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 to be value enhancing. We also find some evidence of an increase in shareholder pressure as well as greater board responsiveness to shareholder pressure at firms adopting MV.

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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 2010). In this study we examine whether and how a specific change, namely, the switch from a plurality voting standard to a majority voting standard, has affected the behavior of both shareholders and directors.

Under a plurality voting standard—until recently the default arrangement 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 each nominee will always be elected as long as she receives one vote “for,” irrespective of the number of votes “withheld” (under SEC rule 14a-4(b) shareholders cannot vote “against” a director nominee, they can only vote “for” or “withhold” support). The plurality voting standard, combined with the paucity of contested elections (Bebchuk 2007), has led to the following observation: “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 would not be elected unless the majority of votes were 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

1 The activists’ campaign in favor of a majority voting standard was partly a response to the Securities and Exchange Commission (SEC) decision to drop the proxy access rule (proposed by the SEC in October 2003) amidst strong opposition from the business community. The proposed rule 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 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 (2010) and Fisch (2011) for a history of proxy access and a skeptical view on whether the SEC proposed rule would have had any real impact.
proposals (Georgeson 2005-2010). Firms began to adopt this new practice, often in response to the 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 firms 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-makers\(^2\) 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 (see fnnt.1), viewed by some observers as potentially a more drastic and beneficial change to the director election system than the switch from a plurality to majority voting standard.

Ex ante, the effect, if any, of a MV standard is not clear. On 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.
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 empirically 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 (hereinafter MV proposals) are voted upon. Following Cuñat, Gine and Guadalupe (forthcoming), 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 shareholders’ behavior, by focusing on their voting decisions. A natural starting point is to examine the effect of MV on the pattern of shareholder votes at director elections. Absent an issue that raises concerns among shareholders about director performance, on average, votes withheld from directors at a typical election is fairly low at 3-5% (Cai, Garner and Walkling 2009). Firms adopting MV may be less
likely to have significant governance or performance issues, making it difficult to detect any change in shareholder votes for directors up for election (i.e. on average directors get elected without any voting opposition both before and after the adoption of MV). We address this problem by examining shareholder votes conditional upon the existence of a “problem” with the director’s performance, as proxied for by the presence of an Institutional Shareholder Services (ISS) recommendation to withhold the vote. When we do so, we find that the percentage of votes withheld is about 3% higher in firms adopting MV (relative to pre-adoption as well as to non-adopters).

While not negligible, this effect is not very large, given that the percentage of votes withheld conditional upon an ISS withhold recommendation averages 20%. This relatively small economic effect of MV could be the result of two opposing forces. On one hand, some shareholders who typically do not withhold their votes (on the ground that it had little or no effect under plurality voting) may be more encouraged to take an “activist” role under MV and, thus, withhold their votes, expecting a greater impact on directors’ behavior. On the other hand, though, some shareholders may become more reluctant to withhold their votes when doing so is no longer just a symbolic act but may actually result in a director being voted off the board, with potentially disruptive effects on the functioning of the board (e.g. resulting in a failure to meet independence criteria of key committees).

To partially alleviate these concerns, we then examine a less ambiguous setting: shareholder votes on non-binding shareholder proposals. If shareholders expect boards to be more responsive to shareholder requests under a MV standard, then there should be an increase in voting support for shareholder proposals, particularly those that generally average close to 50% votes in

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3 ISS is the most influential proxy advisory firm. Its withhold recommendations are the most economically significant determinant of the voting outcome at director elections (see Cai et al. (2009) and Ertimur, Ferri and Maber (2011a).
favor, such as proposals to declassify the board. For such proposals, additional voting support would substantially increase the likelihood of winning a majority vote and thus, the likelihood of being implemented, since boards tend to only implement proposals winning a majority vote (Ertimur et al. 2010). Indeed, we find that voting support for proposals to declassify the board at firms which adopted MV is 18% higher than at the same firms before the adoption and 20% higher than at control firms, consistent with shareholders expecting boards to be more responsive to shareholder votes under MV.

Finally, in our third set of tests, we examine the effect of MV on board behavior, focusing on how the adoption of MV affects the relation between the outcome of director elections and subsequent turnover on the board. Previous studies indicate that board turnover is higher when shareholders’ perception of board performance—as measured by the percentage of votes withheld from directors—is unfavorable (Fischer, Gramlich, Miller and White 2009). We find that the sensitivity of board turnover to votes withheld after the adoption of MV is significantly higher than at control firms and is also significantly higher than at MV firms before the adoption, consistent with the notion that the threat of a “tougher” election system makes boards more responsive to shareholder preferences.

Our study contributes to the limited literature on MV. First, we present the first evidence of a positive stock price reaction associated with the MV standard. Sjostrom and Kim (2007) and Cai et al. (2010) 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 the regression discontinuity design we employ mitigates. Second, our study is the first to provide evidence that the adoption of MV impacts shareholders’ and board’s behavior. In univariate analyses, Cai et al. (2010) report no changes, on average, in shareholder votes at director elections and in director turnover before and after the adoption of MV. In contrast, we show that conditional on the presence of a perceived problem (e.g. an ISS withhold recommendation, high votes withheld) shareholder votes and board turnover do change after the adoption of MV in a manner consistent with the notion that boards will be more responsive to shareholder pressure under MV.

In providing evidence on the effect of MV, our study also contributes to the growing literature on the effects of the director election system. Previous studies on this topic have focused on the economic consequences of votes withheld from directors under the plurality voting standard (Del Guercio, Seery and Woidtke 2008; Cai et al. 2009; Ertimur, Ferri and Muslu 2011b; Fischer et al. 2009) and on the stock price reaction around legislative events surrounding the SEC adoption of proxy access rule (Larcker, Ormazabal and Taylor 2011; Cohn, Gillan and Hartzell 2011; Becker, Bergstresser and Subramanian 2010).

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

The paper proceeds as follows. Section I presents the analysis on the value of MV using an event study approach. Section II examines the effect of MV on shareholders’ voting behavior. Section III studies the effect of MV on board behavior. Section IV concludes.
I. The Value of Majority Voting: Evidence from Shareholder Proposals

Our first research question is whether shareholders perceive the adoption of a MV standard as a value enhancing change in governance. Previous studies have tackled this question through a standard event study around either the adoption of a MV standard or the filing/voting of a shareholder proposal4 to adopt MV, generally concluding that there is no market reaction around these events.5

However, event studies around these events have well known limitations (e.g. Gillan and Starks 2007). Interpreting the reaction around proxy filing dates is problematic because proxy statements contain information other than a specific shareholder proposal (contaminated event problem). In addition, most MV proposals are filed by union pension funds that release the list of target firms well before the proxy filing dates; hence it is unclear whether the proxy filing event contains any new information (anticipated event problem). Similarly, the stock price reaction around the shareholder vote reflects other information released at the annual meeting (announcements, votes on other matters, etc.). In addition, the stock price reaction depends on investor expectations about the voting outcome and the likelihood of adoption conditional on the voting outcome (given the non-binding nature of these proposals). That these expectations hinge on observable and unobservable firm characteristics gives rise to an endogeneity concern making it difficult to attribute the market reaction to the voting outcome per se.

4 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.

