Does Shareholder Voting Maximize Stock Market Value?

Yair Listokin*

January 30, 2008

Abstract
This paper examines the relation between shareholder voting and stock market value from a novel empirical perspective. If voting maximizes value, then the outcome of close proxy contests should not have a systematic effect on stock prices; price setters will anticipate that voting aggregates information efficiently and will build this expectation into the price of the stock before the voting outcome is announced. The paper shows, however, that close dissident victories are associated with significant positive movements in stock prices, while close management victories are associated with negative stock price effects. This suggests that voting outcomes favor management rather than maximizing value, with important policy ramifications. Viewed from a regression discontinuity (RD) design perspective, the study provides unique evidence that dissident control of decision making causes increases in stock value.

* I thank Robert Cooter, Aaron Edlin, Alan Gerber, Henry Hansmann, Daniel Ho, Stephanie Listokin, Roberta Romano, Benjamin Sachs, Alan Schwartz, Eric Talley and participants in the University of California Berkeley Boalt Hall Law and Economics Seminar for helpful comments and discussions and the Oscar M. Ruebhausen Fund for financial support. All errors are my own.
I. Introduction

When shareholders believe that management is inadequate, they have few options under corporate law. One recourse is to purchase the company and install new management. A second is to defeat incumbent management in director elections. Under current Delaware law, both paths often involve proxy contests—shareholders must be convinced to choose new management via the proxy process. Thus, proxy contests are a focal point of corporate law.

The efficacy of proxy contests has been examined from several perspectives. Some examine proxy contests as information aggregation mechanisms and ask whether voting constitutes an efficient way to make corporate decisions. Many of these papers find that voting is not always efficient, even when all parties to a contest enjoy equal resources.

Other scholars emphasize that proxy contests are not evenly balanced contests between similarly situated parties. Proxy contests are expensive. Dissident proxy solicitors only receive compensation for contest expenses when they win. Management, by contrast, is reimbursed under all circumstances. The free rider problem therefore implies that potential dissidents owning a small share of a company devote an inefficiently small amount of resources to proxy contests. Contending that current law is inadequately sensitive to these asymmetries and therefore value-reducing, Lucian Bebchuk (2005, 2007) and others champion several reforms of the proxy process. They

argue that leveling the proxy-contest playing field raises corporate value by enabling shareholders to allocate control of corporate resources to individuals who can use them most efficiently. Others contest this assertion (Macey 2007, Bainbridge 2006), claiming that reforming corporate democracy raises costs without offering corresponding benefits and asserting that proxy contest voting does not necessarily favor management.

To date, there is relatively little empirical research on the relation between corporate voting outcomes and corporate value. The literature that does exist is methodologically flawed by endogeneity and baseline problems or addresses a different topic.

This paper examines the efficiency of corporate voting from a novel empirical perspective. If shareholder democracy in proxy contests maximizes corporate value, then close votes in proxy contests should not cause large movements in stock value, in spite of the fact that the outcome of a closely contested proxy contest should provide new information to the stock market. Rational investors will know that voting maximizes value and capitalize this information into stock prices before a voting outcome is announced. Moreover, a close vote reflects a divergence in shareholder opinion—if half of shareholders support a plan of action and half oppose it, then taking or failing to take the action should have little effect on value, as half of all shareholders will be pleased with any outcome and half will be disappointed.

Conversely, if proxy contests do not always maximize value, then stock prices respond (at least occasionally) to voting outcomes. If the deviations between voting and value systematically favor management, then stock price responses to voting outcomes
are large and systematic.\(^3\) Narrow management victories decrease value, as the informed
price setting shareholder has a more negative view of management’s value than the
decisive voter. Narrow dissident victories increase market value, by contrast, as the price
setting shareholder learns that management’s voting advantage relative to value was not
sufficient to sway the vote outcome.

Combining elements of a regression discontinuity design with event study
methodology, I find evidence that voting does not maximize value and that management
enjoys systematic voting advantages relative to value maximization. In proxy contests
concerning merger votes (which have the greatest importance for corporate value)
dissident victories (merger rejections) are associated with a statistically significant
increase in corporate value of over 7%. When management wins a closely contested
merger-related proxy contest, by contrast, corporate value decreases by approximately
1% to 2%.

