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Picking Friends Before Picking (Proxy) Fights: How Mutual Fund Voting Shapes Proxy Contests

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Abstract

This is the first comprehensive study of mutual fund voting in proxy contests. Mutual funds tend to vote for dissident nominees at firms with weak operating and financial performance, and when dissidents are hedge funds. Notably, passive funds are more likely to support incumbent management than active funds. We find evidence of a positive selection effect: dissidents are more likely to initiate contests and proceed to voting when shareholders are expected to be more supportive based on both observables and unobservables. Our study demonstrates the pivotal role that institutional investors play in shaping the initiation and outcomes of proxy contests.

Keywords: Mutual fund voting, Proxy contest, Selective targeting, Investor stance

JEL Classifications: G23, G3

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Abstract

This is the first comprehensive study of mutual fund voting in proxy contests. Mutual funds tend to vote for dissident nominees at firms with weak operating and financial performance, and when dissidents are hedge funds. Notably, passive funds are more likely to support incumbent management than active funds. We find evidence of a positive selection effect: dissidents are more likely to initiate contests and proceed to voting when shareholders are expected to be more supportive based on both observables and unobservables. Our study demonstrates the pivotal role that institutional investors play in shaping the initiation and outcomes of proxy contests.

1. Introduction

Over the past two decades the importance of proxy contests, or contested elections for board representation, has increased markedly as shareholder activism has become both an established investment strategy and an important form of corporate governance. From 2007 to 2017, dissident shareholders have won board seats in 51.7% of contested elections, suggesting that proxy contests are highly contentious events. Institutional investors play a pivotal role in shaping contest outcomes for at least two reasons. First, both insiders and dissident shareholders typically own a strict minority of the outstanding target stock, so the votes of the firm's remaining shareholders determine which side prevails. In addition, the low and inconsistent participation rate by retail investors in voting matters implies that the support of a majority of the institutional shareholders of targeted firms is crucial to activist success. "Picking friends," that is, the selection of target firms with pro-activist shareholders, is therefore a first-order factor in an activist's decision whether to initiate a proxy contest.[1]

The disclosure of mutual fund voting records mandated by the U.S. Securities and Exchange Commission ("SEC") in 2003, and the availability of standardized databases such as ISS Voting Analytics, have led to a burgeoning literature analyzing the voting behavior of

[1]Damien Park, the co-chairman of the Conference Board's Expert Committee on Shareholder Activism, summarized the importance of a target shareholder base as follows: "Obtaining a clear understanding of how company shareholders will vote in a contested election is one of the most important components of any activist campaign."

institutional investors in management and shareholder proposals.[2] Due to their irregular disclosure format, voting records from contested meetings have not been systematically covered by standard databases, and hence have not been explored to date. Compared to routine proxy voting, which is usually precatory, voting records in contested elections are arguably more informative about shareholders' voting behavior, as the outcome of the election has greater consequences for all parties involved. In this paper, we add to the literature by studying institutional investor voting in proxy contests using a comprehensive sample collected directly from individual form N-PX filings.

Our first contribution is a detailed descriptive analysis of the range of voting outcomes and their relation to firm, event, and investor characteristics. Because shareholders vote for individual candidates from either the management or the dissident slate of director nominees, their choice set is richer than the binary choice of simply supporting the management or the dissident as documented by the existent literature. Funds may support the full management slate, which accounts for 50.6% of the votes in our sample, or can dissent in various ways. Mild dissension through voting for the partial management slate, where support is withheld from some management nominees, occurs in 5.7% of our sample, while de facto abstention, by turning in a blank ballot, amounts to 1.5% of our sample. Finally, funds may express strong dissension by voting in favor of the partial or full slate of dissident nominees, which represent 18.1% and 24.2%, respectively, of votes in our sample. The more refined set of voting choices not only adds variation that enriches our analysis, but also reveals a novel "voting by withholding" strategy: withhold votes appear concentrated in certain director nominees across mutual funds. Such voting behavior, which we interpret as coordination across witholding funds, is more likely to impact election outcomes, and offers mutual funds a way to express dissent without appearing to directly confront management.

Notably, we find that passive funds are 9-10 percentage points less likely than active funds to vote for the dissident. This gap is considerably larger for passive funds managed by the "Big Three" families (BlackRock, Vanguard, and State Street), which are 20 percentage

[2]The standard voting data provided by ISS Voting Analytics covers votes cast by the top mutual fund families in non-contested meetings for Russell 3000 firms. A growing literature has built on this database including Cai, Garner, and Walkling (2009), Matvos and Ostrovsky (2010), Morgan, Poulsen, Wolf, and Yang (2011), Choi, Fisch, and Kahan (2013), Cuñat, Gine, and Guadalupe (2012), Duan and Jiao (2016), Iliev and Lowry (2015), Malenko and Shen (2016), Kedia, Starks, and Wang (2020), Dimmock, Gerken, Ivkovic, and Weisbener (2018), He, Huang, and Zhao (2019), Bubb and Catan (2019), and Bolton, Li, Ravina, and Rosenthal (2020). This data has also been used to examine the incentives affecting mutual fund voting in studies by Davis and Kim (2007), Matvos and Ostrovsky (2008), Harford, Jenter, and Li (2011), Ashraf, Jayaraman, and Ryan (2012), Butler and Gurun (2012), Cvijanovic, Dasgupta, and Zachariadis (2016), and Bodnaruk and Rossi (2016).

points less likely than active funds to vote for the dissident. Excluding these passive funds shrinks the active-passive gap to 4.4 percentage points. A similar pattern holds at the family-level: the most pro-dissident fund families typically have a low fraction of passive funds, and vice versa. A potential explanation is that passive funds – index and exchange-traded funds – are not rewarded for "beating the index," but are instead motivated to minimize expense ratios and tracking errors (Elton, Gruber, and Busse (2004), Choi, Laibson, and Madrian (2010), Lund (2017), Bebchuk and Hirst (2019)). As a result, they lack incentives to confront the incumbent management.

As expected, mutual funds' support for the dissident is higher when the target firm's performance and valuation are lower, as measured by Tobin's q, return on assets, or stock returns. Presumably, subpar performance makes alternative leadership and strategies more appealing to shareholders. Mutual funds are more likely to vote for hedge fund activists than other types of dissidents, consistent with the belief that activist hedge funds have clear, value-oriented goals and are an effective force of governance (Brav, Jiang, Partnoy, and Thomas (2008)).

Marketplace signals also matter. A dissident enjoys higher support after a favorable stock market return to the campaign announcement, where the abnormal return serves as a proxy for the market's expectation of the dissident's success in achieving her goals. Leading proxy advisory firms, Institutional Shareholder Services ("ISS") and Glass, Lewis & Co. ("Glass Lewis"), are important participants in proxy voting. A "For" recommendation for management by ISS (Glass Lewis) is associated with a 51.3% (32.2%) higher rate in full support for management, and a 26.6% (27.6%) lower rate in full support for the dissident. Consequently, dissidents win proxy contests 69.4% of the time with the blessing from ISS, but 25.3% otherwise. This evidence is consistent with Alexander, Chen, Seppi, and Spatt (2010), who find that ISS's certification is associated with more successful proxy fights by dissidents.

Our second contribution is the estimation of the joint determinants of activists' selection of target firms and individual funds' voting in proxy contests. In such a model, every public firm is a potential target for a proxy contest each year. While each firm's shareholders have a view on the relative merit of the incumbent management over a change, their views are only revealed as votes if a contest actually materializes and proceeds to the voting stage. Thus, the model is set up to take into account the fact that observed votes are not a random selection out of all latent events. Instead, firms are targeted presumably because an activist anticipates high voting support from a friendly shareholder base due to circumstances such as firm underperformance, or to inherent shareholder stance toward activism.

We adopt a parsimonious two-step model developed by Lee (1983). In the first-stage, we estimate a multinomial regression, at the firm-year level, predicting three proxy contest outcomes – voted, settled, or withdrawn – relative to the base outcome of the firm not being targeted by an activist.[3] In the second-stage, we estimate a linear regression, at the fund-event level, to predict individual funds' voting decisions in the subset of firm-year annual shareholder meetings that experience a contested board election. The "Lee bias-correction term," constructed using the first-stage estimates, is added to the second-stage to purge the voting regression of selection bias. The system can be identified, in the absence of an explicitly excluded variable in the first stage, because variables in the two equations are measured at different points in time (due to the time lag between activist targeting and shareholder voting) and because a subset of the variables are constructed at different aggregation levels (at the firm level versus at the fund-firm level).

Our analysis reveals that activists "pick friends" before picking proxy fights, along both observable and unobservable dimensions. The degree of pro-activist stance of a company's shareholder base predicts the occurrence of proxy contests.[4] To measure an individual fund's pro-activist stance, we estimate a linear regression predicting votes with fund and event fixed effects, and extract each fund's fixed effect. We then aggregate each fund's pro-dissident stance to the firm-year level using an ownership-weighted average. In our first-stage targeting regression, a one standard-deviation increase in the pro-activist stance of a firm increases the odds of proceeding into a voted contest by 28% and into a settlement by 10%. These magnitudes are economically large relative to the respective unconditional probabilities, out of all firm-year observations, of 0.51% and 0.80%. However, the pro-dissident stance of a firm has no power in predicting proxy contests that are eventually withdrawn. Therefore, an activist-friendly shareholder base, all else equal, not only attracts activists but encourages them to persist to the voting stage. To a lesser degree, it also motivates the incumbent management to agree to a settlement.

We also find evidence of non-random selection into voting based on unobservables. Compared to a reduced-form regression that does not correct for selection, shareholder

[3] After a proxy contest is announced, management may offer a settlement with concessions that usually include accepting some of the dissident nominees to be included on the management slate in a non-contested election. Or, the dissident may withdraw when the outcome is a likely failure. Otherwise, the contest proceeds to voting. While the focus of this study are voted contests, we refer the reader to Bebchuk, Brav, Jiang, and Keusch (2020) for a detailed analysis on the drivers, nature, and consequences of settlements between activist investors and their target companies.

[4] Our methodology aims to capture investor inherent stance that is unrelated to event circumstances such as firm performance or the activist's track record. This contrasts with the literature that measures investor satisfaction with the incumbent management as in Kedia, Starks, and Wang (2020).

support for dissidents is more sensitive to firm performance when we add the Lee bias correction term in the second-stage.[5] Furthermore, the coefficient on the Lee term is significant, and its sign implies a positive correlation between unobservable variables in the first and second-stage. These results indicate that unobservable factors that lead activists to target certain firms are correlated with high support for dissident nominees, beyond what is predicted by observable variables.

Our voting sample includes mutual fund votes for a subset of proxy contests that were settled or withdrawn before the contested election occurred. These settlements and withdrawals are typically events where the contest is resolved only a few days prior to the scheduled vote. In these contests, many mutual funds had already cast their votes in the expectation that the vote would proceed as planned. Such votes, which have not been explored in the literature, provide a useful counterfactual: they show how shareholders would have voted at firms had the contested election actually taken place.

The sample of early votes provides further evidence in support of dissidents "picking friends" before picking proxy fights. In contests that were settled (withdrawn) at the last minute, 43.8% (82.1%) of mutual funds submitted early votes in favor of the entire management slate. This compares to a support rate of 50.6% for the full sample of voted contests, which suggests that strong support for the dissident induces management to offer a settlement. Conversely, a dissident is likely to withdraw its campaign when it expects low support from shareholders. In addition, we incorporate these early votes into our pro-dissident stance measures and re-estimate our two-step model. Our conclusions are unchanged: dissidents are more likely to target firms with a friendly shareholder base, and unobservable factors that affect targeting are associated with high support from mutual funds.

The rest of the paper is organized as follows. Section 2 introduces the institutional background of voting and disclosure by mutual funds in proxy contests, using contested director elections at DuPont in 2015 as an example. Section 3 describes our sample and provides descriptive statistics. Section 4 presents our main empirical analysis of mutual funds' voting decisions. Finally, Section 5 concludes.

[5] Conditional on the proxy contest taking place, it is either because the target company has underperformed, or because it is a desirable target for unobservable reasons, despite its satisfactory performance. When these two possibilities are pooled together, the relationship between support for the dissident and underperformance is potentially attenuated among the materialized contests without the Lee (1983) bias correction.

2. Institutional Background

2.1. Voting in Proxy Contests

At a corporation's annual shareholder meeting, some or all of its directors are up for election. Most of these elections are uncontested, in that shareholders are asked to vote for a slate of nominees proposed by the incumbent board. In the absence of an alternative, candidates routinely receive overwhelming majority support (Ertimur, Ferri, and Oesch (2017)). About 1.5% of board elections, however, are contested, where a "dissident" shareholder proposes a different slate containing at least one alternative nominee. In most cases, the dissident aims at winning a minority subset of the board seats, or a "minority slate." Our study encompasses all contested events that require direct shareholder voting from 2007 to 2017, including contested director elections and written consent solicitations to replace directors.

After a dissident announces a proxy contest, usually by filing a preliminary or definitive proxy statement in connection with contested solicitations (PREC14A or DEFC14A), both the dissident and incumbent board forward proxy solicitation materials to shareholders, who then vote and return the proxy cards, which are essentially ballot cards, of their preferred group.[6] If the contest is not settled or withdrawn it proceeds to the voting stage and a third-party agent for each side accumulates votes via returned proxies and casts these votes at the shareholder meeting. As a challenger, a dissident is considered to have won a contest if at least one of their nominees is elected.[7]

2.2. Trian Partners' Intervention at DuPont

The proxy fight between E. I. du Pont de Nemours and Company ("DuPont"), an iconic American company, and Trian Partners, a leading activist investor, best exemplifies the underlying institutional framework and the intricacies of our data collection process. Trian Partners first engaged with the management of DuPont in mid-2013. The exchange between the parties extended over a two-year period, centering on changing the firm's conglomerate structure and its corporate governance, reducing excess corporate costs, and modifying capital allocation plans. By early 2015, the parties were unable to settle on board membership for the activist to avert a proxy fight, which took place on May 13,

[6] If a shareholder returns proxy cards from both sides, only the latest submission counts toward the vote tally. In 2016, the SEC proposed a reform to institute a "universal proxy card" system in which competing slates would be presented on a single ballot. The reform has yet to be finalized.

[7] DeAngelo and DeAngelo (1989) and, more recently, Fos (2017) provide additional information about the institutional details and empirical regularities regarding proxy contests.

2015 at DuPont's annual shareholder meeting. At the time, Trian Partners owned 2.7% of DuPont shares, and DuPont insiders owned 0.3%. DuPont shareholders faced the choice to either support Trian Partners by electing its founding partner, Nelson Peltz, and three other dissident nominees, or support the incumbent management team led by CEO Ellen Kullman by re-electing all sitting directors. Both sides launched aggressive public campaigns to win over the remaining institutional investors, who were expected to be the pivotal voters in a seemingly close contest.[8]

Trian Partners lost the high-profile proxy contest, as shareholders rejected all dissident nominees and re-elected all incumbent directors. DuPont claimed victory, earning 53.5% of the vote, but subsequently implemented cost cutting measures and asset spin-offs consistent with Trian Partners' goals. Relevant to this study is the way different asset managers voted their shares. Table 1 provides the actual votes cast by mutual funds affiliated with the top 10 fund families. Several distinct patterns emerge.

[Insert Table 1 here.]

First, DuPont's top mutual fund shareholders are the "usual" names of institutional investors with significant ownership in other S&P 500 index member companies. The top five mutual fund families, BlackRock, American Funds (Capital Group), Vanguard, State Street, and Fidelity, collectively owned 25.4% of DuPont shares. Indeed, Nelson Peltz would have won a board seat had one of the three passive institutions that voted against Trian Partners changed its vote.[9]

Second, there is little disagreement within most fund families, as votes in favor of the dissident are generally clustered at the two extremes of 0% or 100%. We do, however, observe some remaining disagreement within certain families, such as T. Rowe Price; 24% of the group's funds voted for management nominees, while 76% voted for dissident nominees. For this reason, we conduct our main analysis at the fund-level rather than the family-level. While no fund family voted for the partial management slate, some actively managed funds from Fidelity, T. Rowe Price, and Delaware Investments supported a subset of director nominees from the dissident's slate.

[8] According to a USA Today article, DuPont spent $15 million on the proxy contest, while Trian Partners spent $8 million. See, "DuPont spent $15M to keep activist investor off board," by Jeff Mordock, May 19, 2015.

[9] See "Peltz One Big Shareholder Vote Away From DuPont Board Seat, Tally Shows," *The Wall Street Journal*, by David Benoit and Jacob Bunge, May 19, 2015. In the final vote count, according to DuPont's June 9, 2015 8-K/A filing, DuPont's board nominee, Lois D. Juliber, won the fewest votes, at 53.5% of voted shares while Nelson Peltz won 45.8% of voted shares. The difference was about 54 million shares.

Third, and most important, is the near dichotomous stance between passive and active funds. The "Big Three" fund families (BlackRock, Vanguard, and State Street), who manage primarily passive funds, voted almost unanimously for the incumbent management. In contrast, almost all actively managed fund complexes, excluding Franklin Resources, voted for all or a subset of dissident nominees. This difference is consistent with the evidence reported later in the paper that passive funds are less likely than active funds to vote for dissidents in nine of the ten years in our sample.

