

Are Mutual Funds Active Voters?

Peter Iliev

pgil@psu.edu

Pennsylvania State University

Michelle Lowry

mlowry@psu.edu

Pennsylvania State University

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Abstract:

There has been growing concern regarding the influence of proxy advisory service companies in the United States. To examine the extent of this influence, we contrast mutual funds' likelihood of agreeing with a proxy advisory service company with their costs and benefits of evaluating the issues up for vote in portfolio companies. We find substantial variation in the extent of funds' engagement in the voting process: funds with high net benefits of actively voting are much more likely to disagree with the conclusions of ISS. The economic effects are large, with the characteristics of voters explaining more of the variation in voting patterns than the items and firms upon which the votes are based. Finally, we find that the actively voting funds are more likely to consider firm-specific factors when voting, and that the extent of such activism is significantly positively related to fund alphas.

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1. Introduction

“I ... have grave concerns as to whether investment advisers are indeed truly fulfilling their fiduciary duties when they rely on and follow recommendations from proxy advisory firms.”

- Daniel M. Gallagher, SEC Commissioner, July 11, 2013.

Mutual funds are required to vote their shares of portfolio companies in the best interests of the funds' shareholders. For each individual fund, the costs of researching each agenda item up for vote in each portfolio company would be substantial. It is thus perhaps not surprising that an industry has grown to service this regulatory requirement. Proxy advisory service companies aggregate information across thousands of companies on the items up for vote, including background information relevant to these votes and also recommendations on the direction in which to vote. While nearly every mutual fund relies on these proxy advisory service companies for some information, the extent of reliance varies greatly. As highlighted by Commissioner Gallagher's quote above, there is a growing concern that many mutual funds may be relying almost indiscriminately on the recommendations of these proxy advisory service companies, and in so doing may not be fulfilling their fiduciary duty to clients.

The question of whether a fund's voting behavior fulfills its fiduciary duty to clients is a challenging one to address empirically. A fund can only vote in one of two directions, 'For' or 'Against' management, and a fund that is actively and independently evaluating the underlying fundamentals could easily decide on the same vote as a fund that was relying completely on the advice of a proxy advisory service company. Moreover, it is unknown whether mutual fund investors are harmed by a reliance on proxy advisory service firms' recommendations.

The first step of our analysis is to empirically estimate funds' voting strategies. We posit that funds will base their voting strategies on the costs and benefits of active voting. Fundamental economics suggests that funds with greater economies of scale in researching items up for vote and

with advantages in information collection will have higher net benefits of voting. As shown by a simple model, funds with higher net benefits of voting will be more likely to actively vote, whereas funds with negative net benefits of voting would find it optimal to follow the recommendation of a proxy advisory service company, for example Institutional Shareholder Services (ISS). Empirical analyses provide strong support: among contentious compensation and governance votes the ISS recommendation explains a substantial fraction of passive funds' voting patterns, but it has little predictive power for actively voting funds. Our analysis highlights the extreme variation in funds' reliance on proxy advisory service companies.

Our research design enables us to compare the economic importance of funds' net benefits of active voting with other factors that have been shown to influence fund votes. Our proxies for funds' net benefits of voting, which arguably capture funds' costs of information collection and benefits of active engagement, include: fund family size, fund size, location in an area with high fund concentration, fund turnover, percent of fund net assets invested in a firm, and percent of firm equity owned by the fund. We compare the influence of these proxies with firm-level factors that relate to the firm's operating position and governance environment, agenda-level factors that relate to the item being voted upon, and funds' conflicts of interest that arise from a mutual fund managing the firm's pension plan. Several findings emerge. First, across all these factors, funds' net benefits of active voting have the strongest effects. When we omit the proxies for funds' costs and benefits of active voting, the regression explanatory power decreases by over half. Second, in strong contrast to the substantial effects of fund-level factors, both firm-level and agenda-level controls contribute negligibly to the explanatory power. The identity of the voters is more important than the item on which shareholders are voting. Third, in contrast to Davis and Kim (2002) and Ashraf, Jayaraman and Ryan (2013), we find some evidence that fund families that manage the pension business of a firm are significantly more likely to vote with management on these firms, i.e., conflicts of interest

do affect voting. However, the economic effect of these pension ties on voting patterns is swamped by funds' costs and benefits of active voting.

To better understand the sources of this divergence of opinions, we focus on the extent to which the incentives of ISS are not perfectly aligned with those of mutual funds. The largest difference in incentives arguably relates to the fact that the mutual funds are owners of the firms in which they are voting, whereas ISS is not. This potentially makes mutual funds more concerned with the ways in which a given proposal may have different effects for different firms. Consistent with proxy advisory service companies being less concerned with company specifics, ISS has been accused of minimizing costs by issuing 'blanket recommendations', i.e., of uniformly recommending For or Against certain governance or compensation policies across all companies. To investigate this claim, we examine in detail four shareholder proposals that have received substantial attention in the literature: 'right to call special meeting', 'require advisory vote to ratify named executive officers' compensation', 'require majority vote for election of directors', and 'declassify the board'. Consistent with allegations of blanket recommendations, results show that across these four items, ISS nearly always recommends voting against management. However, actively voting mutual funds are significantly more likely (than either passive funds or ISS) to vote in a firm-specific manner, i.e., to vote with management in some cases but against management in others. This evidence suggesting that funds evaluate these governance provisions on a firm-by-firm basis is consistent with recent research by Coles, Daniel, and Naveen (2008), which shows that a 'one size fits all' approach to corporate governance is frequently not optimal.

Having established that funds differ markedly in their voting strategies, we next examine the extent to which funds' investment decisions and investment returns are related to their voting policies. Results indicate that voting is significantly related to both. Funds that vote in a direction different than the one recommended by ISS or whose vote is contrary to the overall vote outcome are significantly more likely to sell their shares in the subsequent quarter. Moreover, funds that are more

actively engaged in the corporate governance of their portfolio companies, through an active voting strategy, also create more value. Specifically, to evaluate whether actively voting funds earn any excess returns from this level of attention, we regress monthly fund alphas on a measure of fund active voting: the fraction of the time that the fund disagrees with ISS. Controlling for other fund characteristics, we find a significantly positive relation between active voting and fund alphas. Our results showing that active voting funds earn a positive abnormal return raise the question of why more funds do not actively engage in the corporate governance of the portfolio companies.

Our paper relates to several strands of literature. First, our finding that a group of funds follows ISS recommendations almost indiscriminately is consistent with the ISS recommendations being significantly related to vote outcomes (see, e.g., Bethel and Gillan (2002), Morgan, Poulsen, Wolf and Yang (2011), Daines, Gow and Larcker (2010), Larcker, McCall and Ormazabal (2012)). However, our findings highlight the fact that the firm owners who most actively assess the companies and the issues up for vote frequently disagree with these recommendations. As discussed by Yermack (2010), there can be costly side effects to voting. Recommendations of proxy advisory service firms appear to push vote outcomes away from the preferences of this class of engaged firm owners.

Our understanding of how the characteristics of the voters affect vote outcomes is limited. Related papers in this vein include Chou, Ng, and Wang (2013), Matvos and Ostrovsky (2010), and Davis and Kim (2007), who examine the governance structure of funds, the management friendliness of funds, and the fund-firm business ties, respectively. A contemporaneous working paper by Choi, Fisch and Kahan (2012) considers the severity of passive voting by focusing on a sample of uncontested director elections by several of the largest mutual funds. Our paper takes a more general approach to the ways in which voter characteristics and the funds' economic incentives to vote potentially affect vote outcomes.

Finally, our paper also contributes to an active field of research focused on the importance of

the shareholder base. Boknaruk and Ostberg (2012) find that the shareholder base is associated with the firm's costs of financing, and Becker, Ivkovic and Weisbenner (2011) find that the shareholder base affects the payout policy. Evidence in this paper suggests that differences in shareholder composition potentially affect vote outcomes, something about which managers care deeply.