Proxy contests over director elections tell a similar, if less pronounced, story.
Narrow dissident victories are associated with a 1% to 3% increase in value, depending
on the sample of stocks described as narrow dissident victories. Narrow management
victories are associated with a decrease in value of approximately 1% to 3%. Again, the
evidence consistently supports those arguing that proxy contest voting systematically
favors management and does not maximize value. Combining all observations into a
regression design suggests that dissidents add about 7% to value relative to management
when voting results are close.

This paper is organized as follows. Section 2 examines the existing literature on
proxy voting. Section 3 describes the theory underlying the empirical test. Section 4
\(^3\) See section 3 for a formal definition of systematic voting advantages.
presents the data and empirical methodology, while Section 5 interprets the results. Section 6 concludes.

II. Voting and Corporate Value

The pioneering works of Manne (1963) and Easterbrook and Fischel (1981) rely heavily on the efficacy of proxy fights, particularly in the context of tender offers. These studies assume that corporate voting maximizes corporate value. This is echoed by regulators such as exchanges, which emphasize the value of a “representative [shareholder] vote”. (NYSE Listed Company Manual Section 310).

Echoing a literature that dates back to Condorcet, Goshen (2001, p. 3) explains that “[u]nderlying the voting mechanism is a statistical proposition that a majority vote for a corporate transaction represents the ‘correct’ choice. If more shareholders believe that a particular transaction is efficient, it probably is.” Goshen notes, however, that insincere voting can undermine the efficiency of voting. Gilson and Schwartz (2001), by contrast, apply the insights of Fedderssen and Pesendorfer (1997) to corporate voting and explain that even sincere voting may yield inefficient results when uncertain shareholder/voters account for other voters’ information quality. Bebchuk and Hart (2002) examine problems with both proxy votes (the dissident’s difficulty in convincing other shareholders to vote for a dissident) and takeovers (the pressure a shareholder feels to tender rather than risk being a minority shareholder in the company under new

---

4 Due to the presence of poison pills at so many companies, a hostile tender offer generally cannot succeed without a proxy contest to change the board of directors or to explicitly approve a merger. See cases in note 1 supra.

5 For a discussion of this literature, see Young (1998).
management) and conclude that a hybrid proxy contest/takeover regime is best. Edelman and Thomas (2005) also find that votes may often lead to inefficient outcomes.

Most of these studies demonstrate that voting does not always yield the value maximizing outcome. They do not demonstrate, however, whether these inefficiencies are systematic, that is, whether the deviation between voting outcomes and corporate value tend to occur in favor of some party or outcome. For example, voting may systematically favor management, such that management always wins a proxy contest when it is the higher value option and sometimes wins when it is the lower value option. Alternatively, voting deviations may be unsystematic in that management not only wins some votes when it is the lower value option but also loses some votes when it is the higher value option or systematically favor dissidents such that dissidents win all votes in which they are the higher value option and win some votes when they are not the higher value option.

Many scholars believe that the deviation between voting outcomes and value maximization systematically favors management. Critics of voting in proxy contests argue that management enjoys many advantages over dissidents including: discretion over the timing of a vote (which is set by management); relationships and contact information for shareholders (dissidents may have to sue to obtain a list of shareholders, while management has been in contact with shareholders for an extended period); unlimited funds from corporate coffers for soliciting proxies (dissidents are only reimbursed for proxy expenses when they defeat management); and the ability to use financial leverage to influence the vote of institutional shareholder (management may
threaten to withhold business from financial institutions that vote against them).

(Bebchuk 2007, pp. 688-693)

Few empirical studies of the proxy process evaluate whether the voting process deviates from value maximization in either systematic or unsystematic ways. Pound (1988) examines the probability of winning proxy contests as a function of a number of characteristics thought to be related to the size of management’s advantage. For example, management’s advantages in shareholder knowledge and campaign resources should be greater when there is more dispersed share ownership, which makes a campaign more costly and complex. Pound’s data supports this hypothesis; dissident victory rates decline as ownership dispersion rises. Unfortunately, many of the characteristics examined by Pound are endogenous to the probability of winning, casting doubt on Pound’s conclusions. For example, shareholder ownership may be more dispersed in firms that are less likely to benefit from dissident proxy victories. In this case, dissidents will be less likely to win proxy contests with dispersed share ownership, even if management enjoys no vote-getting advantage.

