reaction to Shareholder Proposals to Adopt Majority Voting Election System

Panel A Abnormal Returns to Passing Majority Voting Standard Proposals

	Model (1) All Votes		Model (2) [-5,+5]		Model (3) [-2,+2]		Model (4) [-1,+1]		Model (5) All Votes	
Variable	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
<i>Intercept</i>	0.0011	0.55	0.0024	0.56	0.0008	0.19	0.0049	0.61	0.0055	1.17
<i>Pass</i>	0.0036	1.33	0.0044	1.10	0.0116	2.13 **	0.0177	5.94 ***	0.0143	2.17 **
Year Fixed Effects	Included		Included		Included		Included		Included	
Polynomial Terms	Not Included		Not Included		Not Included		Not Included		Included	
N	278		77		31		17		278	
Adjusted R ²	1.02%		15.50%		41.70%		23.20%		5.44%	

Panel B Results from Local Linear Regressions

Bandwidth	Coefficient	t-statistic
50	0.0157	1.28
100	0.0172	1.75 *
200	0.0169	2.54 ***

Panel C Abnormal Returns to Passing Majority Voting Standard Proposals – Control for Other Governance Proposals

Variable	Model (1) All Votes		Model (2) [-5,+5]		Model (3) [-2,+2]		Model (4) [-1,+1]		Model (5) All Votes	
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
<i>Intercept</i>	0.0026	1.08	0.0024	0.50	0.0018	0.26	0.0069	0.66	0.0054	1.11
<i>Pass</i>	0.0035	1.28	0.0027	0.67	0.0136	2.63 **	0.0140	2.13 *	0.0160	2.33 **
<i>Anti-Takeover Proposal</i>	-0.0004	-0.07	0.0048	0.81	0.0098	1.52	-0.0047	-0.72	0.0003	0.05
<i>Anti-Takeover Proposal Pass</i>	-0.0008	-0.14	-0.0009	-0.11	0.0002	0.01	-0.0019	-0.19	0.0240	1.13
<i>Other Proposal</i>	-0.0023	-0.88	-0.0012	-0.28	-0.0037	-0.56	-0.0081	-0.88	-0.0012	-0.44
<i>Other Proposal Pass</i>	-0.0016	-0.17	-0.0226	-1.81 *	-	-	-	-	-0.0656	-1.74 *
Year Fixed Effects	Included		Included		Included		Included		Included	
Polynomial Terms	Not Included		Not Included		Not Included		Not Included		Included	
N	278		76		30		17		278	
Adjusted R ²	-0.12%		17.40%		39.30%		14.00%		4.57%	

Table 2 Panel A reports the results for the analysis of abnormal returns on the day of the annual meeting where a shareholder proposal to adopt a majority voting election system is voted upon over the 2005 – 2010 period. The dependent variable, *Abnormal Returns*, is abnormal returns on the meeting date computed using Fama and French (1996) and momentum factors (Carhart 1997). *Pass* is an indicator variable that is equal to one if the shareholder proposal to adopt a majority voting standard receives a percentage of votes in favor greater than 50% (the threshold for passing in our sample). We estimate the relation between *Abnormal Returns* and *Pass* first for the entire sample of proposals to adopt majority voting (Model 1), and then for increasingly small voting outcome windows (proposals that receive 45 – 55%, 48 – 52% and 49 – 51% voting support in Models 2, 3 and 4, respectively). In Model 5, we include polynomial terms in voting outcome of order five, separately for each side of the 50% threshold. Panel B presents the results of local polynomial regressions on either side of the 50% discontinuity in the percentage of votes in favor of shareholder proposals to adopt majority voting. The dependent variable, *Abnormal Returns*, is abnormal returns on the meeting date computed using Fama and French (1996) and momentum factors (Carhart 1997). We consider bandwidths of 100%, 150% and 200% of the default, where the default is 1.44, and use a triangular kernel for estimation. Panel C repeats the analysis in Panel A after controlling for the presence and passing of other governance related shareholder proposals. In particular, *Anti-Takeover (Other) Proposal* is an indicator variable that is equal to one if a shareholder proposal to remove anti-takeover provisions (other governance issues) is voted upon at the annual meeting. *Anti-Takeover (Other) Proposal Pass* is an indicator variable that is equal to one if the shareholder proposal on anti-takeover provisions (other governance issues) receives a percentage of votes in favor greater than 50% (the threshold for passing in our sample). In Model 5 of Panel C, we also include polynomial terms of order five, separately for each side of the threshold, for anti-takeover and other governance related proposals. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively. Reported t-statistics are based on robust standard errors estimated using the Huber (1967) – White (1980) procedure.