The remainder of the paper proceeds as follows. Section two considers the voting decision from the perspective of a mutual fund, where this decision is based on the fund's costs and benefits of active voting. Section three discusses the data and provides descriptive statistics. Section four presents univariate evidence on active voting, and section five examines the determinants of active voting in a multivariate framework. In section six, we investigate the sources of deviation between ISS and actively voting funds. Section seven examines the relation between fund voting and both investment choices and returns. Finally, section eight concludes.

2. The costs and benefits of active voting

We start by analyzing mutual funds' voting decisions in the presence of proxy advisors. We can think of both a mutual fund and ISS as receiving a signal regarding an agenda item up for vote, for example a director. ISS observes a noisy signal about the true type ("High" or "Low") and makes a voting recommendation. The mutual fund buys the ISS recommendation, receives its own noisy private signal and decides to vote "For" or "Against". As we more formally model in Appendix I, a fund's decision to follow its own signal versus that of ISS depends on the relative precision of the two signals. Funds with less precise information are more likely to value ISS's signal over their own, and they will thus passively follow the recommendation of ISS. The model suggests that an increase in the fund precision will relate to a higher probability of the fund voting differently than the ISS recommendation, with the effect being stronger for contentious issues (which can be proxied by ISS recommendations to vote Against).

Bringing this theoretical construct to empirics requires proxies for the precision of funds'

signals. Basic economics provides a strong argument for fund characteristics being related to the precision of their signals. For some funds, the costs of researching and assessing the items up for vote in each portfolio company outweigh the benefits. Such funds are unlikely to conduct meaningful independent research, and thus the precision of their signals is likely to be quite low. In contrast, for other funds the benefits far outweigh the associated costs, meaning that these funds have strong incentives to conduct independent research and will consequently have much more precise signals.

Clearly some institutions consider the benefits of voting to be high. For example, Aggarwal, Saffi and Sturgess (2012) find that institutions such as mutual funds call back lended securities around the time of contentious votes, suggesting that these entities consider the value of voting to be sufficiently high that they are willing to give up the revenue from lending. The associated costs are primarily information-based, and they vary across funds due to differences in both funds' ex ante knowledge about a firm and their costs of gathering and analyzing additional information. We focus on four fund characteristics related to the costs and benefits of informed voting. In addition, we also consider two factors specific to the relation between the fund and the firm.

Our first two proxies for active voting are based on an economies-of-scale argument. Larger funds are likely to have larger positions within a stock, meaning that research costs can be spread over a wider asset base. Similarly, within larger fund families multiple funds are likely to own the same stock. Thus, we posit that larger funds and funds that belong to larger families will enjoy lower unit costs of active voting and thus be more likely to actively vote.

Our third proxy for the costs of gathering and analyzing information for purposes of active voting is motivated by Hong, Kubik and Stein (2005). Hong et al. posit that fund managers who work in the same city are more likely to exchange ideas, for example because they regularly meet at local investor conferences or interact socially. This potentially lowers the costs of gathering and evaluating information on a company. We thus predict that funds located in a Metropolitan

Statistical Area (MSA) with a high fund concentration are more likely to be active voters.

Our final fund-level proxy for the net benefits of voting is fund turnover. Funds with low turnover can spread the costs of collecting information over time; information collected about proxy items in one year will in many cases also be relevant the following year. In addition, funds with lower turnover are also more likely to realize the benefits of any changes in governance, in the form of higher returns. Cunat, Gine and Guadalupe (2012) suggest that the benefits of better governance may take some time to be realized. Thus, we predict that low turnover funds will be more likely to engage in active voting.

In addition to fund-specific factors, we also include two proxies that capture the relation between a fund and each individual firm in which the fund is invested: fund investment in the firm as a percent of fund total net assets, and fund investment in the firm as a percent of total firm equity. The first is motivated by the fact that the benefits of active voting are a function of future expected returns, meaning they should be related to the size of a mutual fund's investment in a firm. The second is motivated by the fact that a fund's ability to affect the vote outcome is greater if it controls a greater percentage of the votes. In addition, investor relations departments of many companies have policies of regularly contacting their largest shareholders, suggesting that funds with greater ownership will have lower costs of obtaining information. In sum, we predict that both of these factors will be positively related to active voting.

3. Data

Since 2003, mutual funds have been required to report their votes on all shares held. These votes are reported on form N-PX, submitted to the SEC. Institutional Shareholder Services (ISS) has compiled the votes by the top 250 mutual fund families into its Voting Analytics database. The data include votes on all agenda items in both regularly scheduled annual meetings and special meetings. Funds have the option of voting For, Against, Abstain, or Withhold; for conciseness we aggregate

Against, Abstain and Withhold together. Further data on funds are obtained from the CRSP mutual fund database, and we take care to obtain the highest quality match possible between ISS data and CRSP data.¹ From CRSP, we collect the most recent holdings that fall within the 90 days prior to the vote date. In addition, we obtain fund expense ratios, fund total net assets, fund turnover, fund family, and fund location. In cases where funds have multiple classes, fund expense ratios represent an average across classes, weighted by the total net assets of each class. Because tickers are only available in the EDGAR header files starting in September 2005, we restrict our sample to the 2006 – 2010 period. Finally, we omit all index funds from the sample.

Information on the firms is obtained from CRSP, Compustat, Execucomp, IRRC and Thompson 13F filings. Our final sample consists of 2,177 unique mutual funds across 239 different families. There are 39,635 separate agenda items that are voted on in 5,858 shareholder meetings of 1,602 different firms.

Descriptive statistics on fund characteristics and votes are found in Appendix II and Table 1. Throughout our analysis, we focus on three groups of votes: director-related, compensation-related, and governance-related. Director votes include only management-proposed directors up for election.² As shown in Table 1, our sample includes 2,131,300 director votes, which represent votes by 2,171 unique mutual funds across 5,622 different elections in 1,537 different firms.

Compensation votes include management proposals related to employee compensation plans, for example stock purchase plans and option repricings. In addition, they also include shareholder proposals related to compensation, for example proposals to limit executive compensation or to provide more disclosure on executive compensation. In total, as shown in Table 1, our sample includes 248,393 votes on compensation-related issues.

¹Because there is no unique fund identifier that is common to these two data sources, we use EDGAR to download all fund names and tickers from the mandatory semi-annual reports filed by registered investment companies (form N-SAR). Following Matvos et al. (2010), we match the ISS data to the EDGAR data based on fund and family name, and then match via ticker to the CRSP mutual fund database.

² There is a very small number of shareholder proposed directors, less than 0.1% of the total sample, which we omit.

Our final vote category consists of governance-related proposals. These include proposals related to items that comprise the G-Index as well as proposals on dual-class share structures, joint CEO-Chairman positions, changing the size of the board, and requiring majority vote for election of directors.³ These governance-related agenda items include both management proposals and shareholder proposals. In total, our sample includes 136,814 votes on governance-related issues.

Consistent with the results of Cai, Garner and Walkling (2009) and Fischer, Gramlich, Miller and White (2009), Table 1 shows that director proposals receive by far the most support. In contrast, compensation and governance proposals are more likely to be brought by shareholders and tend to be more contentious, with ISS recommending with management only 69% of the time on compensation issues and 39% of the time on governance issues.

Descriptive statistics regarding the characteristics of the mutual funds, firms, CEOs, and directors are presented in Appendix II. Our regressions (in subsequent tables) are estimated at the vote level, and thus these descriptive statistics are presented at the vote level as well. Fund characteristics are measured at the fund holdings report date preceding each vote, and company variables are measured at end of the fiscal year preceding the vote.

4. Descriptive evidence on informed voting

4.1. Univariate evidence

This section presents statistics on the prevalence of passive voting, as well as preliminary evidence on our main hypothesis that funds with higher net benefits of active voting are more likely to be active voters. As a first measure of passive voting, we calculate the percent of cases in which each of the 2,177 mutual funds in our sample follows the advice of either management or ISS. For example, Fidelity Magellan Fund voted on 3,806 agenda items (across 252 firms) within our 2006 - 2010 sample period: 90% of these votes were consistent with management's recommendation, and

³ For details on the components of the G-Index, please see Gompers, Iishi, and Metrick (2003).