Other studies (Dodd and Warner 1983, D’Angelo and D’Angelo 1989, Ikenberry and Lakonishok 1993, and Mulherin and Poulsen 1998) evaluate the stock market responses to proxy contest announcements or other forms of shareholder activism, finding generally positive effects. Proxy contest announcements, however, may affect value in many ways, such as by forcing management to change policies. Therefore, stock market responses to proxy announcements are not informative about the degree to which actual voting outcomes relate to value maximization at the time of the vote. Moreover, these studies cannot disentangle the effect of dissident pressure from the effect of
dissident control. Similarly, Kamar’s (2006) examination of voting on mergers and acquisitions provides evidence on the degree to which companies avoid holding votes. Kamar’s study tells little about the relation between value maximization and voting outcomes because management may prefer to avoid proxy votes even though management enjoys systematic advantages in the voting process.

Bebchuk (2006, p. 677) emphasizes that there are only 12 proxy contests per year in the United States. He argues that this is too few in relation to the many thousands of publicly traded companies in the U.S. He concludes that measures, such as reimbursement of dissidents’ proxy expenses and greater shareholder access to the corporate ballot, are necessary to facilitate shareholder democracy. Macey (2007) disputes this conclusion, emphasizing that there is no baseline against which to measure the number of proxy contests as too many or too few. As a result, Macey rejects Bebchuk’s proposed reforms.

Listokin (2007) finds that management wins an extraordinarily high percentage of close votes on management sponsored proposals, suggesting some systematic managerial advantage in close votes. The votes examined by Listokin, however, generally concern CEO compensation and are seldom the subject of a proxy contest. Therefore, there is no reason to conclude that the patterns found there affect proxy contests, which necessarily involve a dissident side that may be able to offset some managerial advantages in elections.

Romano (2003) and Crejmers and Romano (2007) study the impact of confidential voting and mutual fund vote disclosure regulation, respectively—two policy interventions that advocates believed would mitigate managerial advantages in voting.
Both studies find little impact from the changes. These important findings have two possible interpretations—that management enjoys no voting advantage or that changes in these voting rules do nothing to mitigate management’s advantages. There is no way to distinguish between the two hypotheses, which have differential implications for other corporate voting reforms.

III. A Theoretical Framework of Managerial Advantage in Proxy Contests

As the previous section demonstrated, endogeneity concerns, baseline problems, and data limitations conspire to make general tests of management’s advantage in proxy contests difficult. By combining empirical methodologies, this section attempts to derive such a test.

Assume that the market accurately values the value of a corporation. Let $V_M$ be the value of the corporation with a management victory and let $V_D$ be the value of the corporation when there is a dissident victory. Suppose that the market has rational expectations of the probability of a management victory, $\alpha$. The price before the announcement of a vote is $P_{BV} = \alpha V_M + (1-\alpha)V_D$ and the price after the announcement of a management victory is $P_{AV} = V_M$ and after a dissident victory, the price is $P_{AV} = V_D$.

The market response to the announcement of a management victory, $\Delta P_m$ is $P_{AV} - P_{BV} = (1-\alpha)(V_M - V_D)$ and the response to a dissident victory, $\Delta P_D = P_{AV} - P_{BV} = \alpha(V_D - V_M)$.
If voting maximizes value,\(^6\) then management wins if and only if \(V_M > V_D\). The price of the shares before the vote will reflect this expectation. \(\alpha = 1\) when \(V_M > V_D\) and \(\alpha = 0\) otherwise. Therefore, even if the market cannot perfectly predict the outcome of a vote, the share price of a company should not respond systematically to the outcome when voting maximizes value since the market will assume that any outcome will be the value maximizing one. In terms of the model, \(\Delta P_m = \Delta P_D = 0\).