5 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 (plurality plus versus majority plus) and the form of implementation (e.g. bylaws versus governance guidelines). Cai et al. (2010) find insignificant returns for a larger sample of 481 adopters between 2004 and 2007. Cai et al. (2010) 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.
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 and/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. (forthcoming), who focus on the market reaction to the outcomes of governance-related shareholder proposals using a regression discontinuity design (hereinafter RDD). 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 “locally” exogenous) and, therefore, uncorrelated with firm characteristics, thereby alleviating endogeneity concerns. 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. forthcoming).

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6 A growing number of studies rely on RDD in a variety of economic contexts in order to address endogeneity concerns that arise in observational data. Imbens and Lemieux (2008) review some of the practical and theoretical issues in implementation of RDD. Lee and Lemieux (forthcoming) provide an introduction and user guide to RDD. Elections are one specific context that RDD designs have been particularly useful. For example DiNardo and Lee (2004) use RDD to assess the economic impacts of unionization on private sector employers by comparing the outcomes for employers where unions barely won the secret ballot elections for new unionization to those where unions barely lost. Cellini, Ferreira and Rothstein (2010) use RDD to estimate the value of school facility investments in school districts where proposed bonds to fund school capital projects receive voter approval by a narrow margin.

7 To validate this assumption of the RDD approach, Cuñat et al (forthcoming) 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 I.A., we perform a similar test in our sample.
In applying RDD to our setting, a key assumption 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 that is not already fully incorporated in prices, alleviating concerns with prior expectations. This assumption is supported by the empirical evidence. 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. (2011b) find similar results for a large sample of compensation-related shareholder proposals. Cuñat et al. (forthcoming) estimate that passing a governance-related proposal around the threshold leads to a discrete 31% increase in the probability of implementation. This evidence is confirmed in our sample of proposals to adopt MV, with the rate of implementation increasing by 25% around the threshold (i.e. from 65% for proposals in the 48-50% voting range to 90% for proposals in the 50-52% voting range).

Another feature that makes shareholder proposals well suited for RDD is that the distribution of the percentage of votes in favor of shareholder proposal is smooth around the 50% threshold (Listokin 2008, Cuñat et al. forthcoming), suggesting a lack of strategic behavior. In contrast, Listokin (2008) reports a sharp discontinuity for management-sponsored proposals, with higher density of votes on the right side of the threshold consistent with management strategically withdrawing proposals that are likely to fail.

Applying a RDD to a large sample of governance-related shareholder proposals voted upon between 1997 and 2007, Cuñat et al. (forthcoming) find that passing a governance-related proposal generates a 1.3% positive abnormal return, with the effect mostly driven by proposals to remove-anti-takeover defenses (e.g., declassify the board and remove poison pills), at 1.7%. In this section,
we apply this technique to our sample of MV proposals to obtain an estimate of shareholders’ perception of the value of a MV standard.

A. Research Design

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. Following Cuñat et al. (forthcoming) we estimate the following regression for increasingly small intervals around the passing threshold, with standard errors clustered by firm:

$$\text{Abnormal Returns} = \alpha + \beta \text{Pass} + \text{Year Fixed Effects} + \epsilon$$ (1)

The dependent variable, Abnormal Returns, is the abnormal returns on the meeting date, computed using Fama and French (1996) and momentum factors (Carhart 1997). 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 Equation (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 therefore 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. (forthcoming), 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
variable, such that the effect of any discontinuous jump at the threshold is captured by $\beta$. Specifically, we estimate the following regression with standard errors clustered by firm:\(^8\)

$$\text{Abnormal Returns} = \alpha + \beta \text{Pass} + \gamma_1 \text{Votes For}_R + \gamma_2 \text{Votes For}_R^2 + \gamma_3 \text{Votes For}_R^3 + \gamma_4 \text{Votes For}_R^4 + \gamma_5 \text{Votes For}_R^5 + \gamma_6 \text{Votes For}_L + \gamma_7 \text{Votes For}_L^2 + \gamma_8 \text{Votes For}_L^3 + \gamma_9 \text{Votes For}_L^4 + \gamma_{10} \text{Votes For}_L^5 + \text{Year Fixed Effects} + \epsilon$$

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

**B. Results**

Table I, Panel A, shows the results of estimating Equation (1). When we include all MV proposals, regardless of the voting outcome, we find that the coefficient on $\text{Pass}$ (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 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 (+/- 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 $\text{Pass}$ 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 $\text{Pass}$ is 0.0116 (significant at 5%) and in Model (4), when the

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\(^8\) Throughout the analyses we use a polynomial of order five on either side of the threshold. As Cellini et al. (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 $g \to \infty$. Similar to Cüçat et al. (forthcoming), we check the sensitivity of our results to using lower and higher order polynomials.
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 (\(N=31\) in Model 3 and \(N=17\) in Model 4), reducing the efficiency of the coefficient estimates. In Model (5) we estimate Equation (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 \(\text{Pass}\) remains positive at 0.0143 (significant at the 5% level), implying that the passing of a MV provision generates a 1.43% abnormal return.\(^9\)

To increase our confidence in the results, we perform a number of robustness tests. First, 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 \(\text{Pass}\) is insignificant, ranging from -0.0030 (t-statistic=-0.38) to 0.0055 (t-statistic=0.64).

Second, 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

\(^9\) One may argue that a positive stock price reaction for proposals approved by a majority vote is not surprising, since voting shareholders also affect the stock price through their trades. However, as noted by Listokin (2009), there is no obvious consistency between the behavior of the marginal investor (captured by the stock price reaction, such as the event study we perform in Section I) and the behavior of the average voting shareholder.
mean). Results are similar when we repeat the analyses for adjacent voting outcome bins of 21% (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.

Third, given the small sample size (N=31 in the 48%-52% range), our results may be driven by outliers. We visually inspect the distribution of abnormal returns around the threshold and do not find any outliers.

Finally, since Cuñat et al. (forthcoming) 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 at firms targeted by MV proposals. To do so, first, we repeat the analysis in Panel A for the subset of firms where no other shareholder proposal received more than 45% votes in favor (untabulated). Our results and inferences are unchanged (though the sample size is smaller, with N=26 in Model 3 and N=15 in Model 4). Second, in Panel B 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.10

As discussed earlier, one key assumption of the RDD is that the proposal’s passing is akin to an independent random event. If so, firms where the proposal passed by a small margin and firms where the proposals failed by a small margin should not be substantially different. To validate this assumption, similar to Cuñat et al. (forthcoming), for the sample of firms with MV proposals, we run a series of regressions where the dependent variable is a firm characteristic of

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10 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.
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). As shown in Table II, Model (1), the only significant difference is that firms where the MV proposal passes tend to 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, thus 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.