83% of these votes were consistent with ISS's recommendation. After calculating the analogous percentages for each fund in our sample, we plot these percentages in histograms. Specifically, Panel A of Figure 1 places funds into percentiles, with the lowest percentile containing funds whose votes are consistent with management's recommendation in less than one percent of the cases. The highest percentile contains funds whose votes are consistent with management's recommendation more than 99% of the time.⁴ Panel B shows a similar analysis, based on the percent of votes that are consistent with ISS's recommendation. Funds with less than 10 votes are excluded from all figures.

The top panel of Figure 1 shows that most funds vote consistent with management more than 75% of the time, and almost 8% of funds appear to follow a simple rule of always voting with management. The bottom panel of Figure 1 indicates that there is a much more dramatic tendency of funds to adopt a simple rule of following ISS. Over 25% of funds indiscriminately vote with ISS across all firms in their portfolio across the five years in our sample. In comparison, the density of funds at every other percentile point is around 5% or less. Interestingly, based on a relatively small sample (118 funds) of survey responses, McCahery, Sautner, and Starks (2011) conclude that 17% of funds always follow a proxy advisory service firm. Our evidence based on a much larger sample suggests that the practice is even more prevalent.⁵ The evidence that passive funds are more likely to follow ISS than management is consistent with the predictions of our model. Figure 2 shows that there is a strong tendency to indiscriminately vote with ISS across every category of agenda item. Approximately 29%, 23%, and 21% of funds exclusively vote with ISS on director, compensation, and governance-related issues, respectively.

As suggested by the model, we hypothesize that this tendency to passively follow the advice of ISS is more likely among funds with higher costs and/or lower benefits of informed voting. To test this conjecture, Table 2 categorizes the mutual funds in our sample according to the factors that

⁴ The majority of funds in this bin are consistent with management's recommendation 100% of the time.

⁵ To the extent that some funds rely on a proxy advisory service other than ISS, we actually under-estimate the frequency of passive voting.

we posited in Section 2 to be related to the costs and benefits of informed voting. The first column defines the composition of the high net benefits of voting group in each row, and all funds not meeting this definition are put into the low net benefits group.

Looking first at the top row of Table 2, funds that are part of large families (defined as being in a family with above-median total net assets) are categorized as having high net benefits of active voting. The ability to spread the costs of collecting information across many funds in a family means that the per-fund costs should be relatively low and the net benefits high. All other funds are put into the low net benefits group. Consistent with predictions, only 12% of this high net benefits group passively follow ISS's recommendation over 99% of the time, compared to 37% of the low net benefits group. The categorization of funds based on fund size yields similar insights, with larger funds almost always following ISS in only 18% of cases, compared to a much greater rate of 31% among smaller funds. In row three, the finding that only 20% of funds located in MSAs with high fund concentration passively follow ISS, compared to 32% of funds located in lower fund-concentration locales, is consistent with the proximity of many fund managers facilitating the exchange of information and thus lowering the costs of informed voting. In a similar vein, low turnover funds are also significantly less likely to indiscriminately follow ISS.

In the last row of Table 2, we use principal factor analysis to define one parsimonious factor from the four fund-level active voting proxies. Consistent with expectations, family size, fund size, and MSA with high fund concentration share a positive correlation, but fund turnover is negatively correlated with the principal factor. Inferences are similar based on this common factor: predicted active voter funds are significantly less likely to passively follow ISS in over 99% of cases.

5. Determinants of informed voting in a multivariate regression framework

This section presents evidence on the relations between funds' net benefits of active voting and their voting patterns in a multivariate estimation framework. Following our model, we test the

extent to which funds with incentives to vote independently reach different conclusions than ISS when voting on contentious issues. Ertimur, Ferri, and Oesch (2012) and Choi et al. (2012) show that the influence of the ISS recommendation varies with the reasons behind the recommendation, for example with director attendance rates or compensation structures. Thus, we separately examine agenda items by category, so that we can include appropriate controls in each regression.

Regressions of directors up for election control for the characteristics of the director, such as committee membership and tenure, whereas compensation-related regressions control for the CEO characteristics and compensation. Section 5.1 focuses on director elections, and Section 5.2 on agenda items related to compensation and governance. Section 5.3 discusses possible econometric concerns.

5.1. Director Elections

Shareholders rely on directors to protect their interests, and shareholders' ability to vote on directors helps ensure that directors fulfill this role (see Adams, Hermalin, and Weisbach (2010) for a survey of the literature related to the roles of directors.) All firms have management-proposed directors up for vote each year, and mutual funds must vote on each of them.⁶ When evaluating a director, funds potentially consider director characteristics, firm characteristics, and the ISS recommendation. We hypothesize that the predicted active voting mutual funds will place less weight on the ISS recommendation than other funds. We test this conjecture in two ways. First, we subset our sample into cases where ISS recommends voting For versus Against the director, and we examine the relation between fund type and voting patterns. Second, using the entire sample, we employ interactive terms within our nonlinear framework, by following Greene's (2010) approach.

Results of the first approach, the use of two subsamples to examine the influence of ISS

⁶Voting For a director is equivalent to voting with management because all directors in our sample are recommended by management.

among different types of funds, are reported in Table 3. We estimate probit models, where the dependent variable is a dummy equal to one if a mutual fund votes For a director at the company meeting, and zero otherwise. Our variables of interest are the four fund proxies for active voting (log of family size, log of fund size, a dummy equal to one if the fund is located in an MSA with high fund concentration, and fund turnover) and the two fund-firm proxies (investment as a percent of fund total net assets and investment as a percent of firm equity). In addition, we include a battery of control variables, for example other fund characteristics, director characteristics, and firm-specific characteristics. All regressions also include year and industry fixed effects, and standard errors are clustered at the fund level.

Column 1 focuses on the subsample of cases where ISS recommends voting Against management, a subsample that arguably contains a greater portion of more contentious votes and thus represents a strong testing ground for our hypothesis. We expect that funds with higher net benefits of active voting will be more likely to independently evaluate the issues and thus more likely to reach a conclusion different from ISS, i.e., to be more likely to vote with management in this subsample (where by construction ISS is recommending a vote against management). Consistent with predictions, the coefficients on all six of the predicted active voting proxies have the predicted sign, and five of the six are significant at the 5% or 1% level. Specifically, funds that are larger, are from bigger families, are located in MSAs with high fund concentration and have a greater investment in the firm (measured either as a percent of fund assets or as a percent of firm equity) are significantly more likely to vote with management. These funds' higher net benefits of voting cause them to independently assess the issues, and they more frequently disagree with the conclusions of ISS.

Turning to Column 2, we first note that the coefficients on many of the predicted active voting proxies have a sign opposite to that in column 1, as predicted by our model. In the column 1 subsample consisting of ISS Against recommendations, funds that were larger, from bigger families, had higher turnover, and had greater investments in the firm were *more* likely to vote For

management (i.e., opposite to the ISS recommendation), whereas among the column 2 subsample of ISS For recommendations these funds are *less* likely to vote with management. Consistent with this subsample representing less contentious issues on average, the magnitudes of the coefficients are smaller than in the column 1 subsample.

Beyond the effects of these economics of voting, there has also been concern that mutual funds' votes are affected by conflicts of interest. Specifically, many fund families manage the pension plans of a variety of firms, and the funds within these families also frequently own shares in these same firms. These relations raise the possibility that funds with such pension ties are more likely to vote with management. The business ties variable in Table 3, equal to one if a fund's family has a pension tie with a firm and zero otherwise, provides mixed evidence on the role of such conflicts of interest. The significantly positive coefficient on the business ties dummy variable in Column 1 suggests that funds with business ties are more likely to vote with management, consistent with the conflicts of interest story. However, the significantly negative coefficient in Column 2 suggests the opposite. One interpretation of these results would be that business ties cause funds to be more likely to vote with management on contentious issues where votes are more important, and they offset this with negative votes in cases where it doesn't matter.