3. Data and Sample Overview

3.1. Data Sources and Variables

3.1.1. Contested Shareholder Interventions

Both the management and the dissident shareholder are required to file SEC Form DEFC 14A ("definitive contested proxy statement") for shareholders to vote on their respective ballots. We manually download all DEFC 14A filings from EDGAR for the period July 1, 2006 through June 30, 2017. This step results in 410 unique proxy contests. For each contest, we search for the date that the dissident announced the proxy fight, which is typically accompanied by the filing of SEC Form PREC 14A (the "preliminary contested proxy statement") or, in some cases, initiated by a schedule 13D filing (a public disclosure of a beneficial ownership of 5% or more) or a press release. We then search for subsequent proxy filings and 8K/10Q filings to determine whether the shareholder meeting actually took place. If a shareholder meeting did indeed take place, we record the firm name, its CIK and CUSIP numbers, the dissident's name, and the meeting date. This process results in 298 unique contested meetings.

Next, we extract the following information from Form DEFC 14A for both the management's and dissident's proxy cards: the proposal number; the sponsor (management or shareholder); and the text of the proposal. The management proxy card lists director candidates nominated by the incumbent board and management, while the dissident proxy card contains director candidates nominated by the dissident. Each proxy card also includes other management- or shareholder-sponsored proposals, if any.

Because some proxy contests may be missing SEC filings, such as Form 14A or Schedule 13D, we supplement with a comprehensive review of FactSet's SharkRepellent database. This step yields 49 additional contested meetings, bringing our sample to 347 voted proxy

contests.[10] We observe at least one mutual fund vote in 285 of these contests. The remaining 62 events involve over-the-counter traded stocks or small capitalization firms that mutual funds do not hold.

The procedure described above results in an additional 190 proxy contests for which a DEFC 14A filing or a Schedule 13D was submitted but the contest was either settled (155 events) or withdrawn (35 events) before the scheduled meeting took place. We further supplement by searching through PREC 14A filings, Schedule 13D filings, press releases, and SharkRepellent, and find another 295 settled and 204 withdrawn contests. Overall, we find 450 settled events and 239 withdrawn events.

We restrict our universe of proxy contests using several criteria. First, we require that a firm exists in the CRSP-Compustat merged database with a valid market capitalization as of the month-end immediately prior to the meeting date and a valid book value of assets within two years prior to the meeting date. We also drop CRSP share codes that are not equal to 10 or 11. Next, we drop contests where the dissident had nearly zero share ownership in the target firm as of the announcement date of the contest, which we define as fewer than 500 shares and less than 0.01% of outstanding shares. For these contests, economic motives may not be the first order concern for initiating the contest. Our final sample consists of 207 voted proxy contests, 324 proxy contests that were settled and 128 events that were withdrawn before the scheduled contested election.

3.1.2. Mutual Fund Voting Records

The key input to this study is the voting records of registered investment management companies, or U.S. mutual fund companies, which are required to disclose their proxy voting records via annual N-PX filings on the SEC EDGAR website. Because mutual funds do not report their votes in a standardized format, databases such as ISS Voting Analytics do not systematically collect voting records for proxy contests.[11] Different fund families adopt different styles to structure the information provided in their N-PX filings, and, at times, funds within the same family use a variety of formats, complicating the gathering of the voting data.[12] The heterogeneity in reporting styles can be seen in Internet Appendix

[10] Most of the additional events are identified through DFAN 14A (the "proxy soliciting materials") or DEFN 14A (the "definitive proxy statement filed by non management") filings.

[11] Instead, the ISS database covers voting records mostly for non-contested meetings (i.e., management and shareholder proposals) for Russell 3000 firms and additional firms that are held by large mutual fund families. According to ISS, between fiscal years 2004 and 2006, ISS collected voting records by the top 100 families. From 2007 onward, ISS has collected routine voting records by the top 300 families.

[12] For example, some families upload htm filings, other families use the txt format, and some families embed txt documents in htm templates. A number of other families have switched from txt format to htm over

Table IA1, where we include a sample of original voting records by two Vanguard funds and two Northern Lights funds relating to the DuPont proxy contest described in Section 2.2. Vanguard funds file uniformly, while each Northern Lights fund adopts its own unique format. For example, Northern Lights's Covered Bridge Fund did not include the dissident proxy card that they did not vote on, while Northern Lights's Persimmon Long/Short Fund included both the management and dissident cards.

We use a multi-step procedure to extract information from N-PX filings. First, we use several computer scripts to parse all filings by the top 100 mutual fund families for shareholder meetings between July 1, 2006 and June 30, 2017.[13] We extract the following information from each filing: family name, fund name, company name, CUSIP, meeting date, meeting type (annual or special), proposal number, proposal text, sponsor (management or shareholder), management's recommendation, and vote cast for each proposal. From this superset, we identify the votes pertaining to the 207 proxy contests in our sample, matching on company names, CUSIPs, and meeting dates. We then repeat this procedure for the remaining, smaller fund families, by manually downloading their voting records and filtering to the proxy contests in our sample. After combining the datasets collected in these two steps, our final sample comprises 28,999 votes from 5,058 funds, belonging to 536 fund families.

Some fund families outsource portfolio management to sub-advisors to expand product offerings and to gain market share. In theory, and as a general practice, the authority to vote proxies rests with the portfolio manager, but there are exceptions. For example, 25 funds managed by T. Rowe Price voted proxies in the DuPont contest, of which 24 voted in their capacity as a sub-advisor.[14] Following convention, we deem the votes cast by sub-advised funds, with the exception of Vanguard, to be cast by the sub-advising fund family.[15] We retrieve sub-advisory information from the CRSP Mutual Fund database and N-CSR filings.

To date, the theoretical and empirical literature on shareholder voting has considered

our sample period.

[13] According to the CRSP Mutual Fund database, as of December 2016, the top 100 families comprise 85.2% of AUM of all mutual funds. These families hold a similar proportion of voting power.

[14] A sub-advisor's name is usually included in the fund name. For example, "ING T. Rowe Price Equity Income Portfolio" contains "ING," the fund family and investment advisor, and "T. Rowe Price," the sub-advisor.

[15] The Vanguard Group has historically assigned the responsibility of voting Vanguard's equity funds, including sub-advised funds, to its investment stewardship team. However, Vanguard announced in 2019 that by the end of the year its sub-advisors would have full voting power over shares in the mutual funds they manage. See The Vanguard Group's April 2019 *Vanguard Investment Stewardship Commentary*, available at https://about.vanguard.com/investment-stewardship/perspectives-and-commentary.

shareholders as facing a binary choice of voting for either the management or the dissident. However, because the procedures outlined above result in a more comprehensive dataset than typically available, our sample permits a more granular classification of the choice set available to shareholders. Mutual funds have five voting options, ordered in increasing (decreasing) support for the dissident (management): (1) the fund turns in the management proxy card with "For" votes for all management nominees, or "full support for management;" (2) the fund turns in the management proxy card with "For" votes for some but not all management nominees, or "partial support for management;" (3) the fund turns in either, or both, proxy cards without any positive vote, effectively a decision to "abstain;"[16] (4) the fund turns in the dissident proxy card with "For" votes for some but not all of the dissident nominees, or "partial support for dissident;" and (5) the fund turns in the dissident proxy card with "For" votes for all dissident nominees, or "full support for dissident." Not only do our regression analyses benefit from the refined variation in voting outcome, Section 3.3.4 further illustrates that withholding votes in the "partial support" cases constitute an effective strategy in expressing investor preferences which also impacts election outcomes.

Naturally, one can only observe voting outcomes for contests that actually proceed to the voting stage. However, we are able to match a number of voting records to proxy fights that were eventually settled or withdrawn. These events are "eleventh-hour" cases where the settlement or withdrawal occurs close to the scheduled vote. Because mutual funds may submit votes at any time prior to the vote, some funds end up casting votes in these contests under the assumption that the vote will proceed as planned. These votes are voided once the contest is canceled, but the funds did not seek to remove those votes from their N-PX filings. This is likely an unintended and mostly innocuous omission, especially when funds delegate the processing of N-PX filings to a third party. After the settlement, some of the dissident nominees appear on the revised management-issued proxy card and the election proceeds as one that is uncontested. Mutual funds then cast votes on the single set of nominees, whose vote automatically overwrites any votes they might have cast earlier. If the contest is withdrawn, then these votes become irrelevant.

These "accidental" votes, which are new to the voting literature, provide a unique, counterfactual opportunity to observe how shareholders would have voted at non-event firms had a contested election actually occurred. We identify 42 settled and 26 withdrawn

[16]Such "active abstention" has not been discussed in the existent law or finance literature. Internet Appendix Table IA2 provides an example of votes cast by asset manager Wisdom Tree in the proxy contest between Darden Restaurant, Inc. and Starboard Value LP.

proxy contests for which we see voting records in the top 100 fund families' N-PX filings. We then manually search for these 68 events in the filings of the remaining, smaller fund families. Our final sample of votes in settled and withdrawn events comprises 7,989 votes from 2,782 unique funds belonging to 361 fund families. We analyze these early votes in detail in Section 4.4.

3.1.3. Institutional and Mutual Fund Holdings

We use two mutual fund ownership databases: the Thomson Reuters S12 Mutual Fund database and the CRSP Survivor-Bias-Free Mutual Fund database. Both databases cover a broad universe of mutual funds and contain holdings at the security CUSIP level. We download the CUSIP, fund identifier, and number of shares held from each database. While the Thomson Reuters S12 database is at the quarterly frequency, the CRSP Mutual Fund database is at the monthly frequency. We therefore download only March, June, September and December holdings from the CRSP Mutual Fund database to form a superset of mutual fund holdings at the quarterly frequency.

Matching funds between our voting dataset and the ownership databases is nontrivial. First, we match by fund ticker from Form N-PX in the voting data (see Section 3.1.2) to portfolio tickers in the CRSP Mutual Fund database. Second, we use the MFLINKS tables from Wharton Research Data Services ("WRDS") to link each fund in the voting dataset to the Thomson Reuters S12 data, using the provided link between CRSP portfolio number and S12 fund number. Third, for funds in the voting dataset without a link to an S12 fund number, we conduct manual matching by fund names. The matching procedure results in 26,392 (18,495) fund-event observations based on CRSP portfolios (S12 funds).

For each matched fund-event observation, we find the number of shares held as of the quarter prior to the meeting date. We use Thomson Reuters S12 data when available and supplement with CRSP data when missing. To measure each fund's percentage and dollar ownership, we use the shares outstanding and share price fields from the CRSP monthly stock file.[17] We measure ownership analogously at the institution/fund sponsor/fund family level using the Thomson Reuters 13F database.[18]

[17] Following Frazzini (2006), we code as missing values observations when the number of shares held by a fund exceeds the number of outstanding shares at quarter end.

[18] The SEC requires all institutions exercising investment discretion for at least $100 million U.S. publicly traded securities to disclose holdings information in Form 13F within 45 calendar days of quarter-end.

3.2. Event, Fund, and Firm Level Variables

3.2.1. Event Characteristics

Our first set of variables captures event-specific attributes and outcomes. *Dissident win* is an indicator variable coded as 1 if the dissident wins at least one board seat, a winning outcome in a proxy contest. *Support for dissident* is the share of mutual funds voting for the dissident within a given contest, which we describe in detail later in Section 3.3.2. Given the significant impact of leading proxy advisors, especially ISS, in swaying institutional investor opinion, we record their voting recommendations for each contest.[19] We search for each proxy advisor's voting recommendations in filings submitted by the company and the dissident between the announcement of the contest and the meeting date. Since each party has an incentive to publicize a favorable recommendation from a proxy advisor, this process should reveal most of the recommendations made by ISS and Glass Lewis. For the events missing ISS recommendations, we supplement with information from ISS's Voting Analytics database, SharkRepellent, and news articles in Factiva. For each proxy advisor, we collect voting recommendations at the nominee level and create an additional event-level recommendation. *ISS for dissident* is an indicator variable equal 1 if ISS recommends that investors vote for at least one dissident nominee and 0 otherwise; *Glass Lewis for dissident* is constructed similarly. We find 104 "For" and 83 "Against" recommendations by ISS, and 70 "For" and 131 "Against" recommendations by Glass Lewis.

The next set of variables characterizes the dissident. *Hedge fund dissident* is an indicator variable equal to 1 if the dissident is a hedge fund. We proxy for a dissident's experience with the variable *# past events by dissident*, which records the average annual number of interventions the dissident undertakes in the five years preceding a contest.[20] Number counting aside, we further proxy for the activist's commitment in these past engagements with *Past campaign intensity*, a weighted average of three progressive modes of engagement: passive communication (given a value of 1), submission of shareholder proposals (given a value of 2), and more confrontational actions, including the threat of a proxy contest, initiation of an actual proxy contest, a lawsuit, and a takeover bid (given a value of 3).

[19] Leading proxy advisors, especially ISS and to some extent Glass Lewis, have significant sway of up to 30% of institutional votes, according to Cai, Garner, and Walkling (2009), Malenko and Shen (2016) and Li (2018))

[20] We use a comprehensive database of hedge fund activism events launched by hedge funds beginning in 2001, five years before the start of our sample period. The dataset covers all hedge fund activism events in the U.S. and is an extension of the sample used in Brav, Jiang, Partnoy, and Thomas (2008), and Brav, Jiang, and Kim (2015), using the same sample selection criteria. These events are identified mainly through Schedule 13D filings to the SEC, but also includes activism events below a 5% stake identified using news archive searches.

The resulting measure is calculated as follows:

$$Past\ campaign\ intensity = \frac{(\#\ Communication) \times 1 + (\#\ Proposal) \times 2 + (\#\ Confront) \times 3}{\#All\ campaigns}.$$

Last, *Announcement return* is the cumulative abnormal return in excess of the CRSP value-weighted market return over a (-10,10)-day window around the announcement of the proxy contest.

3.2.2. Fund Characteristics

This set of variables captures time-invariant as well as time-variant fund heterogeneity. *Passive fund* is an indicator variable equal to 1 if the fund is passively managed.[21] *Fund total assets* is the dollar value of a fund's equity portfolio, in billions of dollars, and appears in regressions as a logarithm. *Investment as % of fund assets* is a fund's dollar ownership of the target stock as a percentage of its total assets. *Investment as % of firm equity* is a fund's stake in the target company stock as a percentage of the company's outstanding shares. *Holding horizon* is the number of consecutive years in which a mutual fund holds the target stock, assuming changes in portfolio composition occur at the end of the reporting quarter. *Basis-adjusted return* measures a fund's capital gain from its investment in the target company relative to its value-weighted cost basis. Following Frazzini (2006), the cost basis for any fund at a quarter end t is:

$$Basis_t = \sum_{n=0}^{t} Shares_{t,t-n} Price_{t-n} / \sum_{n=0}^{t} Shares_{t,t-n},$$

where $Shares_{t,t-n}$ is the number of shares the fund acquired during quarter $t-n$ that remains on the book at date t. The beginning quarter is censored at 2001Q1.

3.2.3. Firm Characteristics

Several common firm characteristics serve as control variables in our analyses. Market capitalization, MV, is measured in billions of dollars, and appears in the regressions as a logarithm. *Tobin's q* is the sum of book value of debt and market value of equity, scaled

[21] In addition to the CRSP Mutual Fund database classification of funds as an index fund or ETF, we conduct an additional search for indexation-related strings in fund names such as Index, Idx, Indx, INDEX, Ind_ (where _ indicates a space), ETF, Russell, S&P (and its variants such as S & P, S and P, SandP, and SP), DOW (and its variants such as Dow and DJ), MSCI, Bloomberg, KBW, NASDAQ, NYSE, FTSE, Wilshire, Morningstar, 100, 400, 500, 600, 900, 1000, 1500, 2000, 3000, and 5000.

by the sum of book values of debt and equity.[22] Return-on-assets, ROA, is earnings before interest, tax, depreciation and amortization, or EBITDA, scaled by book assets. *Industry-adj. stock return* is the industry adjusted buy-and-hold return during the 12 months prior to the announcement date of the proxy contest. Industry classification is set initially at the SIC three-digit level and we expand to the two-digit, and then one-digit, if needed, to ensure a minimum of five firms. *Leverage* is the ratio of debt to assets, all in book values. *Dividend yield* is common and preferred dividends divided by the market value of common stock plus book value of preferred. *Institutional ownership* and *Mutual fund ownership* are the fractions of shares held by institutional investors and mutual funds at the quarter end before the meeting, respectively, as reported by the Thomson Reuters S12 and 13F databases. Finally, HHI represents industry concentration in terms of the Herfindahl index of sales. We measure HHI at the SIC four-digit level if there are at least five firms in the industry; if not, we measure at the SIC three-digit level.

3.2.4. Construction of Panels

A goal of this paper is to estimate the joint determinants of targeting and voting in proxy contests, which necessitates building two panels at different levels of analysis. The first panel is the *voting* dataset, which includes all events for which we observe mutual fund votes. The unit of observation is the vote cast by each mutual fund (j) in target firm (i) at time (t); the triplet (j, i, t) uniquely identifies a vote, while the pair (i, t) uniquely identifies an event. All time-varying variables, event-level, firm-level, and fund-level, are measured at the disclosure date closest to the contested meeting. For example, return on assets is measured at the closest fiscal year end, basis-adjusted return is measured at the closest quarter end, and market capitalization is measured at the closest month end.