Stock price should not respond to the announcement of the outcome of a close vote for a second, related reason. If management and dissident control are equally valuable, then there will be a tie vote, but no change in price because each outcome is equally valuable for the company. By this logic, extremely close votes should reflect small differences in valuation between management and dissident control, with correspondingly small changes in stock price.

If voting does not maximize value, meaning that a management victory does not imply \(V_M > V_D\), then stock price may respond to voting outcomes. Indeed, the price changes will be as defined above, \(\Delta P_M = (1 - \alpha)(V_M - V_D)\) and \(\Delta P_D = \alpha(V_D - V_M)\). These quantities will be near zero for votes that are not close regardless of the relationship between \(V_M\) and \(V_D\) because the market anticipates the outcome, ie. \(\alpha \approx 0\) or \(\alpha \approx 1\) and capitalizes the expected outcome into the price.\(^7\)

---

\(^6\) For example, suppose that shareholders are uncertain about the desirability of a decision and each gets a noisy but unbiased signal of the decision’s desirability. By the law of large numbers, when everyone votes according to their private signal, the efficient decision will be taken (Young 1997).

\(^7\) Of course, it is possible that a vote is unexpectedly lopsided. In this case, stock prices will respond to votes that are not close. If investor expectations about voting are rational, however, then close votes should witness the largest average stock price responses because they will be associated with the greatest uncertainty.
Therefore, an empirical analysis of the stock market response to close voting outcomes offers several opportunities. First, it provides a test of the proposition that voting maximizes value. If voting maximizes value, then the market should not respond to the outcome of close votes, as explained above. If voting does not maximize value, however, then the stock market may systematically respond to the outcome of close votes.

Second, the stock market response to close voting outcomes yields information about whether voting does not correspond to value maximization in a systematic way. A systematic voting advantage for management means that management always wins a vote when $V_M \geq V_D$ and sometimes wins when $V_M < V_D$. If voting diverges from value in a systematic way that benefits management, then we would expect average price responses to victories to be $\Delta P_M = (1 - \alpha)(V_M - V_D) < 0$ and $\Delta P_D = \alpha(V_D - V_M) > 0$. The opposite price changes would be expected if voting diverges from value maximization in a systematic way that benefits dissidents.

Third, the magnitude of the stock market response to a voting outcome yields information about the degree to which the outcome was expected. For example, if the market expects management to win almost all elections ($\alpha$ is near 1), then dissident victories should exhibit stock market responses of much larger magnitude than management victories. $|\Delta P_M| = |(1 - \alpha)(V_M - V_D)| < |\Delta P_D| = |\alpha(V_D - V_M)|$ when $\alpha > .5$.

Close votes offer another advantage as an empirical test—a reduced possibility of selection bias. As a general matter, we cannot simply compare outcomes in companies where management wins a proxy contest with outcomes in companies where management loses—the two sets of companies may be different along many dimensions,
any one of which may cause the difference in outcomes. Similarly, the effect of the announcement of a proxy contest on value may be caused by many factors, including signaling about the possibility that the company has room for improvement, improved monitoring and shareholder pressure, management distraction, and the possibility of better management by dissidents.

Comparing a company with a narrow management victory to a company with a narrow dissident victory, by contrast, is less problematic. These two companies have managements with relatively similar abilities to attract votes. It is only the outcome of the proxy contest, and not some other factor, that primarily distinguishes the two companies. This facilitates identification of the causal impacts of management victories or defeats.

The empirical tests of value maximization by voting derived here assume that the market values stocks appropriately. It is of course possible that the market values stocks inaccurately. When this is the case, stock market movements in response to voting outcomes still demonstrate a deviation between voting and market value, but the policy conclusions that follow from this observation are murkier. If the market does a poor job of valuing stock, then it is silly to criticize voting because it deviates from market valuations.

IV. Proxy Voting Data and Summary Statistics

A. Data and Summary Statistics

Georgeson Shareholder’s list of proxy contests in its Annual Corporate Governance Report from the years 2000 through 2006 constitutes the starting point for
my data collection. For each proxy contest listed by Georgeson that was decided by vote, I collect voting data—the date of a vote as well as votes received by both management and dissidents—from each company’s public filings, most commonly a 10-Q or 8-K filing for the appropriate time period. This data was combined with stock market data from CRSP, supplemented by data from Yahoo! Finance for stocks traded on the pink sheets markets. The sample includes all companies in the Georgeson reports with available stock market data and voting data.