Table 3 Covariate Balance between MV and Non-MV Firms

Panel A Propensity Score Estimation

	Average Coefficient	Aggregate z-statistic
<i>Intercept</i>	-9.7933	-11.00
<i>ln(Size)</i>	0.9574	13.81
<i>Book-to-Market</i>	0.5205	0.88
<i>ROA</i>	-2.9832	-3.25
<i>% of Institutional Holdings</i>	0.4487	0.74
<i>Abnormal Returns</i>	-0.7442	-3.09
<i>Entrenchment Index</i>	0.0106	0.25
<i>CEO Tenure</i>	-0.0400	-3.64
<i>Board Size</i>	-0.0201	-0.75
<i>Number of MV Directors</i>	0.2944	5.63

Panel B Covariate Balance between MV Firms and All Non-MV Firms

Variable	MV Firms (N=398)		Non-MV Firms (N=2,446)		MV vs. Non-MV Firms	
	Mean	Median	Mean	Median	Mean Difference	Median Difference
<i>ln(Size)</i>	8.9977	9.0641	7.3626	7.2816	1.6351 ***	1.7825 ***
<i>Book-to-Market</i>	0.6227	0.6254	0.6080	0.6109	0.0146	0.0145
<i>ROA</i>	0.1360	0.1264	0.1493	0.1367	-0.0133 ***	-0.0104 **
<i>% of Institutional Holdings</i>	0.7535	0.7740	0.7911	0.8256	-0.0376 ***	-0.0516 ***
<i>Abnormal Returns</i>	0.0037	-0.0363	0.0399	-0.0109	-0.0362 *	-0.0254
<i>Entrenchment Index</i>	2.6558	3.0000	2.7743	3.0000	-0.1185	0.0000
<i>CEO Tenure</i>	5.8664	4.4589	8.2163	5.8986	-2.3499 ***	-1.4397 ***
<i>Board Size</i>	10.4774	10.0000	8.8876	9.0000	1.5898 ***	1.0000 ***
<i>Number of MV Directors</i>	1.7035	1.0000	0.4280	0.0000	1.2755 ***	1.0000 ***

Panel C Covariate Balance between MV Firms and Propensity Score Matched Non-MV Firms

Variable	MV Firms (N=398)		Non-MV Firms (N=398)		MV vs. Non-MV Firms	
	Mean	Median	Mean	Median	Mean Difference	Median Difference
<i>ln(Size)</i>	8.9977	9.0641	8.7854	9.0042	0.2123 **	0.0600 *
<i>Book-to-Market</i>	0.6227	0.6254	0.6347	0.6825	-0.0120	-0.0571
<i>ROA</i>	0.1360	0.1264	0.1193	0.1066	0.0167 **	0.0198 **
<i>% of Institutional Holdings</i>	0.7535	0.7740	0.7476	0.7899	0.0060	-0.0159
<i>Abnormal Returns</i>	0.0037	-0.0363	-0.0284	-0.0540	0.0321	0.0177 *
<i>Entrenchment Index</i>	2.6558	3.0000	2.7538	3.0000	-0.0980	0.0000
<i>CEO Tenure</i>	5.8664	4.4589	5.5900	3.8384	0.2763	0.6205
<i>Board Size</i>	10.4774	10.0000	10.4497	10.0000	0.0276	0.0000
<i>Number of MV Directors</i>	1.7035	1.0000	1.7236	1.0000	-0.0201	0.0000