Our findings of a relation between pension ties and voting patterns contrasts with both Davis and Kim (2002) and Ashraf, Jayaraman and Ryan (2013), who find no significant relation. We posit that the difference arises from the sample composition. Both of these prior papers focus on a more limited sample of shareholder proposals and a more limited sample of funds. In addition, their research design does not control for the fund characteristics, which we find to be strong predictors of voting behavior.⁷

The estimated effects of the control variables are largely consistent with prior literature.

⁷ Both papers find that funds that manage the pension business of a greater number of firms are more likely to vote with management across all firms. We have also estimated regressions using this alternative measure, and the general tenure of results is unchanged.

Funds are more likely to vote with management in bigger firms, in firms with more positive performance, and in firms that are better governed. We also include two controls focused on investors' assessment of the overall governance of the firm. There may be relatively little disagreement regarding items up for vote at a well-governed firm, meaning agenda items will be agreed to nearly unanimously and even a fund devoting considerable resources toward informed voting would be unlikely to disagree on the issue. To capture such effects we first include a dummy variable equal to one if ISS recommends voting against at least one other item up for vote at the same firm meeting. Consistent with this variable capturing firms about which there is more disagreement, we find that it is significantly negatively related to votes with management. Second, we include average support for this firm across all mutual funds in the previous calendar year. Consistent with higher past support capturing better governance, we find that this variable is significantly positively related to votes with management.

We use subsamples rather than interaction terms in Table 3 because Ai and Norton (2003) and Greene (2010) show that the interpretation of interaction terms in nonlinear models is extremely difficult: neither the sign, magnitude, nor statistical significance of interaction terms in nonlinear models can be interpreted directly. Rather, the true effect depends on the value of the independent variable, with the effect varying across different values of the independent variable. Because the coefficient on the interaction term in the regression only provides information on the interaction at a single point, it is relatively uninformative. Following Greene (2010), we examine the effects of fund activism conditional on ISS recommendations (across the entire sample) through graphical analyses, which depict interaction effects over a range of values for the independent variables of interest.

Figure 3 is based on a probit regression similar to that shown in Table 3 but based on the entire sample of fund votes. The dependent variable equals one if a fund votes with management, zero otherwise. To facilitate the analysis, we employ principal factor analysis to define one parsimonious active voter factor from the four fund-level active voting proxies, as described earlier

and used in Table 2. We include both this active voter measure and this measure interacted with a dummy variable equal to one if ISS recommends voting with management and zero otherwise. Analogously, we also include both the fund-firm relationship measures and these measures interacted with the ISS dummy. Figure 3 includes three panels, one for the active voter measure, one for fund investment in the firm as a percent of fund total net assets, and one for fund investment in the firm as a percent of firm equity. For each panel, we hold all other variables at their means and calculate the predicted probability that a fund with varying values of the net benefits proxy will vote with management, conditional on ISS's recommendation.

Panel A of Figure 3 shows results for the predicted active voter measure. The solid line shows the tendencies of funds of different activism levels to vote with management when ISS recommends voting For, and the dashed line represents cases where ISS recommends Against. The slope of each line captures the difference in the probability that the two types of funds (active vs. passive) will vote with management, conditional on the ISS recommendation; shaded regions around these lines represent 95% confidence intervals. Results further support the conclusions drawn from Table 3: active voter funds are substantially less likely than other funds to follow ISS's recommendation. The solid line has a slight negative slope, indicating that active voter funds are less likely to vote with management than other funds, conditional on ISS recommending For. Much more dramatic, we observe a strong positive slope to the dashed line: the most active voter funds are three times more likely than the most passive funds (71% versus 21%) to disagree with ISS, i.e., to vote with management when ISS recommends voting Against.

From a firm's perspective, the potential ramifications of being owned by actively voting versus passive funds are substantial. Consider a director election where ISS recommends voting Against a certain director. Our results suggest that a firm owned entirely by low activism funds would not receive majority approval on this director. Conditional on ISS recommending Against, only 21% such funds would tend to vote For management, on average. In contrast, a firm owned by

high activism funds would obtain an easy majority of 71% approval. On the flip side, in cases where ISS recommends For, a firm owned entirely by passive funds would have near 100% support for the director, while a firm owned by active funds would have only 92% support. Cai et al. (2009) suggest that voting differences of such magnitudes can have substantial effects on firm policies, for example on CEO turnover, CEO compensation, and firm governance structures. In sum, results indicate that ISS is pushing vote outcomes away from the preferences of the most engaged owners, the actively voting mutual funds.

In Panel B, we see that the effect of the size of a fund's investment in a firm, relative to total fund net assets, is similarly substantial. Focusing on cases where ISS recommends Against management (the dashed line) and holding all other variables at their means, a fund would be predicted to follow ISS's recommendation about 45% of the time (1 – 55% prob of voting with management) for a firm in which it had a small position, compared to only 20% in a firm for which it had a large position, relative to total fund assets. In a similar vein, Panel C shows that the size of a fund's investment relative to the total equity value of the firm is also strongly related to voting patterns.

In each figure, the distance between the two lines provides a summary measure of the influence of ISS for funds with different values of the net benefits of voting proxy. A fund that indiscriminately followed ISS all the time would have zero probability of voting with management when ISS recommends voting Against (the dashed line) and 100% probability of voting with management when ISS recommends voting For (the solid line). Thus, the distance between the two lines would be one. In contrast, the distance between these two lines will be substantially smaller for a fund that pays no attention to the ISS recommendation: the distance will only reflect the effects of common information that we cannot perfectly control for, i.e., underlying information that drives both the ISS recommendation and the fund vote. The figures consistently show that the distance between the two lines becomes smaller as one moves right along the horizontal axis, i.e., as the net

benefits of active voting increase. This evidence provides strong support for our conjecture and the model prediction that more active voting funds are less likely to rely on ISS's recommendation.

5.2. Compensation and Governance-related proposals

Compensation and governance-related proposals tend to be more contentious than most director proposals, leading to interesting questions regarding the extent to which mutual funds are willing to passively follow the recommendation of ISS. Given the lower average support for these types of proposals (78% for compensation and 61% for governance, compared to 94% for director proposals), the extent to which shareholders passively follow recommendations of proxy advisory service firms such as ISS has greater effects on whether an agenda item receives majority support. We predict that this tendency to follow ISS will vary as a function of funds' net benefits of voting, in a manner similar to that observed in director elections.

Results are presented in Table 4 and also graphically in Figure 4. We focus first on Table 4, where columns 1 and 2 focus on compensation votes, and columns 3 and 4 on governance votes. In addition, to mitigate any concerns that results may be biased by the fact that these governance and compensation agenda items represent a mix of management and shareholder proposals, column 5 shows a subsample analysis based on just four shareholder proposals: 'right to call special meeting', 'require advisory vote to ratify named executive officers' compensation', 'require majority vote for election of directors', and 'declassify the board'. These are all issues that have received substantial attention, and they tend to be quite contentious: ISS nearly always recommends voting Against management on these issues.⁸ For brevity, the full set of control variables are not shown, but are listed in Appendix II.

We begin by noting that these samples provide stronger evidence in support of the conflicts

⁸ For specification purposes, we restrict our sample in Column 5 to those cases where ISS recommends Against management. As shown in more detail in Table 6, this results in the omission of very few observations.

of interest hypothesis. Four of the five regressions suggest that funds having business ties with a firm are significantly more likely to vote with that firm's management. As discussed earlier, this finding is consistent with a broad body of literature in finance suggesting that conflicts of interest affect a variety of firm activities, but it contrasts with the prior examinations of shareholder voting by Davis and Kim (2002) and Ashraf et al (2012).

Results similarly provide strong support for the importance of funds' net benefits of voting. Across all five columns, we see that funds with higher net benefits of voting (e.g., funds from larger families, larger funds, funds with lower turnover, etc.) are more likely to vote with management when ISS recommends Against (columns 1, 3, and 5), and less likely when ISS recommends For (columns 2 and 4).