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 with the conclusions of no value effects in Sjostrom and Kim (2007) and Cai et al. (2010). Moreover, our estimate of the impact of MV compares favorably with the estimates in Cuñat et al. (forthcoming) for a broad sample of governance-related shareholder proposals (1.3%) and a subset of proposals to remove anti-takeover provisions (1.7%). However, it is important not to overstate the valuation impact of MV relative to anti-takeover provisions. Since shareholders proposals are not binding, the documented stock price reaction will reflect the expected value based on the probability of adoption after the vote (Cuñat et al. forthcoming)—the lower the probability of adoption the higher the full (unconditional) value of the proposal relative to the documented expected value. Since the adoption rate for MV proposals in our sample is about 61% (73% when the proposal passes), versus only 32% (40% when the
proposal passes) for anti-takeover proposals (Ertimur et al. 2010), the full value of proposals to remove anti-takeover provision is likely to be substantially higher than for proposals to adopt MV.\(^ {11}\)

II. The Effect of Majority Voting Standard on Shareholder Votes

The RDD-based analysis of the stock price response to MV proposals in Section I is an important piece of evidence but should be interpreted with caution, since the inferences are based on a subset of firms targeted by MV proposals and with a close vote and may not be generalizable to a larger set of firms.\(^ {12}\) Also, 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 also examine the economic consequences of MV in terms of its impact on the behavior of market participants. In this section, we examine its effects on the behavior of shareholders. For this purpose, we focus on how MV affected shareholder voting behavior—an observable action aimed at influencing firms’ conduct and, thus, potentially directly affected by a new election system aimed at increasing directors’ accountability to shareholders.

A. The Effect of Majority Voting Standard on Votes Withheld from Directors up for Election

A natural starting point is to assess whether the adoption of a new director election standard, such as MV, affects director elections, namely, shareholders’ propensity to withhold votes from directors. Cai, Garner and Walkling (2009) analyze director elections over the 2003-2005 period—when virtually all firms used a plurality voting standard—and document that high

\(^{11}\) In a private email exchange, one of the authors of Cuñat et al. (forthcoming) told us they estimated the full value of proposals to remove anti-takeover provisions at 5.2%.

\(^{12}\) However, when we compare firms targeted by MV proposals (whether or not with a close vote) to other S&P 1,500 firms in terms of size, performance, institutional ownership, entrenchment index and Tobin’s Q, we find 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).
votes withheld, while more frequent over time, are relatively rare. Nonetheless, prior studies also suggest that a display of shareholder dissatisfaction, as reflected in votes withheld of 15-20% or more, is associated with significant economic consequences, in terms of subsequent firm performance, operating decisions (acquisitions, divestitures) CEO turnover, CEO compensation and governance changes (Del Guercio et al. 2008; Cai et al. 2009; Ertimur et al. 2011b; Fischer et al. 2009).

Ex ante, the effect of MV on votes withheld is not clear. On the one hand, some shareholders who typically do not withhold their votes (on the ground that it would have little or no effect under plurality voting, or to preserve good relations with management) may be more encouraged to take an ‘activist’ role under MV (i.e. withhold their votes) expecting a greater impact on director’s behavior. On the other hand, though, some shareholders may become more reluctant to withhold their votes when doing so is no longer just a symbolic act of protest but may actually result in a director being voted off the board and have some disruptive effects on the board’s functioning (e.g. failure to preserve independence of some committees, etc.). A third possibility is that MV, as put into action, is little more than “smoke and mirrors” (Sjostrom and Kim, 2007) and does not have any real effect on director elections and directors’ accountability, in which case we would expect no change in shareholder voting patterns. In this section, we perform an empirical test to shed light on these alternative hypotheses.

A.1. Research Design

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13 In the sample of 13,384 director elections between 2003 and 2005 analyzed by Cai et al. (2009), the vast majority of directors are elected with almost unanimous support (mean and median votes “for” are 94% and 97%, respectively). Georgeson (2010) reports that from 2006 to 2009 the number of directors of S&P 1,500 firms receiving greater than 15% votes withheld increased steadily from 385 (at 189 distinct firms) to 1,027 (at 378 distinct firms).

14 These effects are consistent with Grundfest (1990) argument that a high percentage of votes withheld, 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”.

16
To examine the effect of the MV standard on votes withheld from directors, we first construct a sample of director elections over the 2003 – 2008 period composed of the intersection of the ISS Directors database (which covers firms in the S&P 1500 and from which we retrieve director and board characteristics) and the ISS Voting Analytics database (which covers firms in the Russell 2000 and from which we retrieve election results). Next, within this sample, we identify firms that adopted a MV standard (hereinafter MV firms) and the adoption date using the list provided in Allen (2007) (hereinafter the Allen Report).\textsuperscript{15}

For the combined sample (MV firms and firms that had not adopted MV as of the date of the 2008 proxy season) sample, we estimate the following pooled director level ordinary least squares regression with heteroskedasticity-robust standard errors clustered by director and firm:

\[
\% \text{ Votes Withheld} = \alpha + \beta_1 \text{MV Firm – Before Adoption} \\
+ \beta_2 \text{MV Firm – After Adoption} \\
+ \beta_3 \text{MV Firm – Before Adoption} \times \text{ISS Withhold Rec.} \\
+ \beta_4 \text{MV Firm – After Adoption} \times \text{ISS Withhold Rec.} + \gamma \text{ISS Withhold Rec.} \\
+ \delta \text{Control Variables + Year and Industry Fixed Effects} + \epsilon
\]  

The dependent variable, \(\% \text{ Votes Withheld}\), is the number of votes withheld from a director scaled by the number of votes cast. \(\text{MV Firm – Before (After) Adoption}\) is an indicator variable that is equal to one for MV firms before (after) the adoption of MV, and zero otherwise. The intercept captures votes withheld from directors at firms that had not adopted MV as of the 2008 proxy season.

Absent an issue that raises concerns among shareholders about director performance, on average, votes withheld from directors at a typical election is fairly low at 3-5\% (Cai et al. 2009).

\textsuperscript{15} 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. Sjostrom and Kim (2007) and Cai, Garner and Walkling (2010) also use the Allen Report as a source to identify MV adopters.
Average votes withheld from directors increases by 18–20% in the presence of a withhold recommendation issued by proxy advisors such as ISS (Bethel and Gillan 2002; Cai et al. 2009; Choi, Fisch and Kahan 2009; Ertimur et al. 2011a; Ertimur et al. 2011b; Choi, Fisch and Kahan 2010). ISS issues withhold recommendations in various circumstances—e.g. when directors fail to regularly attend board meetings or to implement shareholder proposals supported by a majority of shares outstanding, or when directors of key committees are not “independent.” Therefore, in order to assess the effect of the director election system on votes withheld from directors, we focus on cases where there is an underlying issue that results in shareholder discontent as captured by the existence of a withhold recommendation from ISS—ISS Withhold Rec. is an indicator variable that is equal one for directors that receive a withhold recommendation from ISS. We then examine whether the sensitivity of votes withheld from directors to ISS withhold recommendations for MV firms after adoption of MV (captured by the coefficient of MV Firm – After Adoption x ISS Withhold Rec.) is higher relative to control firms (captured by the coefficient of ISS Withhold Rec.) and relative to MV firms prior to the adoption of MV (captured by the coefficient of MV Firm – Before Adoption x ISS Withhold Rec).

By analyzing votes withheld conditional on the presence of an underlying issue (ISS withhold recommendation), we also deal with the key concern that any documented effect associated with the adoption of MV is caused by the factors leading to the adoption of MV rather than the adoption of MV per se. For example, if ‘better’ (‘worse’) boards adopt MV to signal their good quality (to reduce shareholder pressure), a finding that unconditional votes withheld is lower (higher) at these firms may simply reflect the better (worse) performance of these boards rather than the effect of a MV standard. We circumvent this problem by conditioning on a measure of poor board performance. Put differently, if better (worse) boards were more (less) likely to adopt
MV, MV firms would be less (more) likely to receive withhold recommendations from ISS and experience high votes withheld. But conditional on the presence of an ISS withhold recommendation, we can reliably examine whether the percentage of votes withheld at MV firms is different than at firms under a plurality voting standard.