Table 3 Panel A presents the summary estimates for the propensity score estimation. The first column presents the averages of the annual coefficient estimates, and the second column presents an aggregate z-statistic calculated as the sum of individual annual z-statistics divided by the square root of the number of years for which we estimate the propensity score. Panels B and C present the covariate balance between MV and non-MV firms. Panel B displays the characteristics of MV firms and those of all non-MV firms (i.e. prior to propensity score matching). Panel C compares the characteristics of MV firms to those of propensity score-matched non-MV firms. *ln(Size)* is the natural logarithm of the market value of equity in millions at the end of the fiscal year ending before the annual meeting (source: CRSP). *Book-to-Market* is book-to-market ratio as of the end of the fiscal year ending before the annual meetings (source: Compustat). *ROA* is the firm's return on assets for the most recent fiscal year ending before the annual meeting, calculated as operating income before depreciation scaled by average total assets (source: Compustat). *% of Institutional Holdings* is the percentage of equity owned by institutions based on 13-F filings (source: Thomson Reuters). *Abnormal Returns* is size-adjusted returns for the most recent fiscal year ending before the annual meeting (source: CRSP). *Entrenchment Index* counts how many of the following provisions are in place at the firm as of the annual meeting: chartered board, poison pill, golden parachute, requirement to approve merger, limited ability to amend charter and limits to amend bylaws (source: ISS Governance Dataset). *CEO Tenure* is the number of years the CEO has been in office (source: Execucomp). *Board Size* is the number of directors on board (source: ISS Directors Dataset). *Number of MV Directors* is the number of directors on board that sit on at least one other board that has adopted a MV standard. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Table 4 Responsiveness to Majority-Vote Shareholder Proposals

Panel A Univariate Analysis of the Probability of Implementation for MV versus Non-MV Firms

Mean of <i>Implemented</i> for MV and Non-MV Firms						
	Pre MV		Post MV		Post MV vs. Pre MV	
	Mean	N	Mean	N	Difference	χ^2
MV Firm	0.3352	358	0.6200	100	0.2848	29.02 ***
Non-MV Firm	0.2711	166	0.2667	30	-0.0044	0.00
	Difference	χ^2	Difference	χ^2		
MV Firm vs. Non-MV Firm	0.0641	2.13	0.3533	13.19 ***		
Difference in Differences	0.2892	7.34 ***				

Panel B Multivariate Analysis of the Probability of Implementation for MV versus Non-MV Firms

Variable	Dependent Variable: Implemented				
	Model (1)		Model (2)		
	Coefficient	t-statistic	Coefficient	t-statistic	
<i>Intercept</i>	-6.9069	-8.35 ***	-8.0883	-4.97 ***	
<i>Non-MV Firm–Post</i>	-0.4335	-1.02	-0.4769	-1.08	
<i>MV Firm–Pre</i>	0.4007	1.81 *	0.2835	1.20	
<i>MV Firm–Post</i>	1.1838	4.08 ***	1.0585	3.26 ***	
<i>% Votes For</i>	5.1897	5.66 ***	5.2423	5.39 ***	
<i>After 2001</i>	0.8317	3.04 ***	0.9132	3.22 ***	
<i>Defense Proposal</i>	1.6896	3.19 ***	1.6578	3.10 ***	
<i>Shareholder Rights Proposal</i>	2.1710	4.09 ***	2.0724	3.87 ***	
<i>Union Proponent</i>	0.1861	0.80	0.3028	1.24	
<i>Institution Proponent</i>	-0.1582	-0.41	-0.0687	-0.17	
<i>CEO Chairman</i>			0.1825	0.77	
<i>% of Independent Directors</i>			0.0285	0.03	
<i>Board Ownership (%)</i>			-5.0980	-1.75 *	
<i>Entrenchment Index</i>			0.0351	0.42	
<i>Activist Ownership (%)</i>			-1.0794	-0.07	
<i>ln(Size)</i>			0.1219	1.31	
<i>Abnormal Returns</i>			-0.3246	-1.28	
<i>Industry Adjusted ROA</i>			-1.1569	-1.20	
N	654		654		
Pseudo R ²	14.20%		15.20%		
Wald Tests	Coefficient	χ^2	Coefficient	χ^2	
<i>MV Firm–Post vs. MV Firm–Pre</i>	0.7831	8.08 ***	0.7750	6.61 ***	
<i>MV Firm–Post vs. Non-MV Firm–Post</i>	1.6173	12.98 ***	1.5354	11.15 ***	
<i>Difference in Differences</i>	1.2166	5.77 **	1.2519	6.06 ***	