There are 96 contested proxy votes in the sample. 2001 witnessed the greatest number of votes (22), while 2005 had the fewest (7). Eight of the proxy votes concerned merger approvals and seventy three concerned director elections. The remaining fifteen contests concerned assorted topics such as confidential voting or the adoption of cumulative voting, with no issue the subject of more than 3 votes. Dissidents won 36 of the 96 proxy votes, for a success rate of 37.5%.

Most proxy contests are competitive. Figure 1 presents a histogram of the percentage of votes received by management in the proxy contests. Management receives an average of only 53% of the total vote in proxy contests and over half of the contests were decided by margins of under 20 percentage points. This competitiveness is not surprising; because dissidents must expend their own funds on proxy contests, it makes little sense to begin a proxy contest with little chance of winning.

Figure 1 also relates to previous research on management’s ability to succeed in

---

8 A number of proxy contests climax in a settlement between the dissident and management. Because the outcome of these settlements is hard to characterize both practically and chronologically, these observations are excluded from the analysis.

9 This starkly contrasts with votes on management sponsored proposals, which are overwhelmingly lopsided. See Listokin (2007).

10 Figure 1 presents data about management’s vote share. In proposals to be acquired by another company, however, management must receive more than 50% of shares outstanding, a more difficult standard.
close elections. (Listokin 2007). As in that paper, management wins very close elections (those decided by margins of no more than 10%) more often than expected (17 out of 24) times. Indeed, if such close elections are effectively be tossups, then management should win this often less than 4% of the time. This alone provides some evidence of managerial advantage in proxy contests.

The overall trend of the data is quite different from Listokin, however. In that paper, I find that management almost never loses votes on management sponsored proposals. Figure 1 indicates, by contrast, that management often loses contested proxy elections, though with a high win rate in extremely close votes. This indicates that management’s advantage in proxy contests is to some degree limited to tipping some percentage of extremely close elections, rather than avoiding almost all losses.

**B. Event Study Methodology**

Figure 1 demonstrates that management losses in proxy contests do occur. As a result, the announcement of voting outcomes yields information to the stock market about the future direction of the company. The less the market was able to predict the outcome, the greater the information content of the announcement of a proxy outcome.

In the next section, I examine the market response to various proxy contest outcomes using standard event study methodology. (MacKinlay 1997, Bhagat and Romano 2003). Using stock market data from thirty days to ninety days (the “estimation window”) before a proxy vote, I use a market model to predict returns and calculate abnormal returns and the distribution of abnormal returns. If voting maximizes market value, then there should not be abnormal returns on days in which voting outcomes are announced, as the market will anticipate that the voting outcome is efficient.
I also examine the following regression.

\[ R_i = \lambda \cdot f(v_i) + \beta \cdot D_i + \varepsilon_i \quad \text{Equation 1} \]

Where \( R_i \) is the abnormal return for stock \( i \) on the day (or days) the news of the proxy contest outcome is released, \( f(v_i) \) is a linear, quadratic or cubic function of the vote share \( v_i \) received by management in the vote, \( D_i = 1(v_i < .5) \) is a dummy variable indicating if management has lost a proxy contest and \( \varepsilon_i \) is an error term. If voting in proxy contests maximizes market value or fails to maximize market value in an unsystematic fashion, then \( \beta = 0 \) because \( f(v_i) \) should control for other characteristics of a proxy contest, such as differential opinions about whether management or dissidents are preferable, that might affect the stock market response. The regression and Figure 2 constitute a variant of a sharp regression discontinuity design. (Imbens and Lemieux 2007). 11

Several methodological questions remain. First, the “event” date on which news of a proxy vote outcome is available to the market is ambiguous. The study uses the day of a vote as the event date. This may not be accurate. While most voting outcome announcements found in simple internet searching are announced on the day of the vote, some votes are announced after the day of the vote. As a result, I include a variety of different length event windows (with resulting differences in standard errors) to capture events that are not incorporated into stock prices on the day of the vote. If the event

---

11 Manipulation of the vote count (McCrary 2007) is a potential concern given Figure 1, which shows a disproportionate managerial ability to win extremely close votes. As a result, the results presented below cannot be interpreted as a simple measure of the causal value of dissident control relative to incumbent control. This study, however, is interested in the relation between corporate voting and market value and manipulation of the running variable does not preclude inferences about this subject.
windows do not capture proxy outcome news, the study is biased towards not finding any significant effects.