Following Cai et al. (2009) and Ertimur et al. (2011a), we control for director characteristics (Attend less than 75% of Meetings, Independent Director, Linked Director, Incumbent Director, Stock Ownership (%), Tenure, Female Director, Number of Other Directorships, Director Age > 65, Audit Committee Member, Compensation Committee Member), the firm’s governance structure (% of Outside Directors, Staggered Board and Poison Pill, Abnormal CEO Compensation, Board Size, Board Holdings, Unequal Voting), the degree of shareholder dissatisfaction stemming from other major negative events (Litigation, Restatement), institutional ownership (% of Institutional Holdings, Blockholder), firm size (ln(Assets)), and firm performance (Industry-Adjusted ROA, Abnormal Returns). Finally, we include year fixed effects and industry fixed effects based on two-digit SIC codes. See Table IV for detailed variable definitions and data sources.

A.2. Results

In unreported univariate tests, similar to Cai et al. (2011) we find that the percentage of votes withheld from directors of MV firms (both before and after adoption) and control firms is similar—mean (median) votes withheld is approximately 5% (3%). However, conditional on an ISS withhold recommendation (a proxy for a perceived problem with the director’s performance), the mean (median) fraction of votes withheld at MV firms after adoption is significantly higher at 27.3% (27.5%), versus approximately 24.5% (23.7%) for MV firms before adoption and for control firms. Table III, Model 1, confirms this result in a multivariate setting: conditional on a ISS
 withhold recommendation, the percentage of votes withheld at MV firms after the adoption of MV is 2.83% higher than at control firms and 2.74% higher than at MV firms before the adoption.

In Model 2 we examine whether this effect is related to the form of MV standard adopted—plurality plus versus majority plus—by splitting the MV Firm – After Adoption indicator accordingly. We find that the effect holds in both subsamples of MV firms and does not differ among them. Overall, it appears that, conditional on the presence of a perceived problem with the director’s performance, shareholders are generally more likely to wage the withhold vote against directors when a MV standard is in place, consistent with the notion that they expect boards to be more responsive to this form of pressure when MV is the standard for director elections.

With respect to the control variables, we find that votes withheld are, on average, 20% higher when there is an ISS withhold recommendation (an effect similar to the 21% figure reported by Cai et al. 2009) and 6% higher for directors with poor attendance. As in Cai et al. (2009), votes withheld are higher following poor operating (but not stock) performance, for directors with longer tenure, when CEO pay is higher and in firms with greater institutional ownership; however, the economic significance of these and other statistically significant variables is generally small.

B. The Effect of Majority Voting Standard on Votes for Shareholder Proposals

In Section II.A. we determined that the percentage of votes withheld is about 3% higher in firms adopting MV (relative to pre-adoption as well as to non-adopters). While not negligible, given that the percentage of votes withheld conditional upon a ISS withhold recommendation averages 20%, this effect is not very large. However, as discussed earlier, it could be the result of two opposing forces: greater activism by shareholders that perceive a MV standard as giving them greater bargaining power and lower activism by shareholders more reluctant to withhold their
votes because under MV a withhold is no longer just a symbolic act of protest but may actually result in a director being voted off the board and disrupt the functioning of the board.

A more powerful setting to examine whether the adoption of MV affects shareholder voting behavior is the voting outcome of governance-related shareholder proposals. If, under a MV standard, shareholders expect boards to be more responsive, we should observe greater voting support for non-binding shareholder proposals aimed at changing the governance structure of the firm.\textsuperscript{16} In particular, since boards tend to implement only proposals winning a majority of the votes cast (Ertimur et al. 2010), we expect greater voting support for proposals that typically receive substantial voting support (e.g. above 40\%) and thus, ex ante, have a realistic chance to pass. Hence, in our empirical tests, we focus on a subset of shareholder proposals to remove anti-takeover provisions, namely, proposals to declassify the board and remove poison pills (more precisely, remove poison pills in place and/or submit future poison pills to shareholder approval). These proposals have historically enjoyed high voting support (Georgeson 2005-2010). Besides, previous studies indicate that these are the provisions of greatest value relevance to shareholders (Bebchuk and Cohen 2005; Bebchuk, Cohen and Ferrell 2009; Cuñat et al. forthcoming).

\textit{B.1. Research Design}

To examine the effect of the MV standard on voting support for shareholder proposals, we construct a sample of shareholder proposals to repeal classified boards and to redeem or vote on poison pills that were voted upon over the 1997 – 2008 proxy seasons at S&P 1500 firms, using data provided by ISS. Similar to the votes withheld analysis, we classify each firm-meeting date observation into one of three groups based on whether the given firm adopted MV and, if so, whether the observation refers to the time prior or subsequent to the adoption. We then estimate

\textsuperscript{16} The increased voting support could be due to traditionally passive shareholders supporting governance reforms under MV (because of the expectation that the firm will be more likely to adopt those reforms) or to activist shareholders investing more resources to campaign in favor of the proposals.
the following pooled director level ordinary least squares regression with heteroskedasticity-robust standard errors clustered by firm for the resulting sample of 713 observations:

\[
\% \text{ Votes For} = \alpha + \beta_1 \text{MV Firm – Before Adoption} + \beta_2 \text{MV Firm – After Adoption} + \beta_3 \text{Classified Board Proposal} + \beta_4 \text{MV Firm – Before Adoption} \times \text{Classified Board Proposal} + \beta_5 \text{MV Firm – After Adoption} \times \text{Classified Board Proposal} + \gamma \text{Control Variables} + \theta \text{MV Firm – Before Adoption} \times \text{Control Variables} + \kappa \text{MV Firm – After Adoption} \times \text{Control Variables} + \text{Year Fixed Effects} + \epsilon
\]

The dependent variable, \% Votes For, is the percentage of votes cast in favor of the proposal, computed as: \# Votes For / (\# Votes For + \# Votes Against). MV Firm – Before (After) Adoption is an indicator variable that is equal to one for observations that precede (follow) the adoption of MV by the given firm, and zero otherwise. The coefficients of these two variables, \(\beta_1\) and \(\beta_2\), capture votes cast in favor of shareholder proposals to redeem or vote on poison pills at MV firms before and after the adoption of MV, respectively, relative to control firms (i.e., firms that do not adopt a MV standard during our sample period), while the intercept captures votes cast in favor of these proposals at control firms. Classified Board Proposal is an indicator variable that is equal to one for proposals to repeal classified boards and its coefficient, \(\beta_3\), captures the incremental voting support for such proposals at non-MV firms (relative to poison pill proposals). \(\beta_4\) and \(\beta_5\) capture the incremental voting support for proposals to repeal classified boards at MV firms before and after the adoption of MV. To the extent that shareholders believe their votes to be more impactful under a MV standard we expect \(\beta_2 > 0\) and \(\beta_5 > 0\).
We include a number of control variables based on the evidence in prior literature (Gillan and Starks 2000, Ertimur et al. 2010, Ertimur et al. 2011b). Specifically, we control for the identity of the proponent (Institutional Proponent), the number of other governance related shareholder proposals voted on at the same annual meeting (# of Other Proposals), ownership structure (% of Institutional Holdings and Board Holdings (%)), board independence (% of Outside Directors), an index of shareholder rights (Entrenchment Index), firm size (ln(Assets)), and financial performance (Industry Adjusted ROA and Abnormal Returns). We allow the coefficients of control variables to vary across control firms and for firms that adopted a MV standard, before and after adoption. We also include year fixed effects to account for trends in voting patterns over time documented in prior literature (Ertimur et al. 2010).