Consistent with these findings, the graphical analyses in Figure 4 are striking. Using a format similar to that of Figure 3, Panel A focuses on compensation agenda items and Panel B on governance-related items, and both focus on the relation between the predicted active voter proxy (the principal factor), the ISS recommendation, and tendency to vote with management. Looking first at the compensation votes in Panel A, the most passive funds have a 98% probability of voting with management when ISS recommends this course of action and a 6% probability of voting with management when ISS recommends to vote Against management. In stark contrast, among the most active funds, the probability of voting with management is virtually unrelated to the ISS recommendation in a statistical sense. The probability that the funds with the highest predicted active voting will vote For management is 84% when ISS recommends this course of action, and 69% when ISS recommends the opposite; moreover, the shaded regions depicting 95% confidence intervals demonstrate the proximity of these points in a statistical sense.

The similarity in the patterns of voting on director proposals and compensation-related matters is notable, particularly in light of prior literature. Armstrong, Gow, Larcker (2012) suggest that shareholder votes have little meaningful impact on firms' incentive-compensation policies, a

finding that contrasts with results for director elections, where Cai et al (2009) and Iliev, Lins, Miller, and Roth (2012) find that small differences in voting have large ramifications. If funds perceive their votes on compensation items to have little impact, they should rationally devote fewer resources toward making informed votes. However, we find that similar types of funds exert more effort toward making informed votes in both director proposals and compensation proposals.

Panel B of Figure 4 depicts the analogous effects for governance votes. Similar to the results on director and compensation votes, the distance between the ISS with management line and the ISS against management line narrows dramatically as the predicted active voter measures increases, indicating that the tendency to follow ISS diminishes as the net benefits of actively voting increase.

In sum, results throughout this section demonstrate that funds with higher net benefits of voting exhibit distinctly different patterns of voting than funds with lower net benefits. This effect is substantial in economic terms and it is observed across all types of proposals: director, compensation, and governance. Among the most active funds, ISS appears to have little influence. However, ISS's influence is substantial across the most passive funds. Thus, while mutual funds have a fiduciary duty to vote, the vote outcomes arguably do not represent a weighted average of the opinions of all shareholders. Rather, they disproportionately reflect the opinion of one entity, and this entity is not even an owner of the firm. The finding that the more engaged firm owners disagree so often with the recommendations of ISS raises provocative questions regarding the influence of proxy advisory service companies.

5.3 Economic magnitudes

In addition to being statistically significant predictors of fund voting, Table 5 demonstrates that these proxies for funds' net benefits of voting are economically important as well. In fact, their explanatory power exceeds that of other known determinants of voting behavior.

Table 5 shows two measures of goodness-of-fit, the McFadden R-squared and the percent of

observations that are classified correctly from the probit model, across the director votes, the compensation votes, the governance votes, and the subsample of four shareholder votes.⁹ In each case, we focus on the set of votes where ISS recommended Against management. Looking first at results from the director sample shown in rows 1 and 2, the first column shows the McFadden R-squared (5.7%) and the percent of observations that are classified correctly (62.7%) from the full sample (the regression reported in column 1 of Table 3). The next three columns show that when either the firm-level controls (col 2), the director controls (col 3), or the business tie measure (col 4) are excluded from the set of independent variables, the goodness of fit measures are virtually unchanged. In contrast, goodness of fit decreases substantially when the proxies for funds' net benefits of voting (the four fund measures plus the two fund-firm measures) are excluded from the set of independent variables – the McFadden R-squared decreases by over 50%.

The economic effects of funds' net benefits of voting are similarly large over the compensation votes, the governance votes, and the subsample of four shareholder proposals. In each case, the characteristics of the voter (i.e., the mutual fund) have greater explanatory power than the characteristics of the firm and agenda item on which the vote is based.

5.4. Robustness

One potential concern with our analysis relates to the possibility that active funds may be more likely than passive funds to voice their concerns through the proxy process, rather than selling the stock and voting with their feet, and how this possibility would affect our results. However, both findings of prior literature and additional empirical analyses mitigate concerns that these issues bias our results. First, while Parrino, Sias, and Starks (2003) find an increase in institutional selling prior to CEO turnover, this selling is concentrated among institutional investors other than mutual funds. Moreover, they find no evidence that this selling stems from a belief that governance structures make

⁹ Our measurement of the percent of observations that are classified correctly is based on an 0.5 cutoff.

direct action too costly. In a similar vein, survey evidence of McCahery et al. (2010) indicates that the majority of mutual funds regularly employ both strategies, i.e., the selling of shares and voting against the company, when they are discontent. Second, Helwege, Intintoli and Zhang (2012) note that exit may lose its impact as a governance tool as institutions are increasingly constrained to hold large capitalization stocks regardless of performance, and they find that institutional investors are less likely to rely on a strategy of voting with their feet in more recent years. Following Helwege et al.'s intuition that voting with their feet is less likely among the largest firms, we have re-estimated our regressions based on the sample of S&P500 firms. Results in this subsample are qualitatively similar to those reported on the broader sample used throughout the paper. Third, Duan and Jiao (2011) find that mutual funds are especially likely to vote Against management rather than exit in cases where ISS recommends voting Against management: results for such subsamples are reported throughout the paper. Finally, to the extent that different types of funds choose to invest into different types of firms, these effects are likely to particularly affect the amount of a firm that a fund owns. However, our regressions are equally-weighted rather than value-weighted, in the sense that each fund with ownership in a firm equates to one observation, regardless of the value of the fund's holdings.

A second source of concern relates to the agenda items up for vote. Schoar and Washington (2011) show that firms are more likely to propose certain agenda items following periods of strong performance. While this potentially affects the relation between performance and vote outcomes, it does not introduce any apparent bias on the relation between the votes of active versus passive mutual funds. Moreover, such selection issues do not apply to the sample of director votes.

6. Why do ISS and actively voting funds reach different conclusions?

Evidence presented thus far indicates that two sets of informed entities, ISS and actively voting mutual funds, are both analyzing companies and the issues up for vote but are frequently

reaching different conclusions. This finding is consistent with the idea that active voting funds use additional information when making their decisions, but it raises the question of what factors contribute to these differing conclusions.

ISS and firm owners differ substantially in terms of their costs and benefits of researching items up for vote in companies. On the cost side, ISS has committed to providing recommendations on all agenda items across an extraordinarily wide array of companies. In contrast, each mutual fund is focused only on those companies in which it has invested, and it has the option to rely on a proxy advisory service company such as ISS (thus avoiding all research costs) in cases where the research costs are too high to justify, e.g., on smaller dollar investments. On the benefit side, mutual funds are focused on the value of their portfolios, and in particular on the expected returns associated with a governance change. As a result, funds have strong incentives to consider the specific effects of each agenda item on each individual company. In contrast, ISS does not own shares in the underlying companies. ISS's revenues come from its customers, meaning the recommendations must be of sufficient quality that customers value its product. These two factors potentially cause ISS to be more focused on the costs of assessing all the issues up for vote across an extremely wide array of companies, rather than on the ways in which a certain governance structure would differentially affect each company.

Consistent with an effort to minimize costs, ISS has been accused of issuing blanket recommendations, i.e., of always recommending against certain issues without considering the specifics of the company.¹⁰ The existence of blanket recommendations combined with passive funds' tendencies to blindly follow ISS would potentially prevent companies from tailoring corporate governance practices to their specific situation. Recent research suggests this may be costly for companies. For example, Coles, Daniel and Naveen (2008) and Johnson, Karpoff, and Yi (2012)

¹⁰ See, e.g., "Companies look to the SEC to rein in proxy advisory service companies", Compliance Week, June 5, 2012.

emphasize that one size fits all approaches on issues related to governance are unlikely to be optimal.

As a first step toward analyzing this issue, Panel A of Figure 5 provides evidence on the frequency of blanket recommendations. Because directors are by definition each unique, the issue of blanket recommendations is less relevant in this subsample. Thus, we focus on governance and compensation-related issues. For each agenda item in our sample, we compute the percentage of cases in which ISS recommends a vote in support of management. We then place agenda items into bins based on this percentage, where issues on which ISS always recommends Against (across all companies and all years in our sample) are placed into the 0% bin, and issues on which ISS always recommends voting in support of management are placed into the 100% bin. Agenda items with mixed support across companies and/or years are placed into the (0,5%], (5,10%], (10,90%], or (95,100%) bins, as appropriate.