Table 4, Panel A presents the probability of implementation of majority-vote shareholders proposals for MV and non-MV firms, for periods preceding and subsequent to the adoption of MV, over 1997-2008. Panel B presents the results for the multivariate analysis for the probability of implementation. The

dependent variable, *Implemented*, is an indicator variable that is equal to one if the firm implements the majority-vote shareholder proposal during the subsequent year (source: Voting Analytics and hand-collected data). *Non-MV Firm–Post* is an indicator variable that is equal to one for non-MV firms after the adoption of MV by the MV firm to which they are matched. *MV Firm–Pre (Post)* is an indicator variable that is equal to one for MV firms before (after) the adoption of MV, and zero otherwise. *Non-MV Firm–Post* and *MV Firm–Pre (Post)* are measured at the time of the annual meeting during which the shareholder proposal receives majority voting support. *% Votes For* is the percentage of votes cast in favor of the shareholder proposal (source: Voting Analytics). *After 2001* is an indicator variable that is equal to one if the proposal is presented at an annual meeting after 2001. *Defense (Shareholder Rights) Proposal* is an indicator variable equal to one for proposals that request the removal of anti-takeover defenses (for proposals to strengthen shareholder rights) (source: Voting Analytics). *Union (Institution) Proponent* is an indicator variable that is equal to one if the proposal is submitted by a union pension fund (other institutional investors) (source: Voting Analytics). *CEO Chairman* is an indicator variable that is equal to one if the CEO is also the chairman of the board (source: ISS Directors Dataset). *% of Independent Directors* is the number of independent directors scaled by board size (source: ISS Directors Dataset). *Board Ownership (%)* is the percentage of shares owned by board members (source: ISS Directors Dataset). *Entrenchment Index* counts how many of the following provisions are in place at the firm: chartered board, poison pill, golden parachute, requirement to approve merger, limited ability to amend charter and limits to amend bylaws (source: ISS Governance Dataset). *CEO Chairman*, *% of Independent Directors*, *Board Ownership (%)* and *Entrenchment Index* are measured as of the time of the annual meeting during which the shareholder proposal receives majority voting support. *Activist Ownership (%)* is the percentage of shares owned by activist pension funds per Cremers and Nair (2005) based on 13-F filings as of the most recent fiscal quarter preceding the annual meeting (source: Thomson Reuters). *ln(Size)* is the natural logarithm of the market value of equity in millions at the end of the fiscal year ending before the annual meeting (source: CRSP). *Abnormal Returns* is size-adjusted returns for the most recent fiscal year ending before the annual meeting (source: CRSP). *Industry Adjusted ROA* is the firm's return on assets (ROA) less average ROA for firms in the same two-digit SIC industry for the most recent fiscal year ending before the annual meeting. We calculate ROA as operating income before depreciation scaled by average total assets (source: Compustat). The difference-in-differences coefficient is calculated as *MV Firm–Post* minus *MV Firm–Pre* vs. *Non-MV Firm–Post*. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively. Reported t-statistics are based on robust standard errors estimated using the Huber (1967) – White (1980) procedure.