B.2. Results

Table IV presents the results. We find that the voting support for proposals to repeal classified boards is approximately 21% higher, on average, at firms that adopt a MV standard relative to firms that do not—the coefficient of MV Firm – After Adoption x Classified Board Proposal is positive and significant at 5% level (β₄=0.2096, t-statistic=2.58). Moreover, the voting support is approximately 18% higher subsequent to the adoption of MV (see Wald tests). In contrast, we find no differences in the voting support for proposals to redeem poison pills across firms that adopt MV versus those that do not and for before versus after the adoption of MV.

The different result for classified board versus poison pill proposal may appear puzzling but is consistent with the evidence that classified boards are the key and most value relevant anti-takeover mechanism (Bebchuk, Cohen and Ferrell 2009; Bebchuk et al. 2011). For example, Bebchuk and Cohen (2005) find that, after controlling for other governance provisions, staggered boards have a strong effect on market value that is several times larger than the average effect of
other provisions in the Gompers, Ishii and Metrick (2003) index. Their evidence is consistent with the findings in Bebchuk, Coates and Subramanian (2002) that effective staggered boards are a stronger factor in determining the outcome of hostile bids than other antitakeover defenses such as pre-bid poison pills.

In terms of control variables, we find that the voting support is higher for proposals sponsored by institutional proponents and at firms with greater institutional ownership while it is lower at larger firms, well-performing firms and at firms where insider ownership is greater, consistent with previous studies on shareholder voting (e.g. Ertimur et al. 2010).

### III. The Effect of Majority Voting Standard on Director Turnover

In the previous section, we examined how the adoption of a MV standard affects shareholder behavior. In this section, we focus on its impact on board behavior, and, in particular, on boards’ responsiveness to shareholder pressure.

To examine this question, we focus on how the adoption of MV affects the relation between the outcome of director elections and subsequent turnover on the board. Director turnover is almost never the direct effect of the outcome of director elections, since directors rarely fail to win a majority of votes “for” (Cai et al. 2009; Kahan and Rock 2010).\(^{17}\) However, we know from previous literature that board shake-ups occur when the perception of board performance—as measured by the percentage of votes withheld from directors—is unfavorable, even if the directors win a majority vote (Fischer et al. 2009). Hence, even if directors rarely lose their seat due to the outcome of a director election, the broader question is whether the sensitivity of board turnover to shareholder dissatisfaction (i.e. high votes withheld from directors) is enhanced under MV. If a MV standard gives director elections “more teeth,” in equilibrium the threat of a failed election

\(^{17}\) For example, in our sample of S&P 1500 firms, out of 33,580 observations there are only 60 cases where a director receives more than 50% votes withheld. As for MV firms, there are only 4 cases out of 7,681 director election observations subsequent to the adoption of MV.
should lead boards of MV firms to be more responsive and “self-policing” by replacing some directors and bringing new directors with fresh ideas.

Note that, similar to analyzing votes withheld conditional on the presence of an ISS withhold recommendation (Section II.A.), analyzing board turnover conditional on shareholder dissatisfaction (votes withheld), alleviates the concern that any documented effect associated with the adoption of MV be caused by the factors leading to the adoption of MV rather than the adoption of MV per se.

A. Research Design

Following Fischer et al. (2009), we examine the relation between votes withheld and subsequent director turnover at firm level. We focus on a sample of 5,171 firm-year observations over 2003 – 2007 in the intersection of the ISS Directors and Voting Analytics databases. Specifically, we estimate the following ordinary least squares regression with heteroskedasticity-robust standard errors clustered by firm:

\[
\text{Board Turnover}_{t+1} = \alpha + \beta_1 \text{MV Firm – Before Adoption}_t \\
+ \beta_2 \text{MV Firm – After Adoption}_t \\
+ \beta_3 \text{MV Firm – Before Adoption}_t \times \text{Median Votes Withheld}_t \\
+ \beta_4 \text{MV Firm – After Adoption}_t \times \text{Median Votes Withheld}_t \\
+ \beta_5 \text{Median Votes Withheld}_t \\
+ \beta_6 \text{Industry-Adjusted Return on Assets}_t \\
+ \beta_7 \text{Industry-Adjusted Return on Assets}_{t+1} \\
+ \beta_8 \text{Abnormal Returns}_t + \beta_9 \text{Abnormal Returns}_{t+1} \\
+ \beta_{10} \text{Change in Institutional Holdings}_{t+1} + \text{Year Fixed Effects} + \varepsilon
\]

The dependent variable, \( \text{Board Turnover}_{t+1} \), 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
The variables of interest are the interaction terms between $MV\ Firm - Before (After)\ Adoption_t$ (indicator variables for MV firms before and after adoption of MV) and $Median\ Votes\ Withheld_t$, that is, the median percentage of votes withheld from directors (votes withheld scaled by the sum of votes for and votes withheld) in the year $t$ annual meeting. As in Fischer et al. (2009), we control for firm operating and stock performance as well as the change in institutional ownership. We also include year fixed effects.

B. Results

In unreported univariate tests, similar to Cai et al. (2011) we find that board turnover (measured as discussed above) does not differ between MV firms (both before and after adoption) and control firms, ranging between 18% and 20%. However, conditional on substantial shareholder dissatisfaction (median votes withheld greater than 15%), we find that board turnover at MV firms after adoption is significantly higher at 58%, versus approximately 19% for MV firms before adoption and for control firms.

Table V presents the results in a multivariate setting. In Model 1 we estimate a benchmark regression and, similar to Fischer et al. (2009), we find a positive association between votes withheld from directors and subsequent director turnover—the coefficient of $Median\ Votes\ Withheld_t$ is positive and significant at 5% level—suggesting a positive association between shareholder dissatisfaction with directors and subsequent board shake-ups.

In Model 2, we introduce our variable of interest, the interaction between $MV\ Firm - Before (After)\ Adoption_t$ and $Median\ Votes\ Withheld_t$. For MV firms, we find that the sensitivity

---

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. In untabulated tests, we repeat the analysis using board size as denominator and controlling for the presence of a classified board among the independent variables. Our results hold and the coefficient on the indicator for classified boards is negative, consistent with the argument in Fischer et al. (2009).
of board turnover to votes withheld after the adoption of MV is significantly higher than at control firms (the coefficient of $MV \text{ Firm} – \text{ After Adoption}_t \times \text{Median Votes Withheld}_t$ is positive and significant—$\beta_3=1.7720$, t-statistic=1.92) and is also significantly higher than at MV firms before the adoption (see Wald tests), consistent with our univariate findings. In contrast, there is no difference between MV firms before the adoption and control firms ($\beta_4=-0.1549$, t-statistic=-0.95).\textsuperscript{19,20}

Overall, our analysis suggests that after the adoption of MV the sensitivity of board turnover to shareholder pressure is higher than before the adoption and higher than at control firms, consistent with the notion that the threat of a ‘tougher’ election system makes boards more responsive to shareholder pressure.