Results show relatively little evidence of ISS recommendations being made without any regard to company specifics. On both governance-related and compensation-related issues, less than 5% of all agenda items are in the 0% or 100% bins, meaning there are few issues on which ISS uniformly recommends Against management, in the most extreme sense. However, in what may be interpreted as evidence of near-blanket recommendations, we find a substantial portion of recommendations falling into the (0 – 5%] or (95-100%) bins: on 32% of governance and 11% of compensation agenda items ISS almost always recommends Against management, and on 19% and 23% of governance and compensation issues, respectively, ISS almost always recommends voting For management.

The often heard argument against alleged blanket recommendations is that they are not optimal given the specifics of the company, i.e., ISS makes a recommendation without fully considering the relevant factors. To the extent that this claim is valid, we would expect to observe actively voting mutual funds disagreeing with ISS more often on issues where ISS makes blanket recommendations. Panels B and C of Figure 5 address these claims, with Panel B focusing on

compensation issues and Panel C on governance issues. Each panel compares the tendency of active versus passive funds to vote consistent with the ISS recommendation, in each of the bins delineated in Panel A. Active (passive) funds are defined as funds with above-median (below-median) predicted fund activism, as defined earlier using the principal factor. Due to the small number of observations in either the 0% or 100% bin, we combine all agenda items with less than 5% recommended support into one lower bin, and all agenda items with more than 95% into one upper bin. We refer to these bins as ‘near-blanket recommendations’. We are particularly interested in the less than 5% bin, as this is where management and ISS are in disagreement.

Panel B shows strong evidence of active voter funds disproportionately disagreeing with ISS on the near-blanket recommendations Against management, i.e., within the [0,5%] bin. On these near-blanket recommendations, passive funds vote consistent with ISS recommendations 59% of the time, compared to only 8% for active funds. This difference is greater than that observed within any other bin. The only other bin in which there is a similar difference in the extent to which these fund types follow ISS is the 5-10% bin, i.e., on the agenda items in which ISS recommends against management in more than 90% of cases across all companies.

Conclusions are similar when we focus on governance issues, shown in Panel C. Those funds with the greatest net benefits of voting, funds that are most likely to independently assess the items up for vote, tend to disagree with this one-size fits all approach.

To further investigate the issue of blanket recommendations, Table 6 conducts a more in-depth examination of four of these near-blanket recommendations. We focus on the four shareholder proposals examined earlier, proposals on which ISS nearly always recommends voting in a direction opposite management and which the literature has identified as key governance features: providing shareholders with the right to call a special meeting, requiring an annual advisory vote to ratify named executive officers’ compensation (i.e., requiring a say on pay vote), requiring a majority vote for election of directors, and declassifying the board. As discussed earlier, it is possible that

business ties between the fund and the firm, in terms of the fund's family managing the firm's pension business, may affect funds' votes. In fact, earlier results suggested that business ties played a particularly large role in the more contentious issues. For this reason, we first present results on the subsample of cases where there are no business ties.

Looking first at column 1 of Table 6, there are 127 proposals to enable shareholders to call a special meeting; ISS recommends voting For all 127 of these proposals and management recommends voting Against all 127.¹¹ Despite the strength of ISS's position, those mutual funds that are most actively engaged in the voting process, i.e., the active voting funds, disagree with this conclusion in a substantial fraction of cases. On average, only 45% of the predicted active voter funds follow ISS's recommendation, compared to 68% of the more passive funds.

We reach the same conclusions when we examine proposals to require majority votes for election of directors and proposals to require an advisory vote to ratify named executive officers' compensation. On both issues, actively voting funds are substantially less likely than passive funds to agree with ISS. While ISS is nearly always opposed to management on these issues, actively voting funds are less likely to always agree with these one-size-fits all prescriptions.

Finally and somewhat surprisingly, voting patterns on proposals to declassify the Board are inconsistent with predictions. Similar to other proposals, ISS nearly always recommends voting For board declassification, and management nearly always recommends voting Against. However, contrary to our expectations, actively voting funds are actually more likely than passive funds to agree with ISS's assessment and vote For declassified board structures (91% compared to 80%). This finding is consistent with research by Bebchuk and Cohen (2005) suggesting that classified boards are value-decreasing, but inconsistent with research by Johnson et al. (2012) that these board structures can be value-increasing in certain cases and also inconsistent with research by Bates,

¹¹ Specifically, the majority of these proposals are for shareholders with ownership of at least 10% to be able to call a special meeting.

Becher, and Lemmon (2008) who find little evidence that classified boards contribute to managerial entrenchment.

The bottom of Table 6 examines the extent to which business ties affect these relations. Specifically, we repeat the above calculations on the subsample of cases where funds do have business ties, in the form of pension business, with a firm. Two findings emerge from this analysis. First, the above patterns relating to the differences between active and passive funds remain strong within this business ties sample. Even among fund-firm pairs with business ties, the funds with higher net benefits of voting are more likely to independently evaluate the issues and come to a conclusion different than ISS. Second, consistent with results reported earlier, business ties also appear to play a role. Across each of the four proposals, funds with business ties are more likely to vote with management (i.e., less likely to agree with ISS) than funds without business ties. Moreover, the economic magnitudes are in some cases large. For example, among active funds voting on proposals to require an advisory vote to ratify compensation, 23% of funds without business ties vote with ISS, compared to only 15% of funds with business ties. In other words, 77% of firms without business ties vote with management, compared to 85% of funds with business ties.

While Table 6 shows that active voter funds are more likely to disagree with ISS on these blanket recommendations, Table 7 examines the extent to which these active funds actually evaluate these types of proposals on a firm-by-firm basis. Specifically, we hypothesize that each active voter funds will be more likely to vote For these proposals in some firms and Against in other firms, consistent with a realization that a one-size-fits-all approach is frequently not optimal. In contrast, each passive fund will be more likely to follow ISS and vote in the same direction across all firms. We test these predictions using two measures of the variation in a fund's votes (for a single type of shareholder proposal) across firms. First, for each of the four shareholder proposals, we calculate the standard deviation of each fund's votes across all firms that had this proposal on a ballot within our sample period. A fund that always voted Against or always voted For the proposal would have a

standard deviation of zero, whereas funds that vary their voting more across firms will have a higher standard deviation. Second, we calculate a linear measure, defined as $\text{Minimum}[\% \text{ votes with ISS}, 1 - \% \text{ votes with ISS}]$. This measure will similarly equal zero for any fund that always votes with ISS or always votes against ISS. It will increase in a linear fashion between 0 and 0.5, as a fund varies its votes more across firms.

We regress each of these dependent variables against our four measures of funds' net benefits of voting.¹² Both specifications provide strong support for active voter funds being less likely to vote in a one-size-fits-all fashion. Funds that are part of larger families, are larger, are located in an MSA with high fund concentration, and have lower turnover, are all significantly more likely to vary their votes across firms, within any of these four shareholder proposals.

To ensure that the active voter funds' variation in voting is not driven by pension ties, columns 3 and 4 repeat the regressions shown in columns 1 and 2, excluding any cases where a fund has a pension tie with the firm. In other words, the standard deviation measure and linear measure of a fund's voting are calculated only across those firms with which it has no business tie. Results are qualitatively similar.

In sum, our results provide evidence that is consistent with allegations regarding ISS's issuance of blanket recommendations. There are clearly important issues on which ISS is predisposed to recommending against management, and on many of these issues active voter mutual funds are most likely to come to a different conclusion than ISS. Moreover, the voting patterns of the active voter funds indicate that they are significantly less likely to subscribe to a one-size-fits all approach to governance.

¹² Note that because the dependent variable is defined at the fund level, we cannot include the two fund-firm measures of net benefits of voting.