The second panel is the *targeting* dataset, covering the universe of publicly traded firms that are potential targets of proxy contests. The unit of observation is a firm-year (i, t), where fiscal year t runs from July in year $t-1$ to June in year t, following the N-PX reporting convention. The outcome variable, $Targeted$, is an indicator variable equal to one if a dissident initiates a proxy contest during year t.[23] We further decompose the variable $Targeted$ into three unordered outcomes depending on whether the contest is eventually voted, settled, or withdrawn. The majority of the dataset consists of non-target

[22] If the denominator is negative, the ratio is reconstructed as (MV equity + BV assets - BV equity)/BV assets, where MV and BV stand for market and book values, respectively.

[23] We exclude firm-years where a dissident has initiated a proxy contest in a preceding year but the contest has not yet been resolved, and we create distinct firm-year observations for cases where firms undergo more than one proxy contest in a given year.

observations.

We merge all firm-level variables, such as market capitalization and Tobin's q, into the targeting dataset. To incorporate the characteristics of each firm's shareholder base, we also aggregate fund-level variables to the firm-year level using each mutual fund's ownership weights. However, because variables related to dissidents, such as number of past campaigns, are undefined for non-targets, we omit them from the targeting dataset. For target firms, we measure all variables at the closest disclosure date prior to the announcement date of a proxy contest; for control firms, we measure all variables as of March of the fiscal year, reflecting the typical time between the announcement of a proxy contest and the shareholder meeting. It is important to note that the variables in the targeting dataset are measured at the announcement date, while the variables in the voting dataset are measured at the meeting date. All potentially unbounded variables in both panels are winsorized at the 1% level. Internet Appendix Table IA3 provides additional details on the measurement and winsorization of the variables used in our analysis.

3.3. Sample Overview

Because this is the first study to comprehensively explore mutual fund voting in proxy contests, we begin with a detailed descriptive analysis.

3.3.1. Proxy Contests and Targeted Companies

Table 2 gives a broad overview of the 659 proxy contests in our sample. In Panel A, we report the yearly frequency of proxy contests that reached a vote, a settlement, or were withdrawn. The number of proxy contests reached a high of 79 in 2008, fell by nearly a half by 2010, and has most recently averaged 65 events per year over the last three years in the sample. About 31.4% of all proxy contests in our sample resulted in a vote, while 49.2% were settled prior to the shareholder meeting. The remaining 19.4% were withdrawn by dissidents.

[Insert Table 2 here.]

Panel B shows the distribution of events by the Fama-French 12 industry classification groups. The most common industry, Business Equipment, comprises 23.8% of all events, and is over-represented relative to the 17.8% share among non-target firms. Panel C shows that hedge funds are the most common type of dissident, with 268 hedge funds initiating 524 (79.5%) of all contests. Individual investors launch 91 (13.8%) contests, while companies initiate 38 (5.8%) contests.

Table 3 presents statistics on target companies. In columns (1) to (3) of Panel A, we show the average, median, and standard deviation of target firm characteristics as of the announcement of each contest. Column (4) shows the average difference between target firms and matched control firms, where we match to the non-target firm in the same SIC-4 industry and year that is closest in market capitalization. On average, target firms have lower Tobin's q and industry-adjusted stock returns, consistent with the notion that a key objective of proxy contests is to improve target performance. Moreover, dissidents tend to launch proxy contests at firms with more institutional and mutual fund investors, who are expected to be more diligent and informed voters compared to retail investors. These patterns are broadly consistent with recent literature, e.g., Fos (2017).

[Insert Table 3 here.]

In addition, Internet Appendix Table IA4 shows the concentration of ownership by mutual funds within target and non-target firms. For each firm, we sort mutual funds in descending order by ownership of outstanding shares, and count the number of mutual funds required to reach a given percentage ownership threshold. It takes an average (median) of 2.7 (2) funds to reach a collective ownership of 5% at a target firm. While this figure is comparable between target and non-target firms, voted firms start to see more concentrated ownership at the 15% level. This difference is consistent with the idea that dissidents select target firms with a more concentrated investor base to facilitate communication with shareholders.

3.3.2. Mutual Fund Votes Sorted by Target Firm and Event Characteristics

Table 4 summarizes mutual fund voting patterns for the subset of proxy contests that reach the voting stage. In Panel A, we report summary statistics for event-level variables and their relation to voting outcomes. The first three rows reveal that voted contests are highly pivotal events. Dissidents win 51.7% of contests, supporting the hypothesis that both the incumbent management and the dissident shareholder ought to expect that their probability of winning is not significantly below 0.5. Should this not be the case, management would choose to settle or the dissident shareholder would withdraw (Bebchuk, Brav, Jiang, and Keusch (2020)). In comparison, within the average contest, 41.9% of mutual funds vote in favor of the dissident, revealing that when a dissident wins (loses), the margin is relatively small (large). Finally, ISS (Glass Lewis) issues recommendations in support of the dissident 55.6% (34.8%) of the time. The difference in support rates of the two leading proxy advisors echoes the findings of Li (2018) and Bubb and Catan (2019).

[Insert Table 4 here.]

In columns (4) to (13), we partition the sample into high and low levels of each characteristic variable. Within each subsample, we report the percentage of mutual funds choosing each of the five voting options defined in Section 3.1.2. We therefore weigh fund-event observations equally. Internet Appendix Table IA5 repeats the analysis weighing events equally. For continuous variables, we split the sample at the median; for indicator variables, we split the sample into either value of the variable.

Panel A reveals that when ISS changes its recommendation from "For" management to "For" dissident, mutual funds' support rate for the full management slate decreases from 82.3% to 31.0%. Partial support for management falls from 6.0% to 4.5%; partial (full) support for dissident increases from 2.6% (7.8%) to 28.6% (34.4%). Recommendations by Glass Lewis are associated with a similar difference in voting outcomes. It is thus expected that leading proxy advisors' recommendations are correlated with contest outcomes. Indeed, dissidents win 69.4% of the contests supported by ISS and only 25.3% otherwise. Such a difference is comparable to that in voting on uncontested proposals.[24]

When the dissident is a hedge fund, mutual funds vote its full and partial slate 20.3% and 24.6% of the time, compared with support rates of 5.1% and 22.0% otherwise. Mutual funds do not appear unambiguously impressed by the sheer quantity of a dissident's past campaigns, as proxied by the number of past activist engagements. Finally, the average price reaction upon announcement of a campaign is 5.1%, and when the announcement return is above its median, mutual funds are eight percentage points more likely to support the dissident's full slate. This correlation between announcement return and voting support suggests some agreement between traders and voters about the extent to which activism is value enhancing.[25]

Panel B summarizes our fund-level variables. Passive funds, though only 18.6% of all funds in our sample, comprise 42.1% of fund-event observations. The average fund has a portfolio value of $3.9 billion, and has 0.4% of its assets invested in a target firm, which amounts to 0.2% of outstanding stock. As of the meeting date, the average (median) fund has held the target stock for 3.3 (2.3) years, and has earned a basis-adjusted return of 8.1% (1.9%). Columns (4) to (13) imply no association between voting behavior and

[24]The difference is an upper-bound for the actual "sway margin" by ISS due to correlated views of ISS and institutions that subscribe to ISS services. Malenko and Shen (2016) show that ISS influences about 25% of the votes in say-on-pay using a careful identification design.

[25]See Levit, Malenko, and Maug (2020) for a model characterizing the relation between median voters and marginal traders.

fund size, investment as a percentage of fund assets, or investment as a percentage of firm equity. Moreover, long-term shareholders, as measured by holding horizon, are no more pro-management than short-term shareholders, contradicting a popular narrative that activists represent the interest of short-term investors. However, funds who have experienced a higher basis-adjusted return are, unsurprisingly, more likely to support the management.

The average support rates reported in columns (4) to (13) of Panel B suggest that passive funds are more likely to vote for management in proxy contests. Relative to active funds, passive funds are 7.5% less (8.5% more) likely to support the dissident's (management's) full slate. On the other hand, the partial support rates are comparable, suggesting that passive funds are more likely to resort to moderate forms of dissent. Panel A of Figure 1 plots the difference in support rates between active and passive funds for each year in our sample. It is clear that active funds are consistently more likely to support the dissident, but this gap has largely declined in the last two years of our sample. Further, Panel B of Figure 1 provides a visual representation of the active-passive gap reported in Table 4, Panel B for each of the five voting choices. It is evident from their support rates for the full and partial management slates that passive funds are more pro-management than active funds.

[Insert Figure 1 here.]

3.3.3. Voting Patterns by Top Mutual Fund Families in Proxy Contests

As illustrated in the DuPont case in Section 2.2, the largest asset managers are likely to be pivotal voters, especially in close contests. Their voting behavior thus warrants additional discussion. Table 5, Panel A reports voting patterns for the top ten families by assets under management.[26] The top three fund families – BlackRock, Vanguard, and State Street (the "Big Three") – collectively managed about $14 trillion of assets as of December 2017, most of which are passively managed. Vanguard is the most frequent voter in our sample, participating in 90.8% of all proxy contests between 2007 and 2017, followed by BlackRock and Fidelity. The smallest institution among the top 10 asset managers, Northern Trust, voted in 134 proxy contests.

[Insert Table 5 here.]

[26] As in Table 4, we compute average support rates by weighing fund-event observations equally within a given fund family. Internet Appendix Table IA6 repeats the analysis in Table 5 weighing contests equally within a given fund family.

The voting decisions of the top ten mutual fund families affirm a positive relationship between the share of passive funds within a family and support for management. The "Big Three" are generally pro-management: their support rates for the full or partial dissident slate ranges from 16.3% by Vanguard to 37.3% by BlackRock. A significant fraction of funds from BlackRock and State Street vote for partial slates, whether those of the dissident or management, indicating some nuance in their voting decisions. At the other end of the spectrum, Goldman Sachs Funds, American Funds, and Prudential are almost all actively managed. Their support rates for the dissident are considerably higher at 69.2%, 57.14%, and 42.5%, respectively.

In Panel B, we rank fund families by their average support rate for the dissident. We restrict to fund families voting in at least 20% of the proxy contests in our sample and report the five most pro-dissident and the five least pro-dissident families. Gabelli is the most pro-dissident family, followed by Mutual of America, Goldman Sachs Asset Management, Nuveen Investments, SunAmerica Asset Management, with support rates for dissidents ranging from 60.6% to 74.6%. On the other end, Guggenheim Investments is the least pro-dissident family, voting for the dissident in only 10.9% of events. Vanguard and State Street also appear in the list of the least pro-dissident fund families.

3.3.4. Voting by Withholding

While voting affirmatively for individual candidates is the most natural way for shareholders to express their preferences, shareholders are also able to signal their disapproval of some candidates by withholding their votes. Withholding is commonly used in uncontested proposals and precatory elections, where a large share or majority of withheld votes often leads to changes catering to shareholder sentiment (Del Guercio, Seery, and Woidtke (2008)). In contested elections, withholding votes may be considered inferior to voting affirmatively for a preferred candidate for the outcome to aggregate investor preferences (Hirst (2018)). However, as shown in Figure 1, Panel B, close to 6% (18%) of the voted proxy cards in our sample involve withheld votes on the management (dissident) slate. Two frictions are responsible for this phenomenon. First, as discussed in Section 2, the lack of a universal proxy makes it impossible for some individual funds to convey their desired board composition via "mixing-and-matching' of nominees from both ballots. Instead, they compromise by voting for only a subset of nominees from the relatively favored side between management and the dissident. Second, some funds may resort to withholding votes on a subset of management nominees as a way to express dissension without appearing to be anti-management because, after all, they still vote on the management card.

A mutual fund's decision to withhold a vote ought to have an impact when its withholding is concentrated on a nominee that other funds have also decided to withhold their votes on. Such concentrated voting, which we refer to loosely as "coordination," increases the odds that withheld votes materially impact the voting outcome, compared to a situation where investors randomly select which nominees to withhold from. We utilize a statistical test meant to explicitly distinguish between the two types of withholding behavior. We first search for contests where mutual funds return proxy cards – either management's or the dissident's – with affirmative, "For" votes for some nominees and withhold votes for others. We then compare the candidate receiving the most withholding votes with the counterfactual outcome where withholding funds independently and randomly select the individual candidates to withhold from. To account for common voting guidelines within fund families, we conduct the test at the fund family level to err on the conservative side. For each contest, we mark the number of nominees that each fund family withheld on and simulate 10,000 voting choices assuming that each family randomly selected the identity of nominees to withhold on. We restrict the sample to proxy contests where at least two families submit withholding votes, to ensure that our simulations create non-degenerate distributions. For each simulation, we record the maximum number of withheld votes across all candidates to approximate this statistic's distribution under the null hypothesis of non-coordinated voting across fund families. Each contest's simulated distribution allows us to calibrate the α-tails ($\alpha = 10\%$, 5%, and 1%). We then record the percentage of events where the observed maximum withholding statistic exceeds each α-tail. If this percentage exceeds α, the observed votes support the hypothesis of coordinated votes across fund families.[27] It is important to note that such an outcome does not require explicit communication or collusion, and may simply result from funds acting on common information, such as candidates' track records, or public signals, such as proxy advisors' recommendations.

Table 6 reports the results. There are 48 (74) events where funds submitted partial withholding votes on the management (dissident) proxy card. On average, there are 4.8 (3.9) candidates up for election on the management (dissident) card whose names are not listed on the opponent's card. In 60.4% (71.6%) of contests, the number of withholding votes received by the weakest management (dissident) candidate exceeds the 10% threshold under the null; the frequency of exceeding the 1% threshold is 39.6% (55.4%). The p-values for such deviations to occur under the null are all smaller than 0.001. Table 6

[27] Note that we are comparing an extremum statistic against its null distribution, instead of the common mean test.

further demonstrates the role of ISS as a potential coordinating signal. When ISS explicitly recommends which nominees to withhold on, 80.0% (69.8%), of events exceed the 1% tail under the null, higher than the percentage across all events. While the ISS effect is large, we continue to find evidence of coordinated withholding even in the absence of an explicit recommendation from ISS on the identity of candidates to withhold from. When we consider withholding on the management card (dissident card) only in contests where ISS recommends investors to vote on the dissident card (management card), 29.2% (41.7%) exceed the 1% tail under the null.

[Insert Table 6 here.]

Importantly, we find that coordinated withholding materially impacts contest outcomes: 46.4% (67.9%) of management (dissident) candidates who received the highest number of withholding votes were not elected. More importantly, in 26.9% (52.6%) of such cases, the number of withholding votes exceeds the "winning margin," such that the candidate would have been elected if the withhold votes she received were instead cast as affirmative "For" votes. Finally, comparing withheld votes from active and passive funds suggests little disagreement: in most contests, an equal share of active and passive funds agreed on the most-withheld nominee.

4. Mutual Fund Voting in Proxy Contests

4.1. Determinants of Mutual Fund Support for Dissidents

In this section, we use our voting dataset to formally explore the most important variables explaining mutual fund support for dissidents in proxy contests. We estimate the following linear regression at the firm-fund-year level:

$$Vote_{i,j,t} = X_{i,t}\gamma + Z_{i,j,t}\lambda + \alpha_{FF12} + \alpha_t + \alpha_j \text{ (or } \alpha_{i,t}) + \epsilon_{i,j,t}. \quad (1)$$

The dependent variable, $Vote_{i,j,t}$, is the vote cast by fund (j) at firm (i) in year (t). As explained in Section 3.1.2, we classify votes into five ordered levels, which we code as follows: full support for management = 0; partial support for management = 0.25; abstention = 0.5; partial support for dissident = 0.75; and full support for dissident = 1. Because we normalize the range of variation to one, the fitted values for the dependent variable can be interpreted as the probability of supporting the dissident. $X_{i,t}$ is a vector of firm-year level variables, such as firm size and operating performance, while $Z_{i,j,t}$ is a vector

of firm-fund-year variables, such as basis-adjusted return. α_{FF12}, α_t, $\alpha_{i,t}$ and α_j are fixed effects, representing Fama-French 12 industry group, year, event, and funds, respectively.

Table 7 reports the regression results. Column (1) includes industry and year fixed effects; column (2) adds fund fixed effects, which subsume time-invariant fund variables, such as the indicator variable for passively-managed funds. Finally, column (3) incorporates event fixed effects, which subsume both time and industry fixed effects, as well as event-specific variables, such as the dissident's track record. Unless otherwise specified, we use the 5% level as our threshold for statistical significance.

[Insert Table 7 here.]

Columns (1) and (2) show that support for dissidents decreases significantly with market capitalization, suggesting stronger support for dissidents' agendas at smaller firms. Dissidents are significantly more likely to receive shareholder support when the target firm is underperforming, as measured by Tobin's q and each fund's basis-adjusted return. For example, a one-standard deviation decrease in a fund's basis-adjusted return increases the probability that it will support the dissident by 3.1 percentage points. However, basis-adjusted return does not predict support once event fixed effects are included, indicating that past stock returns explain voting behaviour in the cross-section, but not within a given event. In addition, the coefficient on operating performance, or ROA, is significant, but only in the specification without fund fixed effects.