IV. Conclusion

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

Second, we examine how MV affected shareholder voting behavior—an observable action aimed at influencing firms’ conduct and, thus, potentially directly affected by a new election

\textsuperscript{19} The coefficients on the main effect, $MV \text{ Firm} – \text{ Before (After) Adoption}_t$, suggest that, after controlling for votes withheld and other determinants, director turnover at MV firms before the adoption of MV was somewhat higher than at control firms and it decreased after the adoption of MV (see Wald test), becoming similar to control firms.

\textsuperscript{20} We also examine whether the sensitivity of board turnover to votes withheld for MV firms depends on the form of MV standard adopted (majority plus versus plurality plus) but find no significant differences.
system aimed at increasing directors’ accountability to shareholders. We find that, in the presence of a withhold recommendation from ISS (a proxy for perceived problems with the director’s performance), the percentage of votes withheld at director elections is about 3% higher in firms adopting MV relative to pre-adoption as well as to non-adopters. We also find that the voting support for proposals to declassify the board at firms which adopted MV is 18% higher compared to the pre-adoption period and 20% higher than at control firms, consistent with shareholders expecting boards to be more responsive to shareholder votes under MV.

Finally, we focus on the impact of the adoption of an MV standard on board behavior, and, in particular, on boards’ responsiveness to shareholder pressure. We find that the sensitivity of board turnover to votes withheld from directors at annual elections is higher subsequent to the adoption of MV, consistent with the notion that the MV election system makes boards more responsive to shareholder pressure.

Our study contributes to the growing literature on the director election system and, more generally, on the economic relevance of governance arrangements.
References


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

### Panel A Abnormal Returns to Passing Majority Voting Standard Proposals

<table>
<thead>
<tr>
<th>Variable</th>
<th>All Votes</th>
<th>[-5,+5]</th>
<th>[-2,+2]</th>
<th>[-1,+1]</th>
<th>All Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.0011</td>
<td>0.55</td>
<td>0.0008</td>
<td>0.0049</td>
<td>0.0055</td>
</tr>
<tr>
<td>Pass</td>
<td>0.0036</td>
<td>1.41</td>
<td>0.0116</td>
<td>0.0177</td>
<td>0.0043</td>
</tr>
</tbody>
</table>

Year Fixed Effects
- Included
- Not Included

Polynomial Terms
- Included
- Not Included

N: 278
Adjusted R²: 1.02%

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>All Votes</th>
<th>[-5,+5]</th>
<th>[-2,+2]</th>
<th>[-1,+1]</th>
<th>All Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.0026</td>
<td>1.11</td>
<td>0.0018</td>
<td>0.0069</td>
<td>0.0054</td>
</tr>
<tr>
<td>Pass</td>
<td>0.0035</td>
<td>1.35</td>
<td>0.0027</td>
<td>0.0136</td>
<td>0.0140</td>
</tr>
<tr>
<td>Anti-Takeover</td>
<td>-0.0004</td>
<td>-0.12</td>
<td>0.0098</td>
<td>-0.0047</td>
<td>0.0003</td>
</tr>
<tr>
<td>Anti-Takeover Pass</td>
<td>-0.0008</td>
<td>-0.21</td>
<td>-0.0092</td>
<td>-0.0002</td>
<td>0.0024</td>
</tr>
<tr>
<td>Other</td>
<td>-0.0023</td>
<td>-0.92</td>
<td>-0.0012</td>
<td>-0.0037</td>
<td>-0.0012</td>
</tr>
<tr>
<td>Other Pass</td>
<td>-0.0016</td>
<td>-0.16</td>
<td>-0.0226</td>
<td>-2.99</td>
<td>-0.0656</td>
</tr>
</tbody>
</table>

Year Fixed Effects
- Included
- Not Included

Polynomial Terms
- Included
- Not Included

N: 278
Adjusted R²: -0.12%
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 repeats the analysis in Panel A after controlling for the presence and passing of other governance related shareholder proposals. In particular, Anti-Takeover (Other) 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 Pass (Other 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 B, 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 standard errors estimated using the Huber (1967) – White (1980) procedure, with firm-level clustering (Rogers, 1993).
Table II Differences in Firm Characteristics as a Function of the Voting Outcome

<table>
<thead>
<tr>
<th>Firm Characteristic</th>
<th>Model (1)</th>
<th></th>
<th>Model (2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient of Pass</td>
<td>t-statistic</td>
<td>Coefficient of Pass</td>
<td>t-statistic</td>
</tr>
<tr>
<td>Tobin's Q</td>
<td>-0.1530</td>
<td>-1.47</td>
<td>0.5620</td>
<td>1.56</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>0.0045</td>
<td>0.29</td>
<td>0.0269</td>
<td>0.63</td>
</tr>
<tr>
<td>Abnormal Returns over 12 Months Prior to Meeting</td>
<td>0.0294</td>
<td>0.69</td>
<td>0.1880</td>
<td>0.81</td>
</tr>
<tr>
<td>% of Institutional Holdings</td>
<td>0.0769</td>
<td>3.84***</td>
<td>-0.0578</td>
<td>-1.08</td>
</tr>
<tr>
<td>Entrenchment Index</td>
<td>0.0082</td>
<td>0.05</td>
<td>-0.3392</td>
<td>-0.49</td>
</tr>
<tr>
<td>Number of Other Proposals</td>
<td>-0.1492</td>
<td>-0.74</td>
<td>0.3369</td>
<td>0.64</td>
</tr>
</tbody>
</table>

Year Fixed Effects                                Included                              Included
Polynomial in Vote Share                          Not Included                          Included

Table II 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. ***, **, 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).
### Table III Votes Withheld from Directors at Elections