Second, different proxy issues are also likely to have different stock price responses. Merger and acquisition contests are different from contested director elections along several dimensions. First, acquisition approval generally requires a majority and occasionally a supermajority (2/3) of total shares outstanding, while director elections require a simple majority of votes cast. Second, mergers and acquisitions are likely to have the largest consequences for corporate value. In a corporation with a staggered board, a dissident proxy victory may not lead to significant changes in corporate value if the victory does not award control of the company to the dissident. As a result, I present several sets of results below, some combining outcomes for merger and director proxy contests and others separating the two categories.

V. Stock Price Responses to Proxy Voting Outcomes

Table 1 and Figure 2 present stock market responses to proxy voting outcomes about mergers and acquisitions. Merger proxy contests are likely to be the most significant for corporate value.

The results are striking. The dissident victories under study were not overwhelming victories; management received almost 50% of votes cast in these votes.\textsuperscript{12} Therefore the vote outcomes were likely both informative and controversial. Yet dissident victories are associated with a cumulative abnormal return of between 7% and 8% over one to three day windows in both all contests and closely contested ones. These

\textsuperscript{12} Management lost the votes because they did not obtain a majority (or in one case a supermajority) of the votes of shares outstanding.
returns are statistically significant at the one percent level in spite of the small sample size (3-4 observations). Moreover, the results are not the artifact of one extreme case. The smallest positive abnormal return associated with a dissident victory was over 4% (see Figure 2). Indeed, the market responds positively to dissident victories even when management receives a majority of votes cast (but not a majority of shares outstanding). These return patterns contradict the hypothesis that voting always maximizes value. If so, this should be anticipated by the market and therefore the market should not respond as it does to the voting outcomes. Second, the deviation between voting and efficiency appears to systematically benefit management ($V_M < V_D$ even in some cases where management wins a vote), as narrow dissident victories raise market value considerably ($\Delta P_D > 0$).

These conclusions are supported by the market response to closely contested management victories. In the one day event window, shareholders bid the price of corporations down upon news of a management victory, in spite of the fact that management garnered more than half of votes cast. The magnitude and statistical significance of these results are considerably lower than in the case of dissident victories - there is no statistical significance for the two and three day windows -- perhaps because management victories are more expected and are therefore incorporated into price expectations to a greater degree.

Table 2 presents a similar but less pronounced story with respect to director election proxy contests. Dissident victories\(^\text{13}\) and close dissident victories are associated with a statistically significant 2.6% cumulative abnormal return over a three day window.

---

\(^{13}\) The magnitude of the positive response to dissident victories goes down to 1.7% but remains statistically significant (the standard error goes down as well) when pink sheets stocks are excluded from the sample of dissident victories. None of the pink sheets stocks are included in the close dissident sample.
following a vote, but only small positive effects are associated with one and two day windows. Close management victories, by contrast, are associated with an almost three percent decline in value over a three day window (with the results again less pronounced over the one and two day windows). As with mergers, there is evidence of systematic pro-management deviation between voting outcomes and stock market value.

Figure 3 combines the merger and director election proxy contests into one larger sample. Figure 3 presents fractional polynomial regressions (with a break at .5) superimposed upon a scatterplot of three day stock market responses to voting outcomes as a function of the vote share received by management. Figure 3 provides graphic support for the proposition that voting systematically deviate from value maximization in favor of management. There appears to be a discontinuity in stock price returns at a management share of .5—when management narrowly loses, prices go up, when management narrowly wins, prices go down.