Table 5 Responsiveness to Votes Withheld from Directors

Panel A Univariate Analyses of the Responsiveness to Votes Withheld from Directors

<i>Mean of Change in Votes Withheld for MV and Non-MV Firms</i>						
	Pre MV		Post MV		Post MV vs. Pre MV	
	Mean	N	Mean	N	Difference	χ^2
MV Firm	0.1532	148	0.1836	92	0.0305	2.27
Non-MV Firm	0.1349	71	0.1058	70	-0.0292	1.29
	Difference	χ^2	Difference	χ^2		
MV Firm vs. Non-MV Firm	0.0183	0.69	0.0779	10.41		***
Difference in Differences	0.0596	3.33				*

Panel B Multivariate Analyses of the Responsiveness to Votes Withheld from Directors

Variable	Dependent Variable: Change in Votes Withheld		Dependent Variable: % Change in Votes Withheld	
	Model (1)		Model (2)	
	Coefficient	t-statistic	Coefficient	t-statistic
<i>Intercept</i>	0.0987	1.30	0.3502	1.51
<i>Non-MV Firm–Post</i>	-0.0366	-1.37	-0.1305	-1.59
<i>MV Firm–Pre</i>	0.0119	0.50	0.0721	1.07
<i>MV Firm–Post</i>	0.0465	1.73	0.1286	1.64
<i>CEO Chairman</i>	0.0157	0.89	0.0367	0.73
<i>% of Independent Directors</i>	0.2845	5.72	0.9559	5.86
<i>Board Ownership (%)</i>	-0.0069	-0.08	0.2254	0.73
<i>Entrenchment Index</i>	-0.0037	-0.51	-0.0302	-1.43
<i>Activist Ownership (%)</i>	-0.0722	-0.06	-2.5642	-0.74
<i>ln(Size)</i>	-0.0218	-3.87	-0.0667	-3.92
<i>Abnormal Returns</i>	0.0547	2.40	0.1596	2.34
<i>Industry Adjusted ROA</i>	0.2906	3.97	0.7683	4.20
<i>Classified Board</i>	0.0274	1.40	0.1141	2.09
N	381		381	
Adjusted R ²	15.00%		16.60%	
Wald Tests	Coefficient	χ^2	Coefficient	χ^2
<i>MV Firm–Post vs. MV Firm–Pre</i>	0.0346	2.40	0.0565	0.80
<i>MV Firm–Post vs. Non-MV Firm–Post</i>	0.0831	10.88	0.2591	12.59
<i>Difference in Differences</i>	0.0712	4.85	0.1870	3.06

Table 5, Panel A presents the univariate analyses for firms' responsiveness to votes withheld from directors up for election for MV and non-MV firms, for periods preceding and subsequent to the adoption of MV. The sample is comprised of firms where at least 20% of the votes are withheld from at least one director at the year $t-1$ annual meeting over the 2003 – 2007 period. The analysis focuses on the “response” at the year t annual meeting over the 2004 – 2008 period. *Change in Votes Withheld* is the maximum percentage votes withheld from directors up for election in year $t-1$ less the maximum percentage of votes withheld from directors up for election in year t . Greater values of *Change in Votes Withheld* indicate a greater level of responsiveness. Panel B presents the