The significant positive coefficient on HHI supports the hypothesis that shareholder governance is more important when product market competition is weaker (Giroud and Mueller (2010)). Furthermore, support is positively correlated with dividend yield and leverage, which tend to be higher for firms operating in mature industries late in their lifecycle. All these firm and industry conditions render "change" at the target firm more appealing.

Hedge fund dissidents receive support that is 13.1 to 14.4 percentage points higher than other dissidents. Interestingly, investors are unimpressed by the sheer volume of activist campaigns launched by a dissident, as it is negatively correlated with shareholder support. Neither the size of investment nor holding horizon are related to shareholder support

Passive funds are about ten percentage points less likely to vote for dissidents. The same pattern is echoed in Bubb and Catan (2019), who find that passive managers are significantly more pro-management when voting on both shareholder- and management-initiated proposals. Because the passive status of a fund is exogenous, in that it is determined at the inception of a fund and does not change over time, its strong relation

with support for management in proxy contests cannot be explained by reverse causality or an omitted factor that affects both variables.[28]

By incorporating fund fixed effects in column (2), the estimates are purged of unobserved fund heterogeneity that may be correlated with the residual in the voting regression. In other words, α_j in equation (1) represents inherent fund stance toward shareholder activism.[29] Without fund fixed effects, the estimates could be biased, because a fund's inherent stance may be correlated with firm characteristics due to (actively-managed) funds' non-random selection of portfolio firms. The high consistency of the coefficients in columns (1) and (2) suggests that endogeneity arising from unobserved fund heterogeneity does not drive our results.

In the same vein, column (3) of Table 7 incorporates event fixed effects ($\alpha_{i,t}$), which filters out potentially endogenous matching between voting funds and events. The coefficient of -0.100 on $Passive\ fund$ indicates that within a given contest, passive funds are 10 percentage points less likely than actively-managed funds to support the dissident. The fact that the coefficient is nearly identical to its counterpart in the pooled cross section suggests that the composition of active vs. passive funds across firms does not impact the estimate for the gap in their pro-dissident stance.

The active-passive gap revealed in Table 7 suggests that the two types of funds may vote in systemically different ways, which we examine in more detail in Table 8. Columns (1) and (2) of Panel A reiterate that passive funds are more likely than active funds to support the management slate, and less likely to support the dissident slate. Conditional on returning the dissident card, passive funds are more likely to withhold votes on certain nominees. The last two columns of Panel A, however, reveal considerable heterogeneity across passive funds. Passive funds managed by the Big Three fund families support the full management slate in 64.6% of contests, significantly higher than the 51.7% support rate of non-Big Three passive funds. Similarly, Big-Three passive funds support the full dissident slate in only 14.0% of contests, while non-Big Three passive funds do so in 22.3% of contests.

[Insert Table 8 here.]

[28] It is worth noting that this result does not contradict Appel, Gormley, and Keim (2019), who show that activism is more likely to escalate to more confrontational interventions, including proxy contests, conditional on activist campaigns, if the target has more passive ownership.

[29] Given the focus of this study, we remain agnostic about the causes for heterogeneity in pro-activist stance among institutional investors. Possible causes include fund family-wide governance policies and the extent of business relations with portfolio firms (Cvijanovic, Dasgupta, and Zachariadis (2016)).

In column (1) of Panel B, we repeat the voting regression in Table 7, but separate the indicator variable *Passive* into two separate variables, *Passive- Big Three* and *Passive-Non Big Three*. The respective coefficients, -0.200 and -0.044, confirm the contrast in voting behavior between the two groups of passive funds. Although both coefficients are significant, the coefficients suggest that Big Three passive funds are four times more pro-management than other passive funds. Overall, these results indicate that the active-passive gap is largely driven by the largest mutual fund families.

Finally, the last two columns of Panel B report separate voting regressions for active and passive funds. Several coefficients are noticeably different across the two subsamples. While passive funds are more sensitive to operating performance (ROA), active funds respond more strongly to investment returns (*Basis-adjusted return*). Further, a passive fund is more likely to support management when the firm represents a large share of its portfolio; the opposite effect holds for active funds, but it the coefficient is not significant at the 5% level.

4.2. Extracting Mutual Fund Pro-Activist Stance from Voting Records

Given that shareholder support determines the winning side in a proxy contest, rational activists should pick battles in companies with a sympathetic shareholder base and try to win over their support. Gauging shareholder support is also necessary given that dissidents and insiders tend to hold quite comparable stakes, and the support of disinterested shareholders is therefore crucial for the success of a campaign.[30] Whether dissidents can count on shareholders as their "friends" is driven by two factors. The first is situational: All shareholders are expected to lean more towards the dissident when the incumbent management performs poorly, as shown in Table 7. The second, and equally important factor, concerns shareholder heterogeneity in their stance toward activism. Some institutional shareholders are more open-minded about shareholder rights while others hold more of a management/board-centric view. In other words, in the same situation there is a spectrum of shareholder friendliness toward the dissident due to their inherent stance.

In regression equation (1), we treat each fund's fixed effect, α_j, as its "pro-dissident stance." Table 7 shows that adding fund fixed effects increases the adjusted R-squared from 12% in column (1) to 20% in column (2), revealing that a large share of the variation in voting outcomes is explained by the identity of the fund alone. We further add event fixed effects ($\alpha_{i,t}$) in column (3) and extract each fund's fixed effect from this final specification

[30] Fos and Jiang (2016) report that in proxy contests, average ownership by incumbent management and dissidents is 10.9% and 9.6%, respectively.

as its stance measure. The inclusion of event fixed effects helps to address endogeneity concerns related to mutual funds' selection of portfolio firms. Specifically, a given fund may tend to hold certain firms where support for dissidents is high due to factors unrelated to shareholders' pro-dissident stance. When we add event fixed effects, each fund fixed effect, α_j, is estimated using within-event variation in voting. A fund with a higher stance measure is therefore more likely to vote for dissidents relative to other shareholders voting *in the same contest*. The inclusion of the event fixed effects does not only filter out potential endogenous matching between firms and some funds, but also isolates fund inherent stance that is orthogonal to circumstances such as firm performance and activist track records. This stance measure is thus designed to capture shareholder inherent "friendliness" that extends beyond satisfaction with the current management team.

[Insert Table 9 here.]

Table 9 summarizes our estimated stance measures. In Panel A, we report the relationship between fund stance and fund characteristics. We first group funds into quintiles based on their stance measure, where the first quintile (fifth quintile) contains the least (most) pro-dissident funds. Within each quintile, we then take the average fund characteristic across all funds. Several patterns emerge. Approximately a third of funds in each of the lowest two quintiles are passive funds, while only 13.5% of funds in the highest quintile are passive, indicating that passive funds are less pro-dissident than active funds. Across all funds, the correlation between stance and passive status is significantly negative (-0.14). In addition, large funds are disproportionately represented in the lowest stance quintile, driven by the concentration of funds from the Big Three fund families. However, there is no noticeable difference across the remaining four quintiles, and across all funds, the correlation between stance and fund size is only -0.04. Finally, there is no clear relationship between stance and the remaining fund characteristics.

In Panel B, we aggregate our stance measures to the family level. Within each fund family, we average across all stance measures, weighing by the number of contests each fund votes in. This allows us to rank fund families by their inherent pro-dissident stance. We report the five most and least pro-dissident fund families, restricting to fund families that vote in at least 20% of the contests in our sample. Compared to Panel B of Table 5, which simply ranks funds based on average support rates, we observe a different ranking for the most pro-dissident fund families in Table 9. Goldman Sachs Asset Management, though supporting dissidents with the third highest rates among all fund families, its pro-dissident stance measure is not among the top five. This suggests that this asset manager tends to

participate in proxy contests where dissidents receive high support from all shareholders. Once adjusting for the "merit" of these contests, which is absorbed by the event fixed effect, Goldman Sachs Asset Management does not appear more pro-dissident relative to its peers. By a similar argument, T. Rowe Price appears as one of the most pro-dissident fund families. At the other end of the spectrum, Vanguard Group, State Street, and Wilmington Trust remain among the least pro-activist asset managers.

4.3. Integrating Mutual Fund Voting in Proxy Contests with Dissident Targeting of Firms

4.3.1. Model Specification

Because the regressions estimated in Table 9 are estimated using only proxy contests that proceed to the voting stage, they are reduced-form, and may not recover mutual funds' true voting behavior. From the dissident's perspective, the decision to initiate a proxy contest involves picking a target from a set of candidate companies, and once the contest is ongoing, deciding whether to proceed to the voting stage, to settle with management, if possible, or to withdraw. Of course, voting outcomes are only observed when the contest does proceed to the voting stage. To analyze this joint system of targeting and voting, we estimate the following parsimonious partial-observability model:

$$Contest^k_{i,t} = W_{i,t}\beta^k + \bar{Z}_{i,t}\eta^k + \alpha^k_{FF12} + \alpha^k_t + u^k_{i,t}, \qquad k \in \{0,1,2,3\} \tag{2a}$$

$$Vote_{i,j,t} = X_{i,t}\gamma + Z_{i,j,t}\lambda + \alpha_{FF12} + \alpha_t + \alpha_j + \epsilon_{i,j,t}, \qquad \text{observed when } k = 1. \tag{2b}$$

Equation (2a) reflects the fact that each firm-year $\{i,t\}$ is a potential target for a proxy contest, with four potential (unordered) outcomes indexed by $k \in \{0,1,2,3\} = \{\text{not targeted}, \text{voted contest}, \text{settlement}, \text{withdrawal}\}$. The coefficients for $k = 0$, corresponding to not being targeted in firm-year (i,t), are normalized to zero.

Equation (2b) predicts $Vote_{i,j,t}$, the vote cast by fund (j) at firm (i) in year (t). Crucially, this decision is observed only if the contest proceeds to the voting stage. Although the vector of firm characteristics relevant for a dissident's targeting decision, $W_{i,t}$, overlaps with the determinants of voting $(X_{i,t})$, we adopt different notations for the two sets of variables for two reasons. First, certain variables, such as dissident track records, are only relevant once targeting materializes, that is, when $k \neq 0$, and are thus omitted from the targeting equation. Second, the variables are measured at different times, as described in Section 3.2.4. $W_{i,t}$ is measured as of the announcement date for targets; for non-targets, it is measured as of March of the fiscal year to approximate when dissidents would have made the decision to not target a certain firm. On the other hand, $X_{i,t}$ is measured just prior to the shareholder meeting, which usually occurs in May or June. Finally, since the

shareholder base is an important part of "picking friends" by dissidents, equation (2a) includes $\bar{Z}_{i,t}$, which aggregates each fund variable $Z_{i,j,t}$ to the firm-year level using each fund's ownership weights, which are proportional to their voting power. It is worth noting that $\bar{Z}_{i,t}$ includes the ownership-weighted average of α_j, measuring the average pro-dissident stance of the shareholder base of targets and non-targets.

The two equations are integrated because the residuals $u^1_{i,t}$ and $\epsilon_{i,j,t}$ are potentially correlated. A company is more likely to be targeted, and a contest is more likely to reach the voting stage rather than be withdrawn, when anticipated (unobservable) shareholder support is high. There is no clear prediction, however, from economic theory as to whether higher shareholder support will favor or disfavor a vote versus a settlement. Since a settlement is mutually agreed upon by both parties, it must deliver to each party higher outcomes than if they were to lose the contest, but not as much as if they were to win. Thus, high shareholder support will encourage the dissident to persist to the voting stage, but will also induce management to offer a settlement with terms that are lucrative to the dissident.[31]

The two-stage multinomial model with partial observability, developed in multiple papers, especially Lee (1983) and then by Dahl (2002) and Bourguignon, Fournier, and Gurgand (2007), is well suited for such a setup. The model is based on the insight in Heckman (1979). We replace the assumption of binary selection with selection into four possible states, and we assume extreme value, rather than normal, distributions for the errors in the selection equations. In the first step, we estimate the probability of each proxy contest outcome using a standard multinomial logit model. We then construct the Lee (1983) bias-correction term for all observations that are associated with a voted contest (i.e., $k = 1$). The term $J = \Phi^{-1}(P^{k=1}_{i,t})$ transforms the probability of a voted contest, $P^{k=1}_{i,t}$, into a standard normal distribution, and $\phi[\Phi^{-1}(P^{k=1}_{i,t})]$ into the corresponding density of a standard normal distribution. Finally, the Lee bias correction term for all contests that reach a vote is calculated as:

$$L_{i,t} = -\frac{\phi[J(P^{k=1}_{i,t})]}{\Phi[J(P^{k=1}_{i,t})]}, \tag{3}$$

which is analogous to the inverse mills ratio in the Heckman (1979) two-step model.[32]

[31] The settlement of an activist campaign is akin to a settlement of a litigation to avert going to a trial in court. The literature on the economics of litigation and settlements (see Spier (2007), Wickelgren (2013) and Daugherty and Reinganum (2017)) provides insights about why and when cases settle. Bebchuk, Brav, Jiang, and Keusch (2020) provide a detailed discussion on the determinants of settlements between firms and activists.

[32] The negative sign in the front of equation (3) is discretionary but we follow the procedure in Lee (1983). Note that it negates the sign of the correlation as we discuss below. We repeat the analysis using the

In the second step, we add $L_{i,t}$ to the linear regression in Equation (2b). This regression is at the fund-firm-year level, and is estimated on the sample of observations with observed votes (i.e., selection state $k = 1$):

$$Vote_{i,j,t} = X_{i,t}\gamma + Z_{i,j,t}\lambda + \eta L_{i,t} + \alpha_{FF12} + \alpha_t + \alpha_j + \epsilon'_{i,j,t}. \tag{4}$$

Analogous to the second-step regression in the standard Heckman two-step model, the presence of the correction term $\eta L_{i,t}$ renders the remaining error term $\epsilon'_{i,j,t}$ orthogonal to the covariates in the regression. The estimate of the coefficient η is informative of the nature of the selection bias because it is *negatively* proportional to the correlation, $corr(\epsilon_{i,j,t}, u^1_{i,t})$. Therefore, a negative coefficient on the Lee correction term suggests a positive correlation between a contest's unobserved propensity to proceed to voting and shareholders' unobserved propensity to support the dissident.

As in the Heckman two-step model, an excluded variable in W, but not in $X \cup Z$, is not strictly required due to non-linearity in equation (3). However, identification based on non-linearity alone is hardly justified, as it tends to have low power and suffers from issues similar to those of weak instruments (French and Taber (2010)). In our setting, we do not believe that there are underlying economic factors that affect targeting but do not affect voting. Instead, identification is strengthened by two different sources of variation. First, the variables used in the two equations are measured at different times due to the gap between the announcement date and the meeting date. The median time lag between the announcement of proxy contests and shareholder voting is 137 days. Second, the variables are measured at different levels of aggregation. While the voting equation includes fund-level characteristics in $Z_{i,j,t}$, the targeting equation includes aggregate, firm-year level variables in $\bar{Z}_{i,t}$. Such a setting is analogous to analyzing firm-level responses to state-level policy changes.

4.3.2. Discussion of the Empirical Results

Table 10 reports the results from estimating the system in (2a) and (2b) using the Lee (1983) two-step approach. The first three columns report the coefficients from the first-stage estimates, predicting each of the three outcomes following the announcement of a proxy contest – voted, settled, and withdrawn – relative to the outside option of a firm not being targeted in a given year. In the fourth column, we show the second-stage voting regression with the Lee bias-correction term. Several results are insightful.

Heckman two-step model in Internet Appendix Table IA8.

[Insert Table 10 here.]

First, the pro-dissident stance of a company's shareholder base predicts the occurrence of a proxy contest, whether it proceeds to the voting stage (significant at the 1% level) or to a settlement (significant at the 10% level). Moreover, the coefficient associated with the voted state is 2.5 times as large as that of the settled state. Translating into "odds ratios," which are exponentiated coefficients in logit models,[33] a one-standard deviation increase in the pro-dissident stance of a firm's shareholder base increases the odds of seeing a voted proxy contest by 28% and a settled proxy contest by 10%, relative to the unconditional probabilities of 0.51% and 0.80% across all firm-year observations. The ordering of these coefficients across the three outcomes strongly supports the narrative that dissidents "pick friends" before picking proxy fights. A dissident-friendly shareholder base encourages dissidents to launch proxy contests and persist to the voting stage; it also, to a lesser degree, motivates the incumbent management to offer a settlement in order to avert the fight. On the other hand, and perhaps not surprisingly, shareholders in firms involved in contests that have been withdrawn are indistinguishable from non-targets in their pro-dissident stance.

Second, the coefficient on the Lee bias-correction term in the second-stage is negative and significant, indicating that dissidents are more likely to target firms with unobservable characteristics that predict stronger shareholder support, beyond the predictive ability of the variables included in the regression, including the measured stance of shareholders.[34] In other words, "picking friends" by dissidents is based on information that is hard to measure and quantify, suggesting that dissidents conduct sophisticated research to identify firms whose shareholders favor a change.