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model (1)</th>
<th></th>
<th>Model (2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>t-statistic</td>
<td>Coefficient</td>
<td>t-statistic</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.0036</td>
<td>0.36</td>
<td>0.0038</td>
<td>0.38</td>
</tr>
<tr>
<td>MV Firm - Before Adoption</td>
<td>0.0000</td>
<td>0.01</td>
<td>0.0000</td>
<td>0.00</td>
</tr>
<tr>
<td>MV Firm - After Adoption</td>
<td>-0.0077</td>
<td>-4.04***</td>
<td>-0.0048</td>
<td>-2.12***</td>
</tr>
<tr>
<td>MV Firm - After Adoption of Plurality Plus</td>
<td>0.0000</td>
<td>0.01</td>
<td>-0.0115</td>
<td>-4.90***</td>
</tr>
<tr>
<td>MV Firm - After Adoption of Majority Plus</td>
<td>-0.0048</td>
<td>-2.12***</td>
<td>-0.0048</td>
<td>-2.12***</td>
</tr>
<tr>
<td>MV Firm - Before Adoption of MV x ISS Withhold Rec.</td>
<td>0.0009</td>
<td>0.08</td>
<td>0.0009</td>
<td>0.07</td>
</tr>
<tr>
<td>MV Firm - After Adoption x ISS Withhold Rec.</td>
<td>0.0283</td>
<td>2.30**</td>
<td>0.0283</td>
<td>2.30**</td>
</tr>
<tr>
<td>MV Firm - After Adoption of Plurality Plus x ISS Withhold Rec.</td>
<td>0.0009</td>
<td>0.08</td>
<td>0.0009</td>
<td>0.07</td>
</tr>
<tr>
<td>MV Firm - After Adoption of Majority Plus x ISS Withhold Rec.</td>
<td>0.0283</td>
<td>2.30**</td>
<td>0.0283</td>
<td>2.30**</td>
</tr>
<tr>
<td>ISS Withhold Rec.</td>
<td>0.2013</td>
<td>31.92***</td>
<td>0.2013</td>
<td>31.93***</td>
</tr>
<tr>
<td>Attend less than 75% of Meetings</td>
<td>0.0595</td>
<td>8.48***</td>
<td>0.0596</td>
<td>8.49***</td>
</tr>
<tr>
<td>Independent Director</td>
<td>0.0033</td>
<td>3.08***</td>
<td>0.0032</td>
<td>3.07***</td>
</tr>
<tr>
<td>Linked Director</td>
<td>0.0162</td>
<td>8.72***</td>
<td>0.0162</td>
<td>8.71***</td>
</tr>
<tr>
<td>Incumbent Director</td>
<td>0.0057</td>
<td>6.75***</td>
<td>0.0057</td>
<td>6.72***</td>
</tr>
<tr>
<td>Stock Ownership (%)</td>
<td>-0.0609</td>
<td>-4.68***</td>
<td>-0.0608</td>
<td>-4.67***</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.0003</td>
<td>4.21***</td>
<td>0.0003</td>
<td>4.19***</td>
</tr>
<tr>
<td>Female Director</td>
<td>-0.0011</td>
<td>-1.47</td>
<td>-0.0011</td>
<td>-1.46</td>
</tr>
<tr>
<td>Number of Other Directorships</td>
<td>0.0008</td>
<td>2.22**</td>
<td>0.0008</td>
<td>2.21**</td>
</tr>
<tr>
<td>Director Age &gt; 65</td>
<td>0.0011</td>
<td>1.24</td>
<td>0.0011</td>
<td>1.24</td>
</tr>
<tr>
<td>Audit Committee Member</td>
<td>0.0031</td>
<td>4.82***</td>
<td>0.0031</td>
<td>4.86***</td>
</tr>
<tr>
<td>Compensation Committee Member</td>
<td>0.0055</td>
<td>7.90***</td>
<td>0.0056</td>
<td>7.96***</td>
</tr>
<tr>
<td>% of Outside Directors</td>
<td>-0.0160</td>
<td>-2.96***</td>
<td>-0.0158</td>
<td>-2.92***</td>
</tr>
<tr>
<td>Staggered Board and Poison Pill</td>
<td>0.0054</td>
<td>3.87***</td>
<td>0.0053</td>
<td>3.83***</td>
</tr>
<tr>
<td>Abnormal CEO Compensation</td>
<td>0.0002</td>
<td>2.73***</td>
<td>0.0002</td>
<td>2.66***</td>
</tr>
<tr>
<td>Board Size</td>
<td>-0.0004</td>
<td>-1.36</td>
<td>-0.0004</td>
<td>-1.44</td>
</tr>
<tr>
<td>Board Holdings (%)</td>
<td>-0.0455</td>
<td>-5.26***</td>
<td>-0.0453</td>
<td>-5.25***</td>
</tr>
<tr>
<td>Unequal Voting</td>
<td>-0.0086</td>
<td>-1.18</td>
<td>-0.0087</td>
<td>-1.18</td>
</tr>
<tr>
<td>Litigation</td>
<td>0.0082</td>
<td>1.64</td>
<td>0.0081</td>
<td>1.62</td>
</tr>
<tr>
<td>Restatement</td>
<td>0.0068</td>
<td>2.40**</td>
<td>0.0068</td>
<td>2.43**</td>
</tr>
<tr>
<td>% of Institutional Holdings</td>
<td>0.0187</td>
<td>3.29***</td>
<td>0.0187</td>
<td>3.29***</td>
</tr>
<tr>
<td>Blockholder</td>
<td>-0.0020</td>
<td>-1.14</td>
<td>-0.0020</td>
<td>-1.12</td>
</tr>
<tr>
<td>ln(Assets)</td>
<td>0.0006</td>
<td>0.85</td>
<td>0.0007</td>
<td>0.94</td>
</tr>
<tr>
<td>Industry Adjusted ROA</td>
<td>-0.0339</td>
<td>-4.55***</td>
<td>-0.0336</td>
<td>-4.51***</td>
</tr>
<tr>
<td>Abnormal Returns</td>
<td>0.0009</td>
<td>0.59</td>
<td>0.0009</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Year and Industry Fixed Effects | Included | Included |
N | 33,580 | 33,580 |
Adjusted R² | 60.00% | 60.10% |
Table III (cont.)

<table>
<thead>
<tr>
<th>Wald Tests</th>
<th>Coefficient</th>
<th>$\chi^2$</th>
<th>Coefficient</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>After vs. Before Adoption</td>
<td>-0.0077</td>
<td>14.47***</td>
<td>0.0274</td>
<td>3.90**</td>
</tr>
<tr>
<td>After vs. Before Adoption x ISS Withhold Rec.</td>
<td>0.0067</td>
<td>5.20**</td>
<td>0.0091</td>
<td>0.18</td>
</tr>
<tr>
<td>After Adoption of Plurality vs. Majority Plus</td>
<td>0.0323</td>
<td>2.88**</td>
<td>0.0232</td>
<td>3.63*</td>
</tr>
<tr>
<td>After Adoption of Majority vs. Plurality Plus x ISS Withhold Rec.</td>
<td>0.0892</td>
<td>4.12**</td>
<td>0.0091</td>
<td>0.18</td>
</tr>
<tr>
<td>After vs. Before Adoption of Plurality Plus x ISS Withhold Rec.</td>
<td>0.0892</td>
<td>4.12**</td>
<td>0.0091</td>
<td>0.18</td>
</tr>
</tbody>
</table>