results for the multivariate analysis. The dependent variable in Model (1) is *Change in Votes Withheld*. The dependent variable in Model (2) is *% Change in Votes Withheld*, defined as *Change in Votes Withheld* scaled by the maximum percentage of votes withheld from directors at the firm in year $t-1$. *Non-MV Firm-Post* is an indicator variable that is equal to one for non-MV firms after the adoption of MV by the MV firm to which they are matched. *MV Firm-Pre (Post)* is an indicator variable that is equal to one for MV firms before (after) the adoption of MV, and zero otherwise. *CEO Chairman* is an indicator variable that is equal to one if the CEO is also the chairman of the board (source: ISS Directors Dataset). *% of Independent Directors* is the number of independent directors scaled by board size (source: ISS Directors Dataset). *Board Ownership (%)* is the percentage of shares owned by board members (source: ISS Directors Dataset). *Entrenchment Index* counts how many of the following provisions are in place at the firm: chartered board, poison pill, golden parachute, requirement to approve merger, limited ability to amend charter and limits to amend bylaws (source: ISS Governance Dataset). *CEO Chairman*, *% of Independent Directors*, *Board Ownership (%)* and *Entrenchment Index* are measured as of the time of the annual meeting during which the shareholder proposal receives majority voting support. *Activist Ownership (%)* is the percentage of shares owned by activist pension funds per Cremers and Nair (2005) based on 13-F filings as of the most recent fiscal quarter preceding the annual meeting (source: Thomson Reuters). *ln(Size)* is the natural logarithm of the market value of equity in millions at the end of the fiscal year ending before the annual meeting (source: CRSP). *Abnormal Returns* is size-adjusted returns for the most recent fiscal year ending before the annual meeting (source: CRSP). *Industry Adjusted ROA* is the firm's return on assets (ROA) less average ROA for firms in the same two-digit SIC industry for the most recent fiscal year ending before the annual meeting. We calculate ROA as operating income before depreciation (Compustat data item *oibdp*) scaled by average total assets (source: Compustat). *Classified Board* is an indicator variable that is equal to one if the firm has a classified board. The difference-in-differences coefficient is calculated as *MV Firm-Post* minus *MV Firm-Pre* vs. *Non-MV Firm-Post*. All control variables are measured at the year t annual meeting, i.e., when we observe the responsiveness to votes withheld from directors. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively. Reported t-statistics are based on standard errors estimated using the Huber (1967) – White (1980) procedure.

Table 6 The Association between Director Turnover and Votes Withheld

Panel A Director Level Analysis

Variable	Dependent Variable: Director Turnover			
	Model (1)		Model (2)	
			Coefficient	t-statistic
<i>Intercept</i>	-2.3812	-5.66 ***	-2.2831	-5.29 ***
<i>Non-MV Firm-Post</i>			-0.0321	-0.18
<i>MV Firm-Pre</i>			0.1390	0.90
<i>MV Firm-Post</i>			0.2543	1.44
<i>Non-MV Firm-Pre x Lag Votes Withheld</i>			0.3293	0.30
<i>Non-MV Firm-Post x Lag Votes Withheld</i>			0.3999	0.24
<i>MV Firm-Pre x Lag Votes Withheld</i>			-0.4143	-0.51
<i>MV Firm-Post x Lag Votes Withheld</i>			1.2101	1.63
<i>Lag Votes Withheld</i>	0.4425	0.88		
<i>CEO Turnover</i>	0.4415	3.90 ***	0.4524	4.28 ***
<i>ln(Assets)</i>	0.0686	1.97 **	0.0515	1.42
<i>Lag Industry Adjusted ROA</i>	0.0214	0.03	-0.0579	-0.07
<i>Lag Abnormal Returns</i>	-0.2269	-1.24	-0.2214	-1.23
<i>Abnormal Returns</i>	-0.0341	-0.19	-0.0353	-0.20
<i>Change in Institutional Holdings</i>	0.0695	0.09	0.0661	0.09
<i>Classified Board</i>	-0.4943	-3.52 ***	-0.4755	-3.40 ***
<i>Attend < 75%</i>	0.4015	1.18	0.3888	1.13
<i>New Director</i>	-0.7527	-4.40 ***	-0.7593	-4.49 ***
<i>Independent Director</i>	-0.7857	-4.90 ***	-0.8082	-5.08 ***
<i>Linked Director</i>	-0.4242	-2.51 **	-0.4345	-2.61 ***
<i>% of Shares Held</i>	-3.4593	-1.96 **	-3.4207	-1.95 *
<i>Tenure</i>	0.0129	2.20 **	0.0129	2.20 **
<i>Female</i>	-0.0164	-0.13	-0.0105	-0.09
<i>Number of Other Directorships</i>	-0.0591	-1.07	-0.0586	-1.08
<i>Age > 65</i>	0.6686	7.14 ***	0.6667	7.25 ***
<i>Compensation Committee Member</i>	-0.0105	-0.11	-0.0039	-0.04
<i>Audit Committee Member</i>	-0.3103	-2.81 ***	-0.3045	-2.75 ***
<i>Other Committee Member</i>	-0.2652	-2.47 **	-0.2643	-2.45 **
<i>CEO</i>	-0.9221	-4.12 ***	-0.9382	-4.18 ***
N	18,398		18,398	
Pseudo R ²	6.46%		6.64%	
Wald Tests			Coefficient	χ^2
<i>MV Firm-Post x Lag Votes Withheld vs. MV Firm-Pre x Lag Votes Withheld</i>			1.6244	2.35
<i>Non-MV Firm-Post x Lag Votes Withheld vs. Non-MV Firm-Pre x Lag Votes Withheld</i>			0.0706	0.00
<i>MV Firm-Post x Lag Votes Withheld vs. Non-MV Firm-Post x Lag Votes Withheld</i>			0.8102	0.20
<i>Difference in Differences</i>			1.5538	0.49