Third, compared to the reduced-form regression reported in column (2) of Table 7, which includes fund fixed effects, shareholder support for the dissident becomes more sensitive to firm characteristics. The coefficients on Tobin's q and basis-adjusted return are larger and the coefficient on return on assets turns significant. This difference can be attributed to attenuation bias in the reduced-form regression due to non-random selection by dissidents. Suppose, for example, that firm underperformance contributes to the merit of a dissident's agenda. Then, in a hypothetical world in which shareholders are asked to choose between

[33]The exponentiated coefficients in logit models correspond to the change in the "odds ratio," or $P(Y = 1)/P(Y = 0)$ where Y is the dependent variable for a one-unit change in the independent variable. When the probability of a positive outcome (e.g., a proxy contest) is small, the odds ratio is approximately the probability itself.

[34]The t-statistics reported in Table 10 are unadjusted for generated regressor bias. In Internet Appendix Table IA9, we use a bootstrap procedure to compute adjusted t-statistics.

the incumbent and "change" at the shareholder meeting each firm-year, we would observe that shareholders are more likely to vote for change in underperforming firms. However, when a proxy contest does take place, it is either because the target company, other things being equal, is underperforming, or because it is a desirable target for unobservable reasons despite its satisfactory performance. When these two possibilities are pooled, the relationship between support for dissidents and underperformance is attenuated among the materialized contests. The integrated model thus reveals the full impact of firm performance on shareholder voting.

Because our stance measures are estimated using the entire sample of voted events, but are used to predict targeting at any point throughout our sample, we implicitly assume that dissidents have more information about the pro-dissident stance of shareholders than the researcher does. For example, shareholders can learn about a firm's shareholder base by meeting directly with large shareholders or retaining professional proxy services. We relax this assumption in the analysis reported in Internet Appendix Table IA7, by constructing the stance measures using only proxy contests that have occurred up to the year of targeting. We re-estimate the Lee correction model and find qualitatively similar results.

Finally, we recognize that our model focuses on addressing selection into voting among the universe of firm-year observations. In this setup, dissidents take the shareholder base of potential targets as given. Another dimension of selection that may impact the targeting-voting dynamics is the extent to which active funds choose their portfolio holdings based on their propensity to support the dissident if a proxy contest materializes. We address this issue in two ways. First, we repeat the second-stage regression using only passive funds, where the possibility of discretionary investment is not an issue; results are shown in Internet Appendix Table IA10. Second, in the Appendix, we model investor turnover after the announcement of a proxy contest (and potentially before the record date). We find that mutual fund shareholder turnover around proxy contests does not exceed the normal frequency of portfolio reshuffling, and that the new shareholders neither exhibit pro-dissident stance nor vote in a systematically different way from current shareholders. We conclude that investor selection is unlikely to affect our main results.

4.4. Integrating Votes in Voted, Settled, and Withdrawn Contests

Our analysis of mutual fund voting has so far focused on the subset of proxy contests that proceed to a vote, because these are the only events for which we observe a full sample of voting records. However, as we mention in Section 3.1.2, we observe additional voting records for a subset of settled and withdrawn contests that were resolved just before the shareholder meeting. This sample, though incomplete, provides a rare opportunity to

observe a "counterfactual," i.e., how shareholders would have voted in proxy contests at firms that did not actually experience a proxy contest.

Since this is the first time in the literature that votes in settled and withdrawn proxy contests have been documented, we begin with an overview of this unique data. Table 11, Panel A, shows that we are able to locate fund votes in 42 (out of 324) settled contests and 26 (out of 128) withdrawn contests. Within this subset, we observe votes by a majority (70-72%) of the funds that held the stock at the time of the meeting. In the settled contests, management receives unusually low shareholder support: the average vote for the full management slate is 43.8%, compared to an average of 50.6% for voted contests. Similarly, dissidents in the set of withdrawn contests receive near zero shareholder support, compared to 24.2% (18.1%) support for the full (partial) dissident slates in voted contests. It is important to note that it is the dissident who "picks the fight" and can thus withdraw voluntarily from the contest. On the other hand, if management expects to lose the vote by a large margin, they can offer a settlement acceptable to the dissident. The disparity in the support rates suggests that both sides of a contest closely heed to cues from shareholders, and will not proceed to the final battle if their "friends" are not present. Finally, while the track records of dissidents in settled contests with early votes are slightly weaker than those of dissidents in voted contests, the track records of dissidents in withdrawn events are markedly weaker: dissidents are less likely to be hedge funds and have previously launched fewer and less intense campaigns.

[Insert Table 11 here.]

Because we observe votes in only a subset of the settled and withdrawn events, Panel B explores whether these events are distinct from the broader sample of settled and withdrawn events. The only significant difference is in the time between the resolution of the contest and the date of the scheduled vote. On average, the settled (withdrawn) events that have early votes are resolved with 5.5 (4.0) days to spare, compared to 48 (32) for the broader set of settled and withdrawn events. No firm characteristic, including shareholders' pro-dissident stance, appears different between the samples with and without observed votes.

Panel C shows which fund characteristics predict early votes in settled and withdrawn contests. The only significant predictors are the fund's passive status and holding horizon. If a fund is passively managed, or if a fund has held a position for a long time, it is more likely to have an established routine of casting votes at the firm, and hence is more likely to cast votes early, some of which end up preceding to an eventual settlement or withdrawal. Since passive funds tend to be significantly more pro-management than active funds, as

shown in Tables 8 and 9, a low pro-dissident stance is associated with a higher likelihood of early votes. If we include both the passive indicator and pro-dissident stance, the latter coefficient becomes insignificant.

The results from Panels B and C in Table 11 suggest that a mutual fund's decision to submit an early vote to a contest that results in a settlement or withdrawal is likely driven by routine, administrative voting procedures. Therefore, these additional votes may permit us to more accurately estimate each fund's pro-dissident stance. In Table 12, we repeat the analysis in Table 10 with first-stage stance measures estimated from the expanded sample. For economy of space, we report the coefficients directly associated with the "picking friends" effect: the coefficients on shareholder stance in the first-stage regression predicting the three contest outcomes, and the coefficient on the Lee bias-correction term in the second stage.

[Insert Table 12 here.]

In Panel A, we restate the results in Table 10 to facilitate comparison. In Panel B, we pool the additional votes from settled and withdrawn contests into the sample of voted contests, and use this pooled sample to estimate pro-dissident stance. Because there are considerably more voted events, these stance measures may insufficiently reflect the information contained in the settled and withdrawn events with early votes. We therefore present a third stance measure, where we re-sample with replacement from the settled and withdrawn events, such that the sample used to estimate stance contains the same number of settled and withdrawn events in the entire sample (324 and 128, respectively). We repeat this procedure 500 times and take each fund's average stance measure across bootstrap subsamples.

Our qualitative inferences are unchanged when we add these alternative stance measures to the first-stage: shareholder stance predicts the occurrence of voted and settled proxy contests, but not withdrawn contests. Moreover, shareholder stance has a stronger effect on the probability of reaching a vote than reaching a settlement. Finally, the coefficient on the Lee bias-correction term is negative and significant across all specifications, confirming a positive correlation between unobservable factors that lead dissidents to target certain firms and unobservable factors that lead shareholders to support dissidents if the vote occurs.

5. Conclusion

Using a comprehensive sample of proxy contests and mutual fund voting records from 2007 to 2017, we study the joint determinants of mutual funds' voting decisions and

dissidents' target selection. Weaker firm performance and valuation, as measured by Tobin's q, return on assets, and stock returns, predict higher mutual fund support for dissident nominees. Passively-managed funds are significantly less likely than active funds to vote for the dissident. In addition, we find a "picking friends" effect along both observable and unobservable dimensions. Firms whose shareholders have a high pro-activist stance, as revealed by funds' voting records, are more likely to experience proxy contests that proceed to the voting stage or are settled. Further, the correlation between the unobservable determinants of dissidents' targeting decisions and mutual funds' support for dissident nominees is positive. Overall, our study demonstrates the pivotal role that institutional investors play in shaping outcomes of proxy contests between management and dissident shareholders.

References

Admati, Anat R. and Paul Pfleiderer, 2009, The "Wall Street Walk" and Shareholder Activism: Exit as a Form of Voice, *Review of Financial Studies* 22, 2645-2685.

Aggarwal, Reena, Pedro A. Saffi, and Jason Sturgess, 2015, The Role of Institutional Investors in Voting: Evidence from the Securities Lending Market, *The Journal of Finance* 70(5), 2309-2346.

Alexander, Cindy, Mark Chen, Duane Seppi, and Chester Spatt, 2010, Interim news and the role of proxy voting advice, *Review of Financial Studies* 23, 4419-4454.

Appel, Ian R., Todd A. Gormley, and Donald B. Keim, 2019, Standing on the shoulders of giants: The effect of passive investors on activism, *Review of Financial Studies* 32(7), 2720-2774.

Ashraf, Rasha, Narayanan Jayaraman, and Harley E. Ryan, 2012, Do pension-related business ties influence mutual fund proxy voting? Evidence from shareholder proposals on Executive compensation, *Journal of Financial and Quantitative Analysis* 47(3), 567-588.

Bebchuk, Lucian, and Scott Hirst, 2019, Index Funds and the Future of Corporate Governance: Theory, Evidence, and Policy, *Columbia Law Review* 119, 2029-2146.

Bebchuk, Lucian, Alon Brav, Wei Jiang, and Thomas Keusch, 2020, Dancing with activists, *Journal of Financial Economics* 137(1), 1-41.

Bolton, Patrick, Tao Li, Enrichetta Ravina, and Howard Rosenthal, 2020, Investor ideology, *Journal of Financial Economics* 137(2), 320-352.

Brav, Alon, Wei Jiang, Frank Partnoy, and Randall Thomas, 2008, Hedge fund activism, corporate governance, and firm performance, *Journal of Finance* 63(4), 1729-1775.

Brav, Alon, Wei Jiang, and Hyunseob Kim, 2015, The real effects of hedge fund activism: Productivity, asset allocation, and labor outcomes, *Review of Financial Studies* 28(10), 2723-2769.

Brav, Alon, Matthew D. Cain, and Jonathon Zytnick, 2020, Retail Shareholder Participation in the Proxy Process: Monitoring, Engagement, and Voting, working paper, Duke University.

Bubb, Ryan, and Emiliano Catan, 2019, The party structure of mutual funds, working paper, New York University.

Butler, Alexander W., and Umit G. Gurun, 2012, Educational networks, mutual fund voting patterns, and CEO compensation, *Review of Financial Studies* 25, 2533-2562.

Bodnaruk, Andriy and Marco Rossi, 2016, Dual ownership, returns, and voting in mergers, *Journal of Financial Economics* 120, 58-80.

Bourguignon, Francois, Martin Fournier, and Marc Gurgand, 2007, Selection Bias Corrections Based on the Multinomial Logit Model: Monte-Carlo Comparisons, *Journal of Economic Surveys* 21(1).

Cai, Jie, Jacqueline L. Garner, and Ralph A. Walkling, 2009, Electing directors, *Journal of of Finance* 64(5), 2389-2421.

Choi, James J., David Laibson, and Brigitte C. Madrian, 2010, Why does the Law of One Price fail? An experiment on index mutual funds *Review of Financial Studies* 23(4), 1405-1432.

Choi, Stephen, Jill Fisch, and Marcel Kahan, 2013, Who calls the shots? How mutual funds vote on director elections, *Harvard Business Law Review* 3, 35-81.

Cuñat, Vicente, Mireia Gine, and Maria Guadalupe, 2012. The vote is cast: The effect of corporate governance on shareholder value, *Journal of Finance* 67, 1943-1977.

Cvijanovic, Dragana, Amil Dasgupta, and Konstantinos E. Zachariadis, 2016, Ties that bind: How business connections affect mutual fund activism, *Journal of Finance* 71(6), 2933-2966.

Cvijanovic, Dragana, Moqi Gronen-Xu, and Konstantinos E. Zachariadis, 2020, Free-riders and underdogs: Participation in corporate voting, working paper, Queen Mary University of London.

Dahl, Gordon B., 2002, Mobility and the return to education: Testing a Roy Model with multiple markets, *Econometrica* 70(6), 2367-2420.

Daughety, Andrew F. and Jennifer F. Reinganum, 2017, Settlement and trial: Selected analyses of the bargaining environment, In: Parisi, F. (Ed.), *Oxford Handbook of Law and Economics*. Oxford University Press, Oxford, 229246.

Davis, Gerard F. and E. Han Kim, 2007, Business ties and proxy voting by mutual funds, *Journal of Financial Economics* 85, 552-570.

DeAngelo, Harry and Linda DeAngelo, 1989, Proxy Contests and the Governance of Publicly Held Corporations, *Journal of Financial Economics* 23(1), 29-59.

Del Guercio, Diane, Laura Seeery, and Tracie Woidtke, 2008, Do boards pay attention when institutional investor activists "just vote no"?, *Journal of Financial Economics* 90(1), 84-103.

Dimmock, Stephen G., William C. Gerken, Zoran Ivkovic, and Scott J. Weisbener, 2018, Capital gains lock-in and governance choices, *Journal of Financial Economics* 127(1), 113-135.

Duan, Ying and Yawen Jiao, 2016, The role of mutual funds in corporate governance: Evidence from mutual funds' proxy voting and trading behavior, *Journal of Financial and Quantitative Analysis* 51, 489-513.

Edmans, Alex, 2009, Blockholder Trading, Market Efficiency, and Managerial Myopia, *Journal of Finance* 64, 2481-2513.

Elton, Edwin J., Martin J. Gruber, and Jeffrey A. Busse, 2004, Are investors rational? Choices among index funds, *Journal of Finance* 59(1), 261-288.

Eritmur, Yonca, Fabrizio Ferri, and David Oesch, 2017, Understanding Uncontested Director Elections, *Management Science* 64(7), 3400-3420.

Fos, Vyacheslav and Wei Jiang, 2016, Out-of-the-money CEOs: Private control premium and option exercises, *Review of Financial Studies* 29, 1549-1585.

Fos, Vyacheslav, 2017, The disciplinary effects of proxy contests, *Management Science* 63(3), 655-671.

Frazzini, Andrea, 2006, The disposition effect and underreaction to news, *Journal of Finance* 61(4), 2017-2046.

French, Eric and Christopher Taber, 2010, Identification of models of the labor market, *Handbook of Labor Economics* 4a, Elsevier.

Giroud, Xavier, and Holger M. Mueller, 2010, Does corporate governance matter in competitive industries? *Journal of Financial Economics* 95, 312-331.

Harford, Jarrad, Dirk Jenter, and Kai Li, 2011, Institutional cross-holdings and their effect on acquisition decisions, *Journal of Financial Economics* 99, 27-39.

He, Jie, Jiekun Huang, and Shan Zhao, 2019, Internalizing governance externalities: The role of institutional cross-ownership, Journal of Financial Economics 134(2), 400-418.

Heckman, James J., 1979, Sample selection bias as a specification error, *Econometrica* 47(1), 153-161.

He, Ellen, and Tao Li, 2017, The benefits of friendship in hedge fund activism, working paper, University of Florida.

Hirst, Scott, 2018, Universal Proxies, *Yale Journal on Regulation* 35(2) 437-511.

Iliev, Peter and Michelle Lowry, 2015, Are mutual funds active voters? *Review of Financial Studies* 28(2), 446-485.

Jiang, Wei, Tao Li, and Danqing Mei, 2018. Influencing control: Jawboning in risk arbitrage, *Journal of Finance* 73(6), 2635-2675.

Kedia, Simi, Laura Starks, and Xianjue Wang, 2020, Institutional investors and hedge fund activism, *Review of Corporate Finance Studies*, forthcoming.

Lee, Lung-Fei, 1983, Generalized econometric models with selectivity, *Econometrica* 51(2), 507-512.

Levit, Doron, Nadya Malenko, and Ernst Maug, 2020, Trading and shareholder democracy, working paper, University of Washington.

Li, Tao, 2018, Outsourcing corporate governance: Conflicts of interest within the proxy advisory industry, *Management Science* 64(6), 2951-2971.

Li, Sophia Zhengzi, Ernst Maug, and Miriam Schwartz-Ziv, 2019, When shareholders disagree: Trading after shareholder meetings, working paper, Rutgers Business school.

Lund, Dorothy Shapiro, 2017, The case against passive shareholder voting, *Journal of Corporation Law* 43.

Malenko, Nadya and Yao Shen, 2016, The role of proxy advisory firms: Evidence from a regression-discontinuity design, *Review of Financial Studies* 29(12), 3394-3427.

Matvos, Gregor and Michael Ostrovsky, 2008, Cross-ownership, returns, and voting in mergers, *Journal of Financial Economics* 89, 391-403.

Matvos, Gregor and Michael Ostrovsky, 2010, Heterogeneity and peer effects in mutual fund proxy voting, *Journal of Financial Economics* 98, 90-112.

Morgan, Angela, Annette Poulsen, Jack Wolf, and Tian Yang, 2011, Mutual funds as monitors: Evidence from mutual fund voting. *Journal of Corporate Finance* 17, 914-928.