7. Relation between Fund Voting and Fund Investments

Our findings highlight the extent to which funds vary in their attention to portfolio firms' governance. While many funds passively follow ISS, there are also many funds that appear to devote considerable resources toward voting and frequently disagree with ISS. Given the impact that ISS recommendations have on vote outcomes, this raises the question of what funds do when they reach a conclusion opposite to ISS. Specifically, are they more likely to sell shares? In a related vein, it raises questions related to the benefits of investing resources in evaluating the corporate governance of portfolio companies: do actively voting funds outperform passive funds? Section 7.1 examines the relation between voting and subsequent ownership changes, and Section 7.2 investigates the link with performance.

7.1. Relation between voting and subsequent ownership changes

If a fund invests considerable resources and determines that a given governance attribute is detrimental to performance, it will likely vote against implementation of such an attribute at the annual meeting. However, if ISS reaches a different conclusion, there is a smaller probability that the vote outcome will go in the direction that the fund wishes. In such cases, are funds more likely to decrease their shareholdings? Table 8 examines this issue. Specifically, we examine the change in shareholdings conditional on the fund reaching the same conclusion as ISS versus a different conclusion.

For each fund, we tabulate the agenda items at each company meeting in which the funds voted in a direction different from ISS. We collect shares held for each fund at the quarter immediately prior to the meeting and at the quarter immediately following, and we measure the change in share ownership as $(\text{shares held after the vote} - \text{shares held before the vote}) / (\text{shares held before the vote})$. To mitigate the influence of outliers, we winsorize this measure at the 0.5% level.

We regress this change in ownership measure on one of three variables that characterizes the extent of the fund's disagreement with ISS. In column 1, we define a dummy variable equal to one if the fund disagreed with ISS on at least one agenda item on the firm's proxy, zero otherwise. In column 2, we define a dummy variable equal to one if the fund disagreed with all agenda items on the firm's proxy, zero otherwise. Finally, in column 3, we measure the percent of agenda items in which the fund disagreed with ISS. In each regression, control variables include fund- and firm-specific characteristics similar to those used in earlier tables.

All three specifications indicate that mutual funds that come to a conclusion different from that of ISS are significantly more likely to sell more shares. In sum, the relation between fund votes and share ownership changes provides further evidence that certain funds feel very strongly about the governance structures of the portfolio companies. They are significantly more likely to sell shares of the portfolio companies whom they perceive to be adopting or maintaining a governance structure that they perceive as value-destructive.

7.2. Relation between Fund Voting and Fund Returns

The relation between funds' net benefits of voting and the tendency to follow ISS as well as the relations between fund voting and share ownership changes suggest that certain funds invest considerable resources evaluating the corporate governance structures of portfolio companies. In contrast, other funds appear to indiscriminately follow ISS on all agenda items. Do funds that invest resources in corporate governance earn a return on this investment? If in-depth evaluation of companies' corporate governance enables funds to make better investments, then the actively voting mutual funds may earn higher returns. Alternatively, if the resources invested in corporate governance are wasted, then we would expect the more actively voting mutual funds to earn lower returns.

Table 9 examines this issue. The dependent variable in these regressions equals the fund alpha, which is calculated for each mutual fund in each month over our sample period, and the independent variable is a measure of fund active voting. To construct the dependent variable, for each fund month t , we regress monthly fund gross returns over the past 36 months (months $t-36$ through $t-1$) on the four factors suggested by Fama and French (1993) and Carhart (1997): the market return minus the risk-free rate (RMRF), returns on a portfolio of small firms minus returns on a portfolio of big firms (SMB), returns on a high BM portfolio minus returns on a low BM portfolio (HML), and returns on a high momentum portfolio minus returns on a low momentum portfolio (UMD). Expected fund returns for month t are measured as factor loadings from this regression times the factors in month t , and the fund alpha equals the difference between actual and expected fund returns. We regress these monthly fund alphas on two measures of the activism level of the fund. In column 1, we tabulate the percent of cases across our entire 2006 – 2010 sample period in which the fund voted in a direction different from that of ISS. In column 2, we calculate this measure on a year-by-year basis. In addition, control variables include the log of total fund net assets, the log of fund age, the fund expense ratio, fund turnover, and fund new money growth (defined as in Kacperczyk, Sialm, and Zheng, 2007).

Both specifications in Table 9 show a significantly positive relation between fund activism and fund returns. Funds that more frequently arrive at a vote that is opposed to that suggested by ISS are more likely to be devoting resources to assessing these items up for vote. Results in Table 9 suggest that funds earn a return from this effort. Following Berk and Green (2004), we measure this returns using gross fund returns, under the logic that mutual fund managers will capture any rents and in an efficient market there should exist no positive alpha in net returns.

8. Conclusion

Mutual funds have a fiduciary duty to vote their shares in the best interests of their shareholders. While it is straight-forward to ascertain that a mutual fund is voting its shares, it is generally less clear whether the fund's vote reflects its own evaluation of what would be in the best interests of the shareholders. We develop a simple model that demonstrates that funds will optimally follow the recommendation of an informed advisor unless they possess superior information. Consistent with this intuition, we find that certain types of mutual funds are systematically more likely to use their own information, rather than indiscriminately following the recommendations of a proxy advisory service company.

The variation in funds' attention to these corporate governance-related agenda items up for vote is driven by the costs and benefits of actively voting. Funds rationally assess the net benefits of voting, and only devote the necessary resources to make an informed vote when these net benefits are sufficiently large. We find that the funds with stronger incentives to actively vote are significantly less likely to passively follow the advice of ISS. Moreover, those funds that are more engaged in the voting process earn a return on this activity, in the form of higher alphas.

Our findings emphasize that mandating shareholder participation, for example through voting, can have unforeseen consequences. In particular, the mandating of voting results in proxy advisory service firms controlling a large block of voting power and commanding a large influence on governance practices within firms. As a result, the opinion of ISS will be overrepresented relative to the opinions of other informed entities, for example actively voting mutual funds. We find that funds that disagree with ISS recommendations on a given company are disproportionately likely to sell their shares in that company following the vote.

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APPENDIX I: A MODEL OF INFORMED VOTING

We develop a simple model to understand the ways in which active voters tend to behave, compared to passive voters. We present the model in terms of a director vote, but it generalizes to the cases of compensation and governance votes as well. The basics of the model are as follows. A director can be of type “High” or “Low” (H and L for brevity). ISS observes a noisy signal about the true type and makes a voting recommendation. The mutual fund buys the ISS recommendation, receives its own noisy private signal and decides to vote “For” or “Against”.¹

The proportion of H directors equals α ($\alpha > 0$), meaning the average probability a director is H equals α . We assume that ISS receives the correct signal with probability β and gets a wrong signal with probability $(1-\beta)$. Analogously, the mutual fund receives the correct signal with probability θ and gets a wrong signal with probability $(1-\theta)$. For example, if the director true type is H, ISS has chance β to observe H and the mutual fund has chance θ to observe H. Thus, more precise signals are represented by higher values of β and θ . We further assume that both signals are informative but not completely revealing, i.e., $0.5 < \beta < 1$, and $0.5 < \theta < 1$.

We begin by just considering the relation between ISS’s recommendation and the probability that the director is of a given type. After developing this intuition, we then incorporate the effects of the fund’s private signal, as the fund’s vote is based on the probability that a director is of a given type conditional on both the ISS recommendation and the fund’s private signal.

ISS recommends “For” if its signal indicates that the probability a director is of type H is greater than α . Intuitively, ISS recommendations are based on the assumption that the company can always locate a director of at least ‘average’ quality. Mathematically, if ISS receives an H signal, the conditional probability the director is of high type becomes:

$$\begin{aligned}
 \Pr(\text{Type}=\text{H} \mid \text{ISS}=\text{H}) &= \frac{\Pr(\text{Type}=\text{H} \ \& \ \text{ISS}=\text{H})}{\Pr(\text{ISS}=\text{H})} \\
 &= \frac{\Pr(\text{ISS}=\text{H} \mid \text{Type}=\text{H}) \times \Pr(\text{Type}=\text{H})}{\Pr(\text{ISS}=\text{H} \mid \text{Type}=\text{H}) \times \Pr(\text{Type}=\text{H}) + \Pr(\text{ISS}=\text{H} \mid \text{Type}=\text{L}) \times \Pr(\text{Type}=\text{L})} \quad (1) \\
 &= \frac{\alpha\beta}{\alpha\beta + (1-\alpha)(1-\beta)} > \alpha \text{ as long as } \beta > 0.5
 \end{aligned}$$

¹ The model is one of sequential learning, in the spirit of Bikhchandani, Hirshleifer, and Welch (1992). We do not model the choice of funds that do not buy the ISS recommendation and do not incur the cost of receiving their own signal about the vote. These funds will most likely revert to the default option of always supporting director nominations by the management.