Table III presents the results for the analysis of votes withheld from directors at annual elections over the 2003 – 2008 period. The dependent variable, % of Votes Withheld, is the number of votes withheld from a given director scaled by the sum of votes cast (source: Voting Analytics). MV Firm – After (Before) Adoption is an indicator variable that is equal to one for director-firm-meeting date observations subsequent to (preceding) the adoption of a majority voting election system (source: Allen Report). MV Firm – After Adoption of Plurality (Majority) Plus is an indicator variable that is equal to one for director-firm-meeting date observations subsequent to the adoption of a plurality (majority) plus standard (source: Allen Report). ISS Withhold. Rec. is an indicator variable that is equal to one if the director receives a withheld recommendation from ISS for the given election (source: ISS). Attend less than 75% of Meetings is an indicator variable that is equal to one for directors that attended less than 75% of meetings over the year preceding the election (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). Incumbent Director is an indicator variable that is equal to one if the director was on board at the time of the prior annual meeting (source: ISS Directors Dataset). Stock Ownership (%) 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 Director 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). Director Age > 65 is an indicator variable that is equal to one if the director is older than 65 (source: ISS Directors Dataset). Audit (Compensation) Committee Member is an indicator variable that is equal to one for directors who sit on the audit (compensation) committee (source: ISS Directors Dataset). % of Outside Directors is the number of independent directors scaled by board size (source: ISS Directors Dataset). Staggered Board and Poison Pill is an indicator variable that is equal to one if the firm has a staggered board or a poison pill in place (source: ISS Governance Dataset). Abnormal CEO Compensation is total less predicted CEO pay. Similar to Core, Guay, and Larcker (2008), we compute predicted CEO pay by taking the exponent of the predicted value for each firm from a regression of the natural logarithm of total CEO compensation on proxies for economic determinants of CEO pay (source: Execucomp, Compustat, CRSP). Board Size is the number of directors on board (source: ISS Directors Dataset). Board Holdings (%) is the percentage of shares owned by board members at the time of the annual meeting (source: ISS Directors Dataset). Litigation is an indicator variable that is equal to one if the firm is targeted by a class-action lawsuit filed over the 12-month period preceding the annual meeting (source: Woodruff-Sawyer & Co. Class Action Lawsuit Dataset). Restatement is an indicator variable that is equal to one if the firm files a restatement over the 12-month period preceding the annual meeting (source: Audit Analytics). Unequal Voting is an indicator variable that is equal to one if the firm has unequal voting in place (source: ISS Governance Dataset). % of Institutional Holdings is the percentage of equity owned by institutions based on 13-F filings (source: Thomson Reuters). Blockholder is an indicator variable that is equal to one if there is at least one institution that owns at least 5% of the firm’s equity based on 13-F filings (source: Thomson Reuters). ln(Assets) is the natural logarithm of total assets (Compustat item dt) in millions for the fiscal year ending before the annual meeting (source: Compustat). Industry Adjusted ROA is the firm’s return on assets (ROA) less average ROA for firms in the same two-digit SIC code 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). Abnormal Returns is size-adjusted returns for the most recent fiscal year ending before the annual meeting (source: CRSP). ***, **, 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).
Table IV Voting Outcomes of Shareholder Proposals

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.5030</td>
<td>5.33***</td>
</tr>
<tr>
<td>MV Firm - Before Adoption</td>
<td>-0.1028</td>
<td>-0.82</td>
</tr>
<tr>
<td>MV Firm - After Adoption</td>
<td>0.0953</td>
<td>0.23</td>
</tr>
<tr>
<td>Classified Board Proposal</td>
<td>-0.0071</td>
<td>-0.49</td>
</tr>
<tr>
<td>MV Firm - Before Adoption x Classified Board Proposal</td>
<td>0.0301</td>
<td>1.45</td>
</tr>
<tr>
<td>MV Firm - After Adoption x Classified Board Proposal</td>
<td>0.2096</td>
<td>2.58**</td>
</tr>
<tr>
<td>Institutional Proponent</td>
<td>0.0349</td>
<td>2.00**</td>
</tr>
<tr>
<td># of Other Proposals</td>
<td>-0.0016</td>
<td>-0.21</td>
</tr>
<tr>
<td>% of Institutional Holdings</td>
<td>0.3462</td>
<td>5.19***</td>
</tr>
<tr>
<td>Board Holdings (%)</td>
<td>-0.5414</td>
<td>-6.90***</td>
</tr>
<tr>
<td>% of Outside Directors</td>
<td>0.0490</td>
<td>0.90</td>
</tr>
<tr>
<td>Entrenchment Index</td>
<td>0.0085</td>
<td>1.15</td>
</tr>
<tr>
<td>ln(Assets)</td>
<td>-0.0177</td>
<td>-2.60***</td>
</tr>
<tr>
<td>Industry Adjusted ROA</td>
<td>-0.2376</td>
<td>-3.47***</td>
</tr>
<tr>
<td>Abnormal Returns</td>
<td>-0.0036</td>
<td>-0.22</td>
</tr>
</tbody>
</table>

Interaction Terms between MV Firm and Control Variables Included
Year Fixed Effects Included

N 713
Adjusted R² 40.70%

<table>
<thead>
<tr>
<th>Wald Tests</th>
<th>Coefficient</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td>MV Firm - After vs. Before Adoption</td>
<td>0.0075</td>
<td>0.00</td>
</tr>
<tr>
<td>MV Firm - After vs. Before Adoption x Classified Board Proposal</td>
<td>0.1795</td>
<td>4.94**</td>
</tr>
</tbody>
</table>

Table IV presents the results for the analysis of votes cast in favor of shareholder proposals to repeal classified boards and to redeem/vote on poison pills that were voted upon during the 1997 – 2008 period. The dependent variable, % of Votes For, is the number of votes cast in favor of the proposal scaled by the sum of votes for and votes against (source: ISS Shareholder Proposals Dataset). MV Firm – After (Before) Adoption is an indicator variable that is equal to one for director-firm-meeting date observations subsequent to (preceding) the adoption of a majority voting election system (source: Allen Report). Classified Board Proposal is an indicator variable that is equal to one for proposals to repeal classified boards (source: ISS Shareholder Proposals Dataset). Institutional Proponent is an indicator variable that is equal to one if the proposal is sponsored by a union pension fund, a public pension fund or another institution (source: ISS Shareholder Proposals Dataset). # of Other Proposals is the number of other shareholder proposals that is being voted upon at the annual meeting (source: ISS Shareholder Proposals Dataset). % of Institutional Holdings is the percentage of equity owned by institutions based on 13-F filings (source: Thomson Reuters). % of Outside Directors is the number of independent directors scaled by board size (source: ISS Directors Dataset). Board Holdings (%) is the percentage of shares owned by board members at the time of the annual meeting (source: ISS Directors Dataset). Entrenchment Index is the total number of the following provisions that 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 (Bebchuk, Cohen, and Ferrell, 2009). ln(Assets) is the natural logarithm of total assets (Compustat item at) in millions for the fiscal year ending before the annual meeting (source: Compustat). Industry Adjusted ROA is the firm’s return on assets (ROA) less average ROA for firms in the same two-digit SIC code 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). Abnormal Returns is size-adjusted returns for the most recent fiscal year ending before the annual meeting (source: CRSP). ***, **, 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).
Table V presents the results for the analysis of the relation between firm level director turnover and votes withheld from directors at annual elections over the 2003 – 2008 period. The dependent variable, \textit{Board Turnover}_{t+1}, 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). \textit{MV Firm – After (Before) Adoption}, is an indicator variable that is equal to one for director-firm-meeting date observations subsequent to (preceding) the adoption of a majority voting election system (source: Allen Report). \textit{Median Votes Withheld}_t, is median % Votes Withheld from directors at the given firm at the year \( t \) annual meeting (source: Voting Analytics). \textit{Industry Adjusted ROA}_t(t+1) is the firm’s return on assets (ROA) less average ROA for firms in the same two-digit SIC code for fiscal year \( t \) (\( t+1 \)), where fiscal year \( t \) is the most recent fiscal year ending before the year \( t \) annual meeting. We calculate ROA as operating income before depreciation (Compustat data item \textit{oibdp}) scaled by average total assets (source: Compustat). \textit{Abnormal Returns}_{t(t+1)} is size-adjusted returns for fiscal year \( t \) (\( t+1 \)), where fiscal year \( t \) is the most recent fiscal year ending before the year \( t \) annual meeting (source: CRSP). \textit{Change in Institutional Holdings}_{t vs. t-1} 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 \( t-1 \) to fiscal year \( t \), where fiscal year \( t \) is the most recent fiscal year ending before 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).