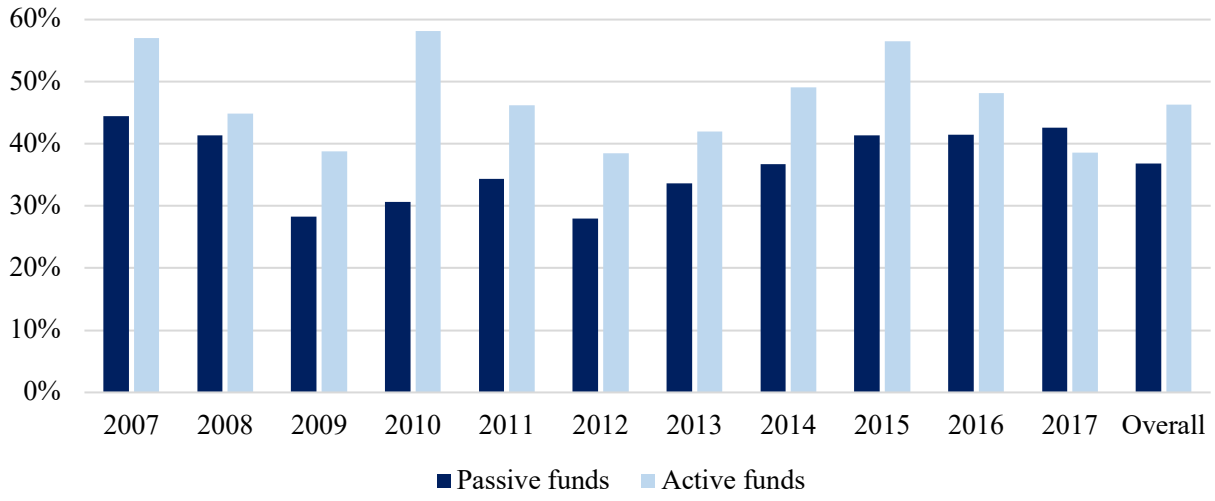
Spier, Kathryn, Litigation, 2007, In: Polinsky, M., Shavell, S. (Eds.), *The Handbook of Law and Economics*. North Holland, Amsterdam, 259342.

Wickelgren, Abraham L., Law and economics of settlement, 2013, In: Arlen, J. (Ed.), *Research Handbook on the Economics of Tort Law*. Edward Elgar Publishing, Cheltenham, 330-359.

Figure 1: Passive and Active Fund Support for Dissidents in Proxy Contests

This figure displays support rates by passive and active mutual funds for management and dissident slates of directors in proxy contests over the period July 2006 through June 2017. We define a fund as passively managed if its name includes the indexation-related strings as described in section 3.2.2, or if the fund is categorized as an index fund/ETF in the CRSP Mutual Fund database. We report in Panel A how support for dissidents' full and partial slate of directors varies over time separately for passive and active funds. For each type of fund, we average support, which equals 1 if a fund supports the full or partial dissident slate, and 0 otherwise, across all fund-event observations in a given year. The dark bars plot the average vote for dissidents by passive funds per year. The light bars plot the corresponding average vote in favor of dissidents by active funds. We report in Panel B support rates for (i) full management slate, (ii) partial management slate, (iii) partial dissident slate, and (iv) full dissident slate, separately by passive and active funds. For each type of fund, we average support, which equals 1 if a fund supports the full management/partial management/partial dissident/full dissident slates, and 0 otherwise, across all fund-event observations. We also report rates of abstention by passive and active funds, where a fund abstains if it submits the dissident and/or management's blank proxy cards.

Panel A: Yearly support for dissidents by passive and active funds



Panel B: Passive and active funds' support for management and dissident slates

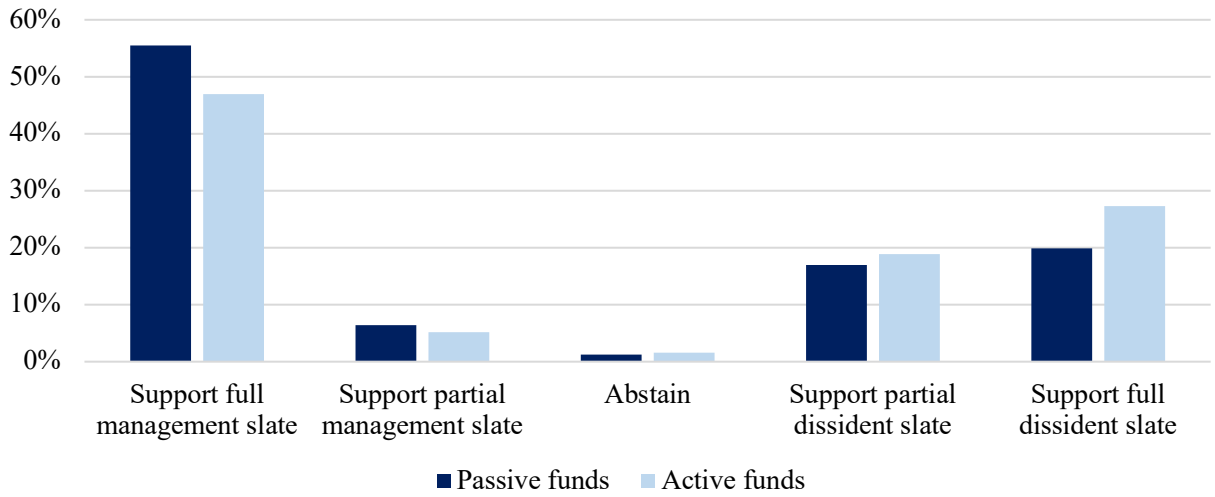


Table 1: Top Ten Fund Family Votes in DuPont's Proxy Contest with Trian Partners

This table provides information on ownership and voting by DuPont's top ten mutual fund families at the quarter end immediately prior to DuPont's proxy contest that took place on May 13, 2015. Fund family holdings are from the Thomson Reuters 13F database and Edgar 13F filings. Fund voting records are from N-PX filings on Edgar. For each fund, we use a computer script to download the fund name, as well as each portfolio firm's name, CUSIP, meeting date, meeting type, proposal number, proposal text, sponsor, management recommendation, and votes cast. We then extract the votes cast at the proxy contest. Column (1) provides the number of funds within a family that hold DuPont shares, and column (2) reports the number and percent of passively managed funds that hold the shares. Column (3) provides each family's aggregate ownership as a percentage of outstanding shares. Columns (4), (5), (7), and (8) provide the fraction of funds that voted for the (i) full management slate, (ii) partial management slate, (iii) partial dissident slate, and (iv) full dissident slate. Column (6) reports the fraction of funds that cast abstention votes.

Fund family name	No. of funds holding DuPont at quarter end before meeting	No. (%) of passive funds	% of outstanding shares	% of funds voting for full management slate	% of funds voting for partial management slate	% of funds abstaining	% of funds voting for partial dissident slate	% of funds voting for full dissident slate
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
BlackRock	47	39 (83%)	6.30%	97.9%	0%	0%	0%	2.1%
American Funds (Capital Group)	11	0 (0%)	6.12%	9.1%	0%	0%	0%	90.9%
Vanguard Group	27	19 (70%)	5.76%	100%	0%	0%	0%	0%
State Street	17	17 (100%)	4.60%	100%	0%	0%	0%	0%
Fidelity Investments	37	0 (0%)	2.66%	2.7%	0%	0%	24.3%	73.0%
Top 5 families	139	75 (54%)	25.44%	66.2%	0%	0%	6.5%	27.3%
T. Rowe Price Group	25	0 (0%)	1.95%	24.0%	0%	0%	24.0%	52.0%
Franklin Resources	6	0 (0%)	1.75%	83.3%	0%	0%	0%	16.7%
Northern Trust Investments	9	7 (78%)	1.42%	0%	0%	0%	100%	0%
Janus Capital Group	6	0 (0%)	1.20%	0%	0%	0%	100%	0%
Delaware Investments	11	0 (0%)	0.87%	0%	0%	0%	90.9%	9.1%
Top 10 families	196	82 (42%)	32.63%	52.6%	0%	0%	20.4%	27.0%

Table 2: Proxy Contests by Year, Industry, and Dissident Type, 2007 – 2017

This table provides descriptive statistics on proxy contests by year in Panel A, by industry in Panel B, and by dissident type in Panel C. We identify proxy contests through contested proxy statements (PREC14A and DEFC14A), 13D filings, as well as SharkRepellent over the period July 2006 through June 2017. We restrict the sample to target firms present in the CRSP-Compustat merged database as of the month-end immediately prior to the meeting date with CRSP common share code equal to 10 or 11. Target firms must have non-zero dissident ownership as of the announcement date of the contest, a valid book value of assets within two years prior to the meeting date, and a valid market capitalization as of the month-end immediately prior to the meeting date. Panel A reports the annual number of proxy contests that were either voted, settled, or withdrawn. In Panel B, columns (1) and (2) provide the number and proportion of contested events within each Fama-French 12 industry classification, column (3) provides the proportion of non-target firm-year pairs within the same Fama-French 12 industries, and column (4) provides the t-statistic for the difference between columns (2) and (3). In Panel C, columns (1) and (2) provide the number and proportion of proxy contests by dissident type, and columns (3) and (4) show the number and proportion of unique investors by dissident type.

Panel A: Proxy contests by fiscal year

	Voted	Settled	Withdrawn	All events
	(1)	(2)	(3)	(4)
2007	13	34	11	58
2008	24	42	13	79
2009	31	29	13	73
2010	13	20	13	46
2011	13	24	11	48
2012	16	19	13	48
2013	18	32	5	55
2014	20	31	7	58
2015	22	38	10	70
2016	19	32	17	68
2017	18	23	15	56
Total	207	324	128	659

Panel B: Proxy contests by Fama-French 12 industry classification

	No. of events	% in industry	% among non-target firms	*t*-stat. of diff. columns (2) and (3)
	(1)	(2)	(3)	(4)
Consumer Non-Durables	20	3.03%	2.33%	1.18
Consumer Durables	29	4.40%	4.58%	-0.21
Manufacturing	50	7.59%	9.40%	-1.59
Energy	22	3.34%	4.09%	-0.97
Chemicals and Allied Products	20	3.03%	2.39%	1.07
Business Equipment	157	23.82%	17.84%	3.97
Telecommunications	21	3.19%	2.54%	1.04
Utilities	8	1.21%	2.74%	-2.39
Wholesale and Retail	73	11.08%	8.94%	1.90
Healthcare, Medical Equipment, and Drug	82	12.44%	12.67%	-0.18
Finance	85	12.90%	20.72%	-4.92
Other	92	13.96%	11.74%	1.76
Total	659	100%	100%	

Panel C: Proxy contests by type of dissident

	No. of proxy contests	% of total	No. of unique dissidents	% of total
	(1)	(2)	(3)	(4)
Hedge fund	524	79.51%	268	68.89%
Individual investor	91	13.81%	81	20.82%
Public and private company	38	5.77%	34	8.74%
Private equity or venture capital firm	5	0.76%	5	1.29%
Insurance company	1	0.15%	1	0.26%
Total	659	100%	389	100%

Table 3: Characteristics of Target and Non-Target Firms

This table provides information on the characteristics of target firms reaching a voted, settled, or withdrawn proxy fight and characteristics of non-target firms. In columns (1)-(3), we report the average, median, and standard deviation of firm characteristics across target firms. For each target firm, we select the non-target firm in the same SIC 4 industry and same year closest in market capitalization. Columns (4)-(5) reports the average and t-stat of the difference in characteristics between target firms and matched control firms. *MV* is market capitalization in billions of dollars. *q* is defined as (book value of debt + market value of equity)/(book value of debt + book value of equity). *ROA* is return on assets, defined as EBITDA/assets. *Leverage* is defined as the ratio of debt to assets, all in book values. *Industry-adj. stock return* is the SIC 3 industry-adjusted buy-and-hold stock return during the 12 months prior to the annoncement date of the proxy contest. *Dividend yield* equals (common dividends + preferred dividends)/(market value of common stock + book value of preferred stock). *Institutional ownership* and *Mutual fund ownership* are the fractions of shares held by institutional investors and mutual funds, respectively, as reported by the Thomson Reuters Ownership Database. *HHI* is the Herfindahl-Hirschman index of sales. All of the variables above, except *Industry-adj. stock return*, *Institutional ownership*, and *Mutual fund ownership*, are measured at the fiscal year end before the announcement date of the contested meeting.

	Summary statistics			Difference with control firm in same industry-year closest in MV	
	Average	Median	Std. Dev.	Avg. Diff.	t-stat. of Diff.
Firms reaching a vote	(1)	(2)	(3)	(4)	(5)
MV ($ billion)	2.327	0.265	8.076	---	---
q	2.063	1.375	2.296	-0.264	-1.47
ROA	0.058	0.084	0.188	0.004	0.30
Industry-adj. stock return	-0.100	-0.082	0.318	-0.165	-4.52
Leverage	0.208	0.152	0.224	0.012	0.64
Dividend yield	0.032	0.015	0.050	0.002	0.33
Institutional ownership	0.599	0.686	0.304	0.051	2.25
Mutual fund ownership	0.219	0.213	0.146	0.023	2.15
HHI	0.211	0.153	0.172	---	---
Firms reaching a settlement					
MV ($ billion)	1.769	0.204	6.742	---	---
q	1.962	1.485	1.873	-0.313	-2.34
ROA	0.045	0.070	0.165	-0.012	-0.91
Industry-adj. stock return	-0.110	-0.103	0.333	-0.141	-4.42
Leverage	0.181	0.102	0.205	-0.021	-1.34
Dividend yield	0.031	0.006	0.055	0.005	1.08
Institutional ownership	0.581	0.622	0.306	0.043	2.25
Mutual fund ownership	0.195	0.188	0.133	0.012	1.38
HHI	0.214	0.165	0.171	---	---
Firms with withdrawn fights					
MV ($ billion)	2.544	0.218	13.101	---	---
q	1.966	1.387	1.828	-0.734	-2.61
ROA	0.055	0.076	0.184	0.057	2.63
Industry-adj. stock return	-0.083	-0.093	0.354	-0.135	-2.50
Leverage	0.179	0.067	0.233	-0.015	-0.59
Dividend yield	0.033	0.002	0.061	0.010	1.49
Institutional ownership	0.567	0.619	0.300	0.064	2.36
Mutual fund ownership	0.191	0.176	0.136	0.013	0.90
HHI	0.200	0.155	0.161	---	---

Table 4: Mutual Fund Support by Event and Fund Characteristics

This table provides information on event and fund characteristics in proxy contests that reached a vote. Columns (1)-(3) in Panels A and B provide the average, median and standard deviation for the variables described below. In Panel A, the average, median, and standard deviation are at the event-level, whereas in Panel B the average, median, and standard deviation are at the fund-event-level. *Dissident win* equals 1 if a dissident wins the voted contest, and 0 otherwise. *Event level support for dissident* is the percentage of funds voting for the dissident's full or partial slate in a given event. *ISS for dissident* (*Glass Lewis for dissident)* is an indicator variable equal to 1 if ISS (Glass Lewis) recommends that investors vote for at least one director nominee from the dissident's slate, and 0 otherwise. *Hedge fund dissident* is an indicator equal to 1 if the dissident is a hedge fund, and 0 otherwise. *# past events by dissident* equals the average annual number of interventions the dissident undertakes in the five years preceding a contest. *Past campaign intensity* equals (#Communication × 1 + #Proposal × 2 + #Confront × 3) / #All campaigns, where #Communication is the number of events in which the dissident seeks to communicate with the board/management, #Proposal is the number of events in which the dissident submits shareholder proposals, and #Confront is the number of events in which the dissident threatens to sue or launch a proxy contest, initiates a proxy contest, a lawsuit, a takeover bid or asks for board representation. *Announcement return* is the cumulative abnormal return ("CAR") between -10 days and +10 days around the announcement of a proxy contest. *Passive fund* is a dummy variable equal to 1 for a passively managed fund, and 0 otherwise. We define a fund as passively managed by searching if its name includes the indexation-related strings as described in section 3.2.2, or if the fund is categorized as an index fund/ETF in the CRSP Mutual Fund database. *Fund assets* and *Investment as % of fund assets* are measured at the quarter end prior to the contested meeting. *Holding horizon* is the number of years a fund has held the firm's shares; we deem all consecutive holding quarters up to six months apart to represent the same holding sequence. *Basis-adjusted return* is the percentage deviation of the current stock price from the aggregate cost basis. Columns (4)-(7) and (10)-(13) in Panels A and B provide support rates for (i) full management slate, (ii) partial management slate, (iii) partial dissident slate, and (iv) full dissident slate at low level and high level for each of the characteristic variables. In addition, columns (8) and (9) report abstention votes at low and high levels for each of the characteristic variables. We report the average support rate across all fund-event observations. For *ISS for dissident*, *Glass Lewis for dissident*, *Hedge fund dissident*, and *Passive fund*, low level takes a value of 0, while high level has a value of 1. For all other variables the cutoff for a high- and low-level is the median across the event-level (fund-event-level) values of the characteristic variable in Panel A (Panel B).