Regression results (Table 3) following the specification in Equation 1 also support this proposition. After controlling for the impact of vote share on stock price response (contests with a convincing victor are expected and reflect considerable shareholder consensus) using a 4th degree polynomial, dissident victories are associated with a statistically and economically significant 7% increase in corporate value relative to management victories. Control variables such as stock market value, contest type, pink sheet dummies and year dummies do not appreciably alter this estimate. While making causal inferences regarding dissident’s effects on corporate value in this specification is questionable due to potential manipulation of vote outcomes, this measure suggests that

---

14 For votes requiring a majority of shares outstanding, the vote share variable uses the number of shares outstanding as the denominator, rather than the total number of votes cast.
dissident victories increase value, over and above any impact of signaling, dissident pressure or monitoring. At the very least, the regression provides further support for the systematic pro-management deviation between voting results and stock market value.

VI. Conclusion

The data presented in the previous section strongly suggest that voting does not yield the stock price maximizing outcome in all cases. If this were the case, then the market should not respond to voting outcomes. In fact, the market responds in a dramatic fashion to many votes.

Moreover, the stock market responses are not simply large in magnitude but otherwise without pattern. Instead, the modeling framework developed above demonstrates that the pattern of the data \( \Delta P_D > 0, \Delta P_M < 0 \) will occur when voting systematically favors management. In other words, the scholars concerned about management’s many proposed advantages in proxy elections that would enable management to win elections when management is not the value maximizing choice have considerable support.

The data also support the conclusion that dissident control and decision-making, rather than simply enhanced corporate scrutiny or identification of undervalued firms, cause increases in corporate value. This clarifies the sources of the value increase identified by a number of studies into the impacts of activist corporate governance (e.g. Brav et al 2006). The discontinuity results presented above suggest that activist shareholders may not merely be good monitors or signalers, but also value enhancing controlling shareholders.
Several conclusions follow from these results—assuming that stock market valuations are accurate or nearly accurate. First, if shareholder voting does not maximize value, then there is no reason to expect decisions made by shareholders on mergers and acquisitions, the corporate governance linchpins of the Manne and Easterbrook and Fischel theories of the corporation, to operate effectively. Other levers of corporate governance, such as executive compensation and regulation, may need more emphasis.

Second, reforms of shareholder voting may be needed, preferably at the state level to allow for experimentation. For example, an expansion of supermajority rules would offset management advantages. Assuming some (even if imperfect) level of correlation between voting support and efficiency, there should be some supermajority requirement for management that would no longer allow management victory even when

\[ V_D > V_M \].

Such a requirement would presumably lead to a closer connection between voting outcomes and stock prices. So long as the goal of shareholder voting in proxy contests is to maximize value and that the market provides a good estimate of value, then supermajority requirements for management should be efficient relative to simple majority voting requirements.

Supermajority rules are no panacea. Not all management teams have the same capacity to push voting in a favorable direction, so the size of the supermajority requirement will always be debatable. Other reforms, such as dissident subsidies and access to the shareholder ballot, may be needed. While such reforms will undoubtedly introduce costs as well as benefits, the large positive shareholder response to dissidents in close votes suggests that these costs may be justified.
VII. References


Figure 1

Management Vote Share in Contested Proxy Contests
Figure 2: Stock Market Responses to Proxy Contest Outcomes Regarding Mergers

Note: Management vote share is calculated relative to the relevant requirement. If a proposal must receive a majority of shares outstanding to win, then the management vote share is calculated relative to the number of shares outstanding. The management vote share in these cases is therefore lower than it would be if it was calculated as a proportion of votes cast.
Figure 2: Stock Market Responses to Proxy Voting Outcomes

-2
-1
0
1
2
3 Day Cumulative Abnormal Return

0
.2
.4
.6
.8
1
Management Vote Share

2nd order fractional polynomial for mgmt. vote shares<.5
2nd order fractional polynomial for mgmt vote shares>.5
Table 1: Stock Price Responses to News of Proxy Contest Outcomes Regarding Mergers