Panel B Board Level Analysis

Variable	Dependent Variable: Director Turnover as a % of Directors Up for Election			
	Model (1)		Model (2)	
	Coefficient	t-statistic	Coefficient	t-statistic
<i>Intercept</i>	-0.0520	-0.70	-0.0722	-0.97
<i>Non-MV Firm–Post</i>			0.0314	1.23
<i>MV Firm–Pre</i>			0.0719	3.26 ***
<i>MV Firm–Post</i>			0.0625	2.08 **
<i>Non-MV Firm–Pre x Lag Max Votes Withheld</i>			0.3548	2.86 ***
<i>Non-MV Firm–Post x Lag Max Votes Withheld</i>			0.1184	0.81
<i>MV Firm–Pre x Lag Max Votes Withheld</i>			-0.0928	-1.05
<i>MV Firm–Post x Lag Max Votes Withheld</i>			0.2337	1.54
<i>Lag Max Votes Withheld</i>	0.1419	2.12 **		
<i>CEO Turnover</i>	0.0782	5.03 ***	0.0787	5.15 ***
<i>ln(Assets)</i>	0.0065	1.09	0.0046	0.77
<i>Lag Industry Adjusted ROA</i>	-0.0436	-0.33	-0.0500	-0.39
<i>Lag Abnormal Returns</i>	-0.0713	-4.53 ***	-0.0697	-4.52 ***
<i>Abnormal Returns</i>	-0.0415	-2.39 **	-0.0420	-2.48 **
<i>Change in Institutional Holdings</i>	0.1846	1.61	0.1791	1.57
<i>Classified Board</i>	0.1455	11.49 ***	0.1478	12.08 ***
N	3,016		3,016	
Adjusted R ²	10.70%		11.30%	
Wald Tests			Coefficient	χ^2
<i>MV Firm–Post x Lag Votes Withheld vs. MV Firm–Pre x Lag Votes Withheld</i>			0.3265	3.50 *
<i>Non-MV Firm–Post x Lag Votes Withheld vs. Non-MV Firm–Pre x Lag Votes Withheld</i>			-0.2364	1.49
<i>MV Firm–Post x Lag Votes Withheld vs. Non-MV Firm–Post x Lag Votes Withheld</i>			0.1153	0.31
<i>Difference in Differences</i>			0.5629	4.68 **