Panel A: Event characteristics

				Event level support rate for management or dissident slate									
				Vote for full management slate		Vote for partial management slate		Abstain		Vote for partial dissident slate		Vote for full dissident slate	
	Average	Median	Std. Dev.	Low level	High level	Low level	High level	Low level	High level	Low level	High level	Low level	High level
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Dissident win	51.7%	100%	50.1%										
Event level support for dissident	41.9%	44.3%	34.6%										
ISS for dissident	55.6%	100%	49.8%	82.3%	31.0%	6.0%	4.5%	1.4%	1.5%	2.6%	28.6%	7.8%	34.4%
Glass Lewis for dissident	34.8%	0%	47.8%	60.1%	27.9%	5.9%	5.3%	1.8%	0.8%	16.4%	22.4%	15.9%	43.5%
Hedge fund dissident	78.3%	100%	41.3%	57.0%	49.5%	14.2%	4.2%	1.6%	1.4%	5.1%	20.3%	22.0%	24.6%
# past events by dissident	1.82	0.40	2.85	49.0%	51.5%	9.2%	3.7%	2.0%	1.2%	12.8%	21.1%	27.1%	22.6%
Past campaign intensity	2.01	2.00	1.69	52.2%	49.4%	8.5%	3.7%	1.5%	1.5%	14.8%	20.4%	23.1%	25.0%
Announcement return	5.1%	4.4%	18.6%	54.8%	46.1%	4.6%	6.8%	1.3%	1.6%	19.0%	17.2%	20.3%	28.3%

Panel B: Fund characteristics

				Event level support rate for management or dissident slate									
				Vote for full management slate		Vote for partial management slate		Abstain		Vote for partial dissident slate		Vote for full dissident slate	
	Average	Median	Std. Dev.	Low level	High level	Low level	High level	Low level	High level	Low level	High level	Low level	High level
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Passive fund	42.1%	0%	49.4%	47.0%	55.5%	5.1%	6.4%	1.6%	1.3%	18.9%	17.0%	27.4%	19.9%
Fund assets ($ billion)	3.85	0.34	24.38	50.5%	51.2%	5.9%	6.0%	1.3%	1.2%	18.1%	16.7%	24.3%	24.9%
Investment as % of fund assets	0.43%	0.10%	1.45%	51.3%	50.3%	6.4%	5.6%	1.1%	1.3%	15.9%	18.9%	25.3%	23.9%
Investment as % of firm equity	0.17%	0.02%	0.59%	50.9%	50.7%	5.6%	6.3%	1.1%	1.4%	19.4%	15.4%	23.0%	26.2%
Holding horizon (year)	3.34	2.25	3.26	50.7%	50.9%	5.6%	6.3%	1.6%	0.9%	17.8%	17.0%	24.3%	24.9%
Basis-adjusted return	8.1%	1.9%	38.7%	49.1%	52.5%	5.3%	6.6%	1.5%	0.9%	18.5%	16.3%	25.6%	23.6%

Table 5: Mutual Fund Voting in Proxy Contests by Fund Family Subsamples

This table provides information on proxy voting by selected subsamples of mutual fund families. Panel A reports proxy voting by the top ten mutual fund families by assets under management ("AUM"). We exclude Pacific Investment Management Company from our list as it is primarily a fixed income fund company. To calculate support for the (i) full management, (ii) partial management, (iii) partial dissident, and (iv) full dissident slate, we average support, which equals 1 if a fund supports the full management/partial management/partial dissident/full dissident slates, and 0 otherwise, across all fund-event observations within a family. Similarly, we also calculate percentage of abstentions, where a fund abstains if it submits a blank dissident and/or blank management proxy card. Panel B provides information on proxy voting by the most and least pro-dissident fund families among frequent institutional voters. We rank fund families by the sum of support for the full dissident slate and support for the partial dissident slate. Frequent institutional voters are fund companies that voted in at least 20% of the 207 proxy contests between 2007 and 2017. Voting records are obtained from N-PX filings. AUM data are collected from N-CSR, 10-K, 10-Q filings, and fund company websites.

Panel A: Top 10 mutual fund families' voting behavior

Fund family name	AUM as of 2017 ($ trillion)	No. of proxy contests voted	Support for full management slate	Support for partial management slate	Abstain	Support for partial dissident slate	Support for full dissident slate	% passive funds as of 2017
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
BlackRock	6.3	173	52.0%	10.5%	0.2%	18.5%	18.8%	91.9%
Vanguard Group	4.9	188	78.2%	4.3%	1.2%	4.6%	11.7%	76.9%
State Street	2.8	118	60.1%	12.4%	1.4%	17.0%	9.1%	66.7%
Fidelity Investments	2.4	166	50.9%	4.9%	2.0%	13.7%	28.5%	22.1%
Dreyfus Investments (BNY Mellon)	1.9	75	52.5%	3.3%	2.1%	21.9%	20.2%	37.5%
American Funds (Capital Group)	1.8	34	36.6%	6.3%	0%	8.9%	48.2%	0%
J.P. Morgan Asset Management	1.7	82	53.1%	7.7%	0.9%	17.4%	20.9%	14.7%
Goldman Sachs Asset Management	1.5	45	23.8%	7.0%	0.0%	46.2%	23.1%	11.1%
Prudential Financial	1.4	100	51.0%	5.1%	1.4%	18.4%	24.1%	7.7%
Northern Trust Investments	1.2	134	73.6%	0.6%	0%	8.0%	17.9%	62.5%

Panel B: Most and least pro-dissident fund families among frequent voters

Fund family name	AUM as of 2017 ($ billion)	No. of proxy contests voted	Support for full management slate	Support for partial management slate	Abstain	Support for partial dissident slate	Support for full dissident slate	% passive funds as of 2017
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Most pro-dissident families								
Gabelli Asset Management	43.1	70	23.8%	0.4%	1.2%	15.7%	58.9%	0%
Mutual of America	21.2	42	28.0%	0%	0.8%	32.0%%	39.2%	33.3%
Goldman Sachs Asset Management	1,490.0	45	23.8%	7.0%	0%	46.2%	23.1%	11.1%
Nuveen Investments	970.5	89	30.4%	7.9%	0.5%	27.6%	33.6%	20.7%
SunAmerica Asset Management	79.2	86	31.8%	6.1%	1.5%	30.8%	29.8%	0%
Least pro-dissident families								
Guggenheim Investments	208.0	109	85.3%	0.5%	3.3%	2.5%	8.4%	54.5%
Vanguard Group	4,940.4	188	78.2%	4.3%	1.2%	4.6%	11.7%	76.9%
Wilmington Trust	89.2	97	73.6%	3.1%	1.9%	6.3%	15.1%	0%
Northern Trust Investments	1,161.0	134	73.6%	0.6%	0%	8.0%	17.9%	62.5%
State Street	2,781.7	118	60.1%	12.4%	1.4%	17.0%	9.1%	66.7%

Table 6: Analysis of Withheld Votes

This table analyzes the subset of voted proxy contests where funds submit withhold votes on either the management or dissident card. We restrict the sample to contests where at least two funds returning the same card withhold votes on different director nominees. We exclude contests with multiple dissident slates, and keep only contests where each ballot item on either card follows the structure "Elect director [name of nominee]." Panel A provides summary statistics on the withholding sample. Panel B presents the results of the test for "coordinated withholding" across funds, adjusting for family-level decision making. For each contest with withholding on either the management or dissident card, we simulate the distribution of the number of withhold votes the most-withheld nominee receives under the null hypothesis that mutual funds randomly select the identity of which nominees to withhold support from. We report the percentage of contests where the number of withhold votes the most-withheld nominee receives exceeds the 90th, 95th and 99th percentiles of each contest's simulated distribution.

Panel A: Summary of proxy contests with withhold votes

	Management card	*Dissident card*
	(1)	(2)
Number of contests	48	74
Mean (standard deviation) across contests		
Number of director nominees	4.8 (2.2)	3.9 (1.9)
Number of withholding funds	22.2 (20.1)	67.3 (85.7)
Number of withholding families	8.3 (7.8)	23.7 (25.0)

Panel B: Tests for coordinated voting across funds

	% of contests with maximum withholding above null		
	90th percentile	95th percentile	99th percentile
	(1)	(2)	(3)
Withholding on management card			
All contests	60.42%	56.25%	39.58%
ISS recommends partial management card	90.00%	90.00%	80.00%
ISS recommends dissident card	50.00%	50.00%	29.17%
Withholding on dissident card			
All contests	71.62%	67.57%	55.40%
ISS recommends partial dissident card	86.05%	83.72%	69.77%
ISS recommends management card	58.33%	50.00%	41.67%

Table 7: Determinants of Mutual Funds' Support for Dissidents

This table reports the relationship between mutual funds' voting choices and observable variables in the sample of proxy contests that reached a vote. We report how firm, dissident, fund, and fund-event characteristics are associated with mutual funds' support for the dissident. The dependent variable, *Mutual fund supports dissident,* equals 0, 0.25, 0.5, 0.75, or 1 if a mutual fund votes for the full management slate, votes for the partial management slate, abstains, votes for the partial dissident slate, or votes for the full dissident slate, respectively. All independent variables are as defined in Tables 3 and 4. Standard errors are clustered at the fund family level. In each column we report estimated coefficients and their associated *t*-statistics. *, ** and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively. Singleton observations are dropped in each fixed-effect model.

	Dependent variable: Mutual fund supports the dissident {0, 0.25, 0.5, 0.75, 1}		
	(1)	(2)	(3)
Log(MV)	-0.010**	-0.021***	
	[-2.56]	[-3.54]	
q	-0.032***	-0.027***	
	[-7.32]	[-5.59]	
ROA	-0.095**	-0.083	
	[-2.10]	[-1.64]	
Leverage	0.055**	0.059*	
	[2.06]	[1.94]	
Dividend yield	0.171*	0.197*	
	[1.85]	[1.95]	
HHI	0.307***	0.346***	
	[7.49]	[6.90]	
Institutional ownership	0.036	0.015	
	[1.42]	[0.53]	
Hedge fund dissident	0.131***	0.144***	
	[5.16]	[4.92]	
# past events by dissident	-0.010***	-0.012***	
	[-4.51]	[-5.86]	
Past campaign intensity	0.003	0.005	
	[0.67]	[1.08]	
Passive fund	-0.092***		-0.100***
	[-3.62]		[-4.24]
Log(fund assets)	-0.004	-0.006	-0.005
	[-0.49]	[-0.39]	[-0.65]
Investment as % of fund assets	0.102	0.180	0.315
	[0.34]	[0.15]	[1.55]
Holding horizon (year)	0.002	-0.000	0.001
	[0.92]	[-0.18]	[0.40]
Basis-adjusted return	-0.084***	-0.091***	-0.008
	[-3.98]	[-4.25]	[-0.49]
Fiscal year FEs	Yes	Yes	No
Industry FEs (FF-12)	Yes	Yes	No
Fund FEs	No	Yes	No
Event FEs	No	No	Yes
Observations	20,350	18,790	20,748
Adj. R-squared	0.12	0.20	0.40

Table 8: Passive Fund Voting in Proxy Contests

This table provides evidence relating voting outcomes to fund investment styles. In Panel A, we show average support rates for the management and dissident slates by different types of funds. To calculate support for the (i) full management, (ii) partial management, (iii) partial dissident, and (iv) full dissident slates, we average support, which equals 1 if a fund supports the full management/partial management/partial dissident/full dissident slates, and 0 otherwise, across all fund-event observations within a class of funds. Similarly, we also calculate the percentage of abstentions, where a fund abstains if it submits either the dissident or management's blank proxy card or both blank proxy cards. In column (3), we show support rates by funds that are passively managed and managed by BlackRock, Vanguard, or State Street, and in column (4), we show support rates by funds that are passively managed and not managed by BlackRock, Vanguard, or State Street. In Panel B, we adopt the regression specification from Table 7. The dependent variable, *Mutual fund supports dissident,* equals 0, 0.25, 0.5, 0.75, or 1 if a mutual fund votes for the full management slate, votes for the partial management slate, abstains, votes for the partial dissident slate, or votes for the full dissident slate, respectively. In column (1), the variables *Passive fund: Big Three* and *Passive funds: Non-Big Three* are as defined in Panel A. All other independent variables are as defined in Tables 3 and 4. In columns (2) and (3), we restrict the sample to passively managed and actively managed funds, respectively. Standard errors are clustered at the fund family level. In each column we report estimated coefficients and their associated *t*-statistics. *, ** and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively. Singleton observations are dropped in each fixed-effect model.

Panel A: Average support rates by investment style

	Active funds	Passive funds	Passive funds: Big Three	Passive funds: Non-Big Three
	(1)	(2)	(3)	(4)
Vote for management slate	52.10%	61.91%	73.35%	57.08%
Full management slate	46.95%	55.52%	64.56%	51.70%
Partial management slate	5.15%	6.39%	8.79%	5.38%
Abstain	1.62%	1.27%	0.61%	1.55%
Vote for dissident slate	46.28%	36.82%	26.04%	41.38%
Partial dissident slate	18.93%	16.97%	11.99%	19.08%
Full dissident slate	27.35%	19.85%	14.05%	22.30%

Panel B: Heterogeneity in voting patterns by investment style

	All funds	Passively managed funds	Actively managed funds
	(1)	(2)	(3)
Log(MV)	-0.010**	-0.025***	-0.017*
	[-2.45]	[-4.08]	[-1.94]
q	-0.032***	-0.018***	-0.038***
	[-7.44]	[-2.99]	[-7.45]
ROA	-0.092**	-0.131**	-0.042
	[-2.06]	[-2.62]	[-0.60]
Leverage	0.061**	0.117***	-0.020
	[2.19]	[2.93]	[-0.50]
Dividend yield	0.152*	0.288*	0.114
	[1.68]	[1.73]	[0.80]
HHI	0.303***	0.299***	0.398***
	[7.34]	[4.67]	[6.55]
Institutional ownership	0.040	0.007	0.024
	[1.56]	[0.20]	[0.49]
Hedge fund dissident	0.132***	0.091***	0.187***
	[5.32]	[2.96]	[5.88]
# past events by dissident	-0.010***	-0.015***	-0.009***
	[-4.52]	[-8.07]	[-2.67]
Past campaign intensity	0.003	0.014***	-0.002
	[0.58]	[2.66]	[-0.25]
Log(fund assets)	0.002	0.001	-0.018
	[0.33]	[0.04]	[-1.18]
Investment as % of fund assets	0.216	-5.000***	2.028*
	[0.74]	[-4.85]	[1.65]
Holding horizon (year)	0.002	0.004*	-0.003
	[0.98]	[1.98]	[-1.40]
Basis-adjusted return	-0.094***	-0.055**	-0.132***
	[-5.29]	[-2.10]	[-6.50]
Passive fund: Big Three	-0.200***		
	[-4.22]		
Passive fund: Non-Big Three	-0.044**		
	[-2.00]		
Fiscal year FEs	Yes	Yes	Yes
Industry FEs (FF-12)	Yes	Yes	Yes
Fund FEs	No	Yes	Yes
Event FEs	No	No	No
Observations	20,350	8,762	10,007
Adj. R-squared	0.13	0.20	0.21

Table 9: Fund Characteristics and Stance

This table provides information on the correlation between fund characteristics and the fund-level fixed-effect stance measure. We estimate each fund's stance measure as the fixed effect recovered from the voting regression with both event and fund fixed effects. *Passive fund* is a dummy variable equal to 1 for a passively managed fund, and 0 otherwise. *Fund assets* and *Investment as % of fund assets* are measured at the quarter end before the contested meeting. *Holding horizon* is the number of years a fund holds the firm shares. *Basis-adjusted return* is the percentage deviation of the current stock price from the aggregate cost basis. Panel A provides the average of fund characteristics by stance quintile. Fund characteristics are averaged by fund across all proxy contests. Panel B lists the most and least pro-dissident fund families among frequent institutional voters based on stance. Families are ranked by average fund-level stance measure across all funds within family. Individual funds are weighted by number of contests in which they voted. Frequent institutional voters are fund companies that voted in at least 20% of the 207 proxy contests between 2007 and 2017. Voting records are obtained from N-PX filings. AUM data are collected from N-CSR, 10-K, 10-Q filings, and fund company websites.