<table>
<thead>
<tr>
<th>Sample</th>
<th>Dissident Victories in Mergers</th>
<th>Dissident Victories in Close Mergers (dissident vote share&lt;.7)</th>
<th>Close Management Victories (management vote share&lt;.7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Day Window</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Cumulative Abnormal Return (CAR) (Standard Error in Parentheses)</td>
<td>.070 (.013)</td>
<td>.083 (.014)</td>
<td>-.022 (.011)</td>
</tr>
<tr>
<td>Two Day Window</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean CAR (Standard Error in Parentheses)</td>
<td>.064 (.018)</td>
<td>.075 (.020)</td>
<td>-.011 (.016)</td>
</tr>
<tr>
<td>Three Day Window</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean CAR (Standard Error in Parentheses)</td>
<td>.072 (.022)</td>
<td>.080 (.024)</td>
<td>-.008 (.019)</td>
</tr>
<tr>
<td>Management Vote Share of Votes Cast</td>
<td>.48</td>
<td>.54</td>
<td>.60</td>
</tr>
<tr>
<td>Management Vote Share of Shares Outstanding</td>
<td>.40</td>
<td>.47</td>
<td>.42</td>
</tr>
<tr>
<td>Observations</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Notes: The number of votes necessary to win each vote differs. Target votes votes on acquisition generally require supermajorities (e.g. two thirds of votes shares outstanding or majority of shares outstanding). Acquirer votes on acquisitions require a simple majority of votes cast. See, e.g. NYSE Listed Company Manual, Sections 312.03, 312.07
Table 2: Stock Price Responses to News of Proxy Contest Outcomes Regarding Director Elections

<table>
<thead>
<tr>
<th>Sample</th>
<th>Dissident Victories in Director Elections</th>
<th>Close Dissident Victories (dissident vote share&lt;.6)</th>
<th>Close Management Victories (management vote share&lt;.6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Day Window</td>
<td>.009 (.008)</td>
<td>.003 (.004)</td>
<td>-.005 (.010)</td>
</tr>
<tr>
<td>Mean Cumulative Abnormal Return (CAR) (Standard Error in Parentheses)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two Day Window</td>
<td>.019 (.009)</td>
<td>.012 (.007)</td>
<td>-.011 (.015)</td>
</tr>
<tr>
<td>Mean CAR (Standard Error in Parentheses)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three Day Window</td>
<td>.027 (.013)</td>
<td>.027 (.009)</td>
<td>-.029 (.018)</td>
</tr>
<tr>
<td>Mean CAR (Standard Error in Parentheses)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Vote Share of Votes Cast</td>
<td>.36</td>
<td>.45</td>
<td>.54</td>
</tr>
<tr>
<td>Management Vote Share of Shares Outstanding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>34</td>
<td>15</td>
<td>19</td>
</tr>
</tbody>
</table>
Table 3: Regression of Returns on Vote Shares

<table>
<thead>
<tr>
<th></th>
<th>3 day cumulative abnormal return</th>
<th>3 day cumulative abnormal return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Vote Share</td>
<td>-0.29 (0.45)</td>
<td>-0.61 (0.38)</td>
</tr>
<tr>
<td>Management Vote Share Squared</td>
<td>1.05 (1.7)</td>
<td>2.15 (1.57)</td>
</tr>
<tr>
<td>Management Vote Share Cubed</td>
<td>-1.18 (2.32)</td>
<td>-2.62 (2.217)</td>
</tr>
<tr>
<td>Management Vote Share^^4</td>
<td>0.446 (1.062)</td>
<td>1.08 (1.04)</td>
</tr>
<tr>
<td>Dissident Victory</td>
<td>0.077 (0.020)**</td>
<td>0.073 (0.015)**</td>
</tr>
<tr>
<td>Market value (ln)</td>
<td>0.005 (0.003)</td>
<td>0.005 (0.003)</td>
</tr>
<tr>
<td>Merger Vote</td>
<td>0.035 (0.017)*</td>
<td>0.035 (0.017)*</td>
</tr>
<tr>
<td>Year Dummies</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Stock Market Dummies</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
<td>81</td>
<td>73</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.25</td>
<td>0.38</td>
</tr>
</tbody>
</table>

Regression of three day abnormal market return on 4th order polynomial in management vote share, control for type of proxy contest, and effect of dissident victory. Robust standard errors in parentheses
* significant at 5% level; ** significant at 1% level