Table 6 presents the results for the analysis of the relation between director turnover and votes withheld from directors at annual elections over the 2003 – 2008 period. Panel A displays the results for director level analysis while Panel B displays the results for the board level analysis. The dependent variable in Panel A, *Director Turnover*, is an indicator variable that is equal to one if the director loses his/her seat between the annual meeting in year t and the annual meeting in year $t+1$ (source: ISS Directors Dataset). The dependent variable in Panel B, *Director Turnover as a % of Directors up for Election*, is the number of directors that turn over between the annual meeting in year t and the annual meeting in year $t+1$ divided by the number of seats up for election at the annual meeting in year $t+1$ (source: ISS Directors Dataset). *Non-MV Firm–Pre (Post)* is an indicator variable that is equal to one for non-MV firms before (after) the adoption of MV by the MV firm to which they are matched. *MV Firm–Pre (Post)* is an indicator variable that is equal to one for MV firms before (after) the adoption of MV, and zero otherwise. *Non-MV Firm–Pre (Post)* and *MV Firm–Pre (Post)* are measured at the time of the year $t+1$ annual meeting. *Lag Votes Withheld* is the percentage of votes withheld from the director at the year t annual meeting (source: Voting Analytics). *Lag Max Votes Withheld* is the percentage of maximum votes withheld from directors at the firm at the year t annual meeting (source: Voting Analytics). *CEO Turnover* is an indicator variable that is equal to one if the CEO of the firm turns over during the fiscal year preceding annual meeting in year t or year $t+1$ (source: Execucomp). *ln(Assets)* is the natural logarithm of

total assets (Compustat data item *at*) as of the end of the fiscal year preceding annual meeting in year $t+1$. *Lag Industry Adjusted ROA* is the firm's return on assets (ROA) less average ROA for firms in the same two-digit SIC industry for the most recent fiscal year ending before the year t annual meeting. We calculate ROA as operating income before depreciation (Compustat data item *oibdp*) scaled by average total assets (source: Compustat). *(Lag) Abnormal Returns* is size-adjusted returns for the most recent fiscal year ending before the year $(t) t+1$ annual meeting (source: CRSP). *Change in Institutional Holdings* is the *change in % of Institutional Holdings*, the percentage of equity owned by institutions based on 13-F filings (source: Thomson Reuters), from fiscal year t to fiscal year $t+1$, where fiscal year t is the most recent fiscal year ending before the year t annual meeting. *Classified Board* is an indicator variable that is equal to one if the firm has a classified board at the time of the year $t+1$ annual meeting. *Attend < 75%* is an indicator variable that is equal to one for directors that attended less than 75% of meetings over the year (source: ISS Directors Dataset). *New Director* is an indicator variable that is equal to one if the director was not on board at the time of the prior annual meeting (source: ISS Directors Dataset). *Independent (Linked) Director* is an indicator variable that is equal to one if the director is deemed to be an independent (gray) director (source: ISS Directors Dataset). *% of Shares Held* is the percentage of shares owned by the director at the time of the annual meeting (source: ISS Directors Dataset). *Tenure* is the number of years the director has been on board (source: ISS Directors Dataset). *Female* is an indicator variable that is equal to one for female directors (source: ISS Directors Dataset). *Number of Other Directorships* is the number of other board seats the director holds in the ISS universe as of the time of the annual meeting (source: ISS Directors Dataset). *Age > 65* is an indicator variable that is equal to one if the director is older than 65 (source: ISS Directors Dataset). *Compensation (Audit, Other) Committee Member* is an indicator variable that is equal to one for directors who sit on the compensation (audit, other) committee (source: ISS Directors Dataset). *CEO* is an indicator variable that is equal to one if the director is the CEO of the firm (source: ISS Directors Dataset). All director characteristics are measured at the year t annual meeting. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively. Reported t-statistics are based on standard errors estimated using the Huber (1967) – White (1980) procedure, with firm-level clustering (Rogers, 1993).