Panel A: Fund characteristics sorted by stance

	Average within each quintile					
Stance quintile	Passive fund	Fund assets ($ billion)	Investment as % of fund assets	Investment as % of firm equity	Holding horizon (year)	Basis-adjusted return
1	32.55%	2.40	0.86%	0.20%	2.47	6.33%
2	34.33%	1.25	0.67%	0.18%	2.42	7.75%
3	28.85%	1.25	0.62%	0.17%	2.36	8.85%
4	22.96%	1.44	0.59%	0.15%	2.21	5.18%
5	13.49%	1.37	0.98%	0.30%	2.27	6.29%

Panel B: Most and least pro-dissident fund families by fund stance among frequent voters

Fund family name	AUM as of 2017 ($ billion)	No. of proxy contests voted	Average stance measure	Support for full management slate	Support for partial management slate	Abstain	Support for partial dissident slate	Support for full dissident slate	% passive funds as of 2017
	(1)	(2)	(3)	(3)	(4)	(5)	(6)	(7)	(8)
Most pro-dissident families									
Gabelli Asset Management	43.1	70	1.514	23.8%	0.4%	1.2%	15.7%	58.9%	0%
T. Rowe Price Group	991.1	102	0.529	39.3%	8.3%	1.3%	20.0%	31.0%	18.8%
Mutual of America	21.2	42	0.519	28.0%	0%	0.8%	32.0%	39.2%	33.3%
Nuveen Investments	970.5	89	0.463	30.4%	7.9%	0.5%	27.6%	33.6%	20.7%
SunAmerica Asset Management	79.2	86	0.458	31.8%	6.1%	1.5%	30.8%	29.8%	0%
Least pro-dissident families									
Vanguard Group	4,940.4	188	-1.218	78.2%	4.3%	1.2%	4.6%	11.7%	76.9%
State Street	2,781.7	118	-0.725	60.1%	12.4%	1.4%	17.0%	9.1%	66.7%
Wilmington Trust	89.2	97	-0.724	73.6%	3.1%	1.9%	6.3%	15.1%	0%
Royce Investment Partners	15.0	59	-0.623	59.5%	0.0%	0.8%	26.7%	13.0%	0%
Penn Mutual Asset	23.5	92	-0.587	55.3%	10.7%	1.9%	21.4%	10.7%	66.7%

Table 10: Integrated Analysis of Proxy Contests and Voting

In this table, we report results from estimating a system of equations for investor voting and dissident targeting. The dependent variable in the voting equation, *Mutual fund supports dissident,* equals 0, 0.25, 0.5, 0.75, or 1 if a mutual fund votes for the full management slate, votes for the partial management slate, abstains, votes for the partial dissident slate, or votes for the full dissident slate, respectively. In the targeting equation, *Voted, Settled,* or *Withdrawn* equals 1 if a proxy contest results in a vote, is settled, or withdrawn, and *Log(fund assets), Investment as % of fund assets, Holding horizon (year),* and *Basis-adjusted return* are aggregated to the firm level by weighting each fund by its investment as percent of firm equity. All other independent variables are as defined in Table 3. Second-stage standard errors are clustered at the fund family level. In each column we report estimated coefficients and their associated *t*-statistics. *, ** and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively. Singleton observations are dropped in each fixed-effect model.

	Targeting equation: Multinomial logit			Voting equation: Linear regression
	Voted	Settled	Withdrawn	Fund supports dissident {0, 0.25, 0.5, 0.75, 1}
	(1)	(2)	(3)	(4)
Log(MV)	-0.148**	-0.250***	-0.129*	-0.049***
	[-2.46]	[-4.71]	[-1.67]	[-6.23]
q	-0.057	-0.142***	-0.131**	-0.039***
	[-1.38]	[-3.28]	[-2.08]	[-7.95]
ROA	0.310	0.352	1.319**	-0.108**
	[0.63]	[0.85]	[2.00]	[-2.01]
Leverage	0.288	-0.583*	-0.706	0.119***
	[0.81]	[-1.83]	[-1.37]	[3.37]
Dividend yield	-0.857	0.943	1.545	0.244**
	[-0.58]	[0.86]	[0.93]	[2.41]
HHI	-0.845*	-0.170	-0.871	0.312***
	[-1.68]	[-0.45]	[-1.37]	[5.91]
Institutional ownership	0.930***	1.370***	0.570	0.139***
	[2.85]	[4.98]	[1.38]	[3.68]
Log(fund assets) (firm-level)	0.023	-0.040	-0.037	
	[0.27]	[-0.64]	[-0.39]	
Inv. as % of fund assets (firm-level)	1.798	1.120	-1.036	
	[0.85]	[0.56]	[-0.19]	
Holding horizon (year) (firm-level)	0.004	0.003	0.005	
	[1.44]	[1.28]	[1.19]	
Basis-adjusted return (firm-level)	-0.557**	-0.879***	-1.022***	
	[-2.56]	[-4.72]	[-3.43]	
Fund stance measure (firm-level)	2.718***	1.147*	0.167	
	[3.78]	[1.85]	[0.16]	
Hedge fund dissident				0.145***
				[4.84]
# past events by dissident				-0.009***
				[-3.87]
Past campaign intensity				0.004
				[0.79]
Log(fund assets)				-0.008
				[-0.52]
Investment as % of fund assets				0.200
				[0.16]
Holding horizon (year)				0.001

				[0.69]
Basis-adjusted return				-0.095***
				[-4.67]
Lee correction term				-0.357***
				[-5.55]
Fiscal year FEs	Yes	Yes	Yes	Yes
Industry FEs (FF-12)	Yes	Yes	Yes	Yes
Fund FEs	No	No	No	Yes
Observations	37,660	37,660	37,660	18,698
Adj. R-squared				0.21
Pseudo R-squared	0.05	0.05	0.05	

Table 11: Settled and Withdrawn Events with Observed Votes

This table provides information on fund votes for events that were eventually settled or withdrawn. In Panel A, we summarize fund voting and dissident characteristics for all contests with observed votes. We define *# fund votes per event* as the number of funds we observe voting in a given event and *% of funds casting votes* as the number of voting funds divided by the number of funds holding the event firm, as reported by the CRSP Mutual Fund Database and the Thompson Reuters Ownership Database. Panel B provides firm characteristics of settled and withdrawn contests with observed votes. In Panel C, we use a linear probability model to study what factors predict whether a fund votes in settled and withdrawn events. The sample is restricted to contests that were settled or withdrawn in which we observe at least one vote. All variables are as defined in Tables 3 and 4. Standard errors are clustered at the fund family level. In each column we report estimated coefficients and their associated *t*-statistics. *, ** and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively.

Panel A: Fund votes in contests with observed votes

	Voted	Settled	Withdrawn
	(1)	(2)	(3)
# events	207	42	26
# fund votes per event	140	110	130
% of funds casting votes	---	69.9%	72.2%
Support for full management slate	50.6%	43.8%	82.1%
Support for partial management slate	5.7%	8.9%	7.4%
Abstain	1.5%	3.0%	8.1%
Support for partial dissident slate	18.1%	25.9%	1.1%
Support for full dissident slate	24.2%	18.4%	1.4%
Dissident characteristics			
Hedge fund	0.78	0.78	0.50
# past campaigns	1.82	1.11	0.72
Past campaign intensity	2.01	1.71	1.41

Panel B: Firm characteristics of settled and withdrawn contests with observed votes

	With votes	Without votes	
	Average	Average	t-stat. of Diff.
Settled events	(1)	(2)	(3)
Days between settlement and meeting date	5.52	48.13	-7.75
MV ($ billion)	2.112	1.720	0.35
q	1.849	1.978	-0.41
ROA	0.038	0.046	-0.26
Industry-adj. stock return	-0.133	-0.107	-0.47
Leverage	0.170	0.183	-0.36
Dividend yield	0.020	0.033	-1.46
Institutional ownership	0.618	0.576	0.82
Mutual fund ownership	0.214	0.192	0.96
HHI	0.217	0.214	0.10
Firm-aggregated stance measure	-0.030	-0.011	-1.09
Withdrawn events			
Days between settlement and meeting date	4.04	31.76	-3.66
MV ($ billion)	1.100	2.916	-0.63
q	1.791	2.011	-0.55
ROA	0.081	0.049	0.80
Industry-adj. stock return	-0.150	-0.067	-1.07
Leverage	0.240	0.163	1.52
Dividend yield	0.030	0.034	-0.27
Institutional ownership	0.624	0.552	1.09
Mutual fund ownership	0.237	0.180	1.86
HHI	0.163	0.210	-1.31
Firm-aggregated stance measure	-0.033	-0.025	-0.41

Panel C: Characteristics of funds voting in settled and withdrawn events

	Dependent variable: Dummy for mutual fund voting			
	Settled events		Withdrawn events	
	(1)	(2)	(3)	(4)
Passive fund	0.101***		0.118***	
	[3.45]		[4.56]	
Fund stance measure		-0.138**		-0.197***
		[-2.12]		[-2.88]
Log(fund assets)	-0.010	-0.013	0.003	0.000
	[-1.30]	[-1.56]	[0.39]	[0.02]
Investment as % of fund assets	2.449**	1.285	1.492	0.186
	[2.49]	[0.94]	[1.28]	[0.14]
Holding horizon (year)	0.001**	0.001***	0.001**	0.001***
	[1.98]	[2.61]	[2.42]	[3.39]
Basis-adjusted return	-0.013	-0.005	0.014*	0.009
	[-0.42]	[-0.14]	[1.70]	[1.00]
Event FEs	Yes	Yes	Yes	Yes
Observations	4,537	3,756	3,299	2,837
Adj. R-squared	0.16	0.17	0.36	0.38

Table 12: Integrated Analysis of Proxy Contests and Voting using Alternative Measures of Fund Stance

This table extends the analysis in Table 10 using alternative estimation samples for the fund stance measure. For each estimation sample, we report four coefficients and their associated *t*-statistics from the estimated system of equations for dissident targeting (first stage) and investor voting (second stage). Second-stage standard errors are clustered at the fund family level and *, ** and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively. We report in columns (1)-(3) the first-stage loadings on the firm-aggregated stance measure for reaching a vote, settlement and withdrawal, respectively. In column (4), we report the second-stage Lee correction term. Panel A provides the results from the baseline specification in Table 10. In Panel B, we re-estimate the fund stance measure by adding votes from the settled and withdrawn events for which we observe votes to the estimation sample. In Panel C, we resample the settled and withdrawn events for which we observe votes such that the number of settled (withdrawn) events in the estimation sample equals the total number of settled (withdrawn) events, including those without observed votes. For each iteration, we sample with replacement from the settled and withdrawn events with early votes, add these votes to the main voting sample, and recover each fund's fixed effect from the voting regression with both event and fund fixed effects. We repeat this resampling procedure 500 times and compute each fund's stance measure as its average fixed effect over all iterations. We then aggregate each fund's average stance measure to the firm-level as in Table 10.

Panel A: Baseline specification

First-stage loadings on stance measure			Second-stage
Voted	Settled	Withdrawn	Lee correction term
(1)	(2)	(3)	(4)
2.718***	1.147*	0.167	-0.357***
[3.78]	[1.85]	[0.16]	[-5.55]

Panel B: Adding votes from settled and withdrawn events

First-stage loadings on stance measure			Second-stage
Voted	Settled	Withdrawn	Lee correction term
(1)	(2)	(3)	(4)
3.082***	1.357**	0.361	-0.343***
[4.08]	[2.03]	[0.33]	[-5.27]

Panel C: Resampling to total number of settled/withdrawn events

First-stage loadings on stance measure			Second-stage
Voted	Settled	Withdrawn	Lee correction term
(1)	(2)	(3)	(4)
3.242***	1.402**	0.510	-0.227***
[4.14]	[1.97]	[0.43]	[-3.42]

Appendix

Appendix A1. Mutual Fund Voting Participation and Trading Prior to Voting

Actively-managed mutual funds may invest in or divest from companies based on their propensity to support the dissident in a proxy contest. A priori, the direction of the selection is ambiguous based on findings from existing literature. For example, Li, Maug, and Schwartz-Ziv (2019) show that shareholder trades and voting in proposals are related around shareholder meetings. A fund manager might take a "Wall Street walk" by selling shares in a firm she perceives to be poorly managed to avoid voting against the manager (Admati and Pfleiderer (2009); Edmans (2009)). Alternatively, a pro-activist fund may accumulate a block in a firm that is vulnerable to, or already experiencing, activist situations (Kedia, Starks, and Wang (2020), He and Li (2017)).

This section examines what motivates investor selection along three different margins: (i) no show, or non-participation in voting despite holding shares in the target firm; (ii) buy-into-voting, or voting by shareholders who accumulate their stake after the announcement of a proxy fight; and (iii) sell-out-of-voting, or selling by shareholders prior to voting but after the announcement of a proxy fight. Overall, we find that the position turnover rates by actively-managed funds in target companies are no higher than their normal rates, and that the average pro-dissident stance of shareholders involved in these situations is not statistically different from that of their peers. The evidence in this section mitigates the concern that shareholder turnover biases our estimation of shareholder voting and dissident targeting, which takes the shareholder base as given.

A1.1 No Show

Shareholders are not legally required to vote, although though most institutional shareholders do, especially after the SEC rule change in 2003 mandating disclosure of votes by mutual funds. "No-show" funds are those that have share holdings but do not participate in the voting process. It is difficult to classify no-show funds with certainty, because the disclosure of quarterly holdings does not allow us to pin down the change in holdings relative to the record date. Given this constraint, we define no-show as fund-event observations that satisfy the following criteria: (i) the fund has at least one recorded vote during our sample period; (ii) the fund has held the stock in the target company from quarter end Q-2 to quarter end Q, where Q is when the record date falls. We set the requirement for holdings status in Q-2 to rule out frequent inter-quartile portfolio changes by some funds. Results are similar if we drop the Q-2 filter; (iii) there is no disclosed vote by the fund in the target company. By these criteria, about 14.3% of funds that were eligible to vote in the proxy contest did not, and were "no-shows." This turnout rate is consistent with prior studies that estimate the overall participation rate to be around 75%, with a much lower participation rate by retail

investors at around 30% (see Cvijanovic, Groen-Xu, and Zachariadis (2020) and Brav, Cain, and Zytnick (2019)).

Results are reported in the Internet Appendix. Columns (1)-(3) of Table IA11 show the determinants of no-show. No-show is more likely when the firm is small, the fund's stake is small relative to the fund's own assets under management, and the firm's overall institutional ownership is high. The benefit of influencing control is presumably lower in these situations. Funds are more likely to skip voting if ISS or Glass Lewis supports the dissident slate, perhaps to avoid confrontation with management. Importantly, the fund-level shareholder pro-dissident stance measure does not whether or not funds vote, suggesting that inherent attitude toward activism is not a driver of selection into no-show.

One reason commonly cited for funds' no-show is that shares lent out and not recalled on the record date cannot be voted by the owners. However, in recent years institutional shareholders have become conscious about calling back shares on loan prior to the record date, especially for high-stake voting events (Aggarwal, Saffi, and Sturgess (2015)). Our finding that passively-managed funds, which are significantly more likely to lend out their shares, are no more likely to skip voting confirms that stock lending is unlikely to be a driving force in this setting.

Overall, these results are consistent with the justification often provided by mutual funds that abstention from voting is favored when the cost of casting an informed vote exceeds the expected benefit.

A1.2 Buy-into-Voting and Sell-out-of-Voting

Funds can choose to join the vote in a proxy contest by buying into a company after it has become the target of an activist, but before the record date, analogous to what risk arbitrageurs do in M&A (Jiang, Li, and Mei (2018)). Again, with quarterly holdings information, we can only approximate buy-into-voting by requiring that a voting fund has disclosed holdings in quarter Q but not in quarter Q-1 or Q-2, where Q is the quarter that contains the record date. According to this definition, 6.3% of the funds at the voting stage are new entrants. Columns (4)-(6) of Table IA11 analyze the characteristics of buy-into-voting funds, relative to all funds that cast votes in a contest, restricting to actively-managed funds. Overall, buy-in funds are more likely to target firms with relatively high market capitalization but low institutional ownership, where the expected benefit of influencing voting outcomes is presumably higher.

We find that buy-into-voting investors' average pro-dissident stance measure is similar to other shareholders. Further, they vote in favor of management at a rate of 52.2%, which is indistinguishable from the 52.8% support rate of pre-standing shareholders. Within the same event, buy-in investors' support rate for management is 2.7 percentage points higher than pre-standing shareholders, but the difference is not statistically significant.

Next, we classify an actively-managed, sell-out-of-voting fund as a non-voting fund that has disclosed holdings in quarters *Q*-2 and *Q*-1 but not in *Q*. We require the fund disclose holdings in *Q-2* to rule out frequent inter-quartile portfolio changes by some funds, but the results are similar if we drop the *Q-2* filter. By these criteria, 6.8% of funds are sell-out-of-voting funds. Relative to voting, sell-out funds' stakes in target companies are smaller as a share of their portfolios, and have been held for a shorter horizon. However, sell-out funds appear to be neutral in their inherent stance towards incumbent management versus dissidents. Because proxy advisors usually issue recommendations after the record date, funds that want to get in or out for voting-related motives cannot condition their decisions on proxy advisors' recommendations. Therefore, we omit variables relating to proxy advisors from the buy-in and sell-out regressions.

Naturally, there is turnover in mutual fund holdings even in the absence of proxy contests. Therefore, turnover prior to shareholder meetings may not be attributable solely to proxy contests, especially if the turnover rate is not excessive. We therefore conduct a placebo test to assess the relative magnitude of position turnover by funds leading up to a proxy contest. In the test, we set "pseudo-event time" to be two quarters prior to the announcement date of the proxy contest for each target firm. Results are reported in Table IA12.

First, we find the "pseudo buy-in" and "pseudo sell-out" rates to be 7.2% and 8.9%, respectively. These rates are slightly higher than the shareholder turnover levels around proxy contests. In other words, shareholder turnover around proxy contests is not higher than at other times. Second, the same set of variables predict buy-in and sell-out between Table IA11 and Table IA12. This suggests that the turnover that we do observe around proxy contests is driven by common factors motivating portfolio turnover.

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