Given that $\beta > 0.5$ by assumption (i.e., ISS's signal is assumed to be informative), these equations indicate that whenever ISS receives an H signal, the conditional probability of the director being high type is greater than the average director quality, α . Therefore, ISS will recommend voting "For" if it receives an H signal. Similarly, ISS will recommend "Against" if it receives an L signal.

The mutual fund conducts a similar analysis to make its vote, but this decision is conditional on both the ISS signal, which is fully revealed by the ISS recommendation, and on its own private signal. For example, consider a fund's vote conditional on observing a private signal of H and an ISS signal of L. We know that a fund will vote "For" if it perceives director quality higher than α . The fund will expect director quality:

$$\begin{aligned} & \Pr(\text{Type}=\text{H} \mid \text{ISS}=\text{L}, \text{Fund}=\text{H}) \\ = & \frac{\Pr(\text{ISS}=\text{L}, \text{Fund}=\text{H} \mid \text{Type}=\text{H}) \times \Pr(\text{Type}=\text{H})}{\Pr(\text{ISS}=\text{L}, \text{Fund}=\text{H} \mid \text{Type}=\text{H}) \times \Pr(\text{Type}=\text{H}) + \Pr(\text{ISS}=\text{L}, \text{Fund}=\text{H} \mid \text{Type}=\text{L}) \times \Pr(\text{Type}=\text{L})} \quad (2) \\ = & \frac{(1-\beta)\theta\alpha}{(1-\beta)\theta\alpha + \beta(1-\theta)(1-\alpha)} \end{aligned}$$

Mathematically, it can be shown that the above probability is above α if $\theta > \beta$, i.e., as long as the fund signal has higher precision than the ISS signal. The intuition is simple, as long as the fund has a better quality signal than ISS, it will trust its H signal more than the ISS L signal.

Because fund signals are private, we empirically only observe the fund vote and the ISS recommendation. We thus seek to analogously solve the probability of the possible [ISS recommendation, fund vote] combinations through the model. Consider first the case in which the ISS signal is L. If the fund similarly receives a signal of L, there is a zero probability it will vote "For". If the fund receives a signal of H, it will vote "For" if $\theta > \beta$. In sum, when $\theta \leq \beta$ the overall probability of the fund voting "For" given an ISS signal of L equals zero. When $\theta > \beta$, the fund trusts its signal more than ISS's signal, and the probability of the fund voting "For" and ISS signal of L equals:

$$\begin{aligned} & \Pr(\text{ISS}=\text{L}, \text{Fund}=\text{H}) \\ = & \Pr(\text{ISS}=\text{L}, \text{Fund}=\text{H} \mid \text{Type}=\text{H}) \times \Pr(\text{Type}=\text{H}) + \Pr(\text{ISS}=\text{L}, \text{Fund}=\text{H} \mid \text{Type}=\text{L}) \times \Pr(\text{Type}=\text{L}) \quad (3) \\ = & (1-\beta)\theta\alpha + \beta(1-\theta)(1-\alpha) \\ = & (\alpha - \beta)\theta + (1-\alpha)\beta \end{aligned}$$

Putting everything together we have:

$$\Pr(\text{Fund votes For, ISS rec Against}) = [(\alpha - \beta)\theta + (1 - \alpha)\beta] \text{ if } \theta > \beta, \text{ and } 0 \text{ if } \theta \leq \beta \quad (4)$$

These findings highlight the importance of the fund's signal relative to that of ISS. If the fund's signal indicates the director is an H type but ISS recommends "Against", it is the relative precision of the two signals that determines the fund's vote.

A similar series of equations shows the probability of a fund voting "For" when ISS recommends "For" to be:

$$\Pr(\text{Fund votes For, ISS rec For}) = [\alpha\beta\theta + (1 - \alpha)(1 - \beta)(1 - \theta)] \text{ if } \theta > \beta, \text{ and } 1 \text{ if } \theta \leq \beta \quad (5)$$

We are also interested in the probabilities of the fund voting "For" conditional on ISS recommending "Against" (Eq. (6)) and on ISS recommending "For" (Eq. (7)). These are easily derived by dividing the probabilities in equations (4) and (5) by the probabilities of ISS recommending "Against" and "For", respectively:

$$\Pr(\text{Fund votes For} \mid \text{ISS rec Against}) = \frac{(\alpha - \beta)\theta + (1 - \alpha)\beta}{\alpha(1 - \beta) + (1 - \alpha)\beta} \text{ if } \theta > \beta, \text{ and } 0 \text{ if } \theta \leq \beta \quad (6)$$

$$\Pr(\text{Fund votes For} \mid \text{ISS rec For}) = \frac{\alpha\beta\theta + (1 - \alpha)(1 - \beta)(1 - \theta)}{\alpha\beta + (1 - \alpha)(1 - \beta)} \text{ if } \theta > \beta, \text{ and } 1 \text{ if } \theta \leq \beta \quad (7)$$

Figure A1 plots the conditional probabilities of a fund voting "For", given parameters $\alpha=0.9$ and $\beta=0.8$. The α of 0.9 corresponds generally to the high observed rate of director support, as shown by Cai et al. (2009) and Fischer et al. (2009). Panels A shows the conditional probabilities for a fund to vote For over a range of values for fund precision, θ , of [0.7, 0.9]. Panels B shows the analogous probabilities when the fund precision parameter θ is noisy. Specifically, we assume that each value of the fund precision proxy is uniformly distributed in the $[\theta-0.1, \theta+0.1]$ interval. For example, if the fund precision proxy is equal to 0.7, then the true precision of the fund has an equal probability to be anywhere in the [0.6, 0.8] interval.

The figures illustrate several patterns. First, all funds are more likely to vote For a director when ISS recommends For. This is consistent with the greater probability of the director actually being high quality. Second, as fund precision increases, the reliance on ISS decreases: the probability a fund votes For (as shown on the y-axis) decreases as a function of precision in cases that ISS recommends voting For (solid line) and increases when ISS recommends Against (dashed

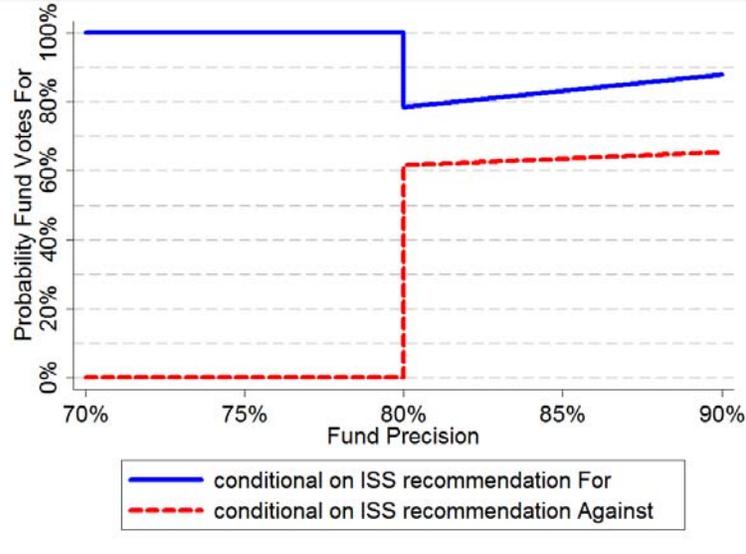
line). Put differently, the narrowing distance between the two lines represents a decrease in higher precision funds' tendencies to follow ISS's recommendation.

The main implication from the model can be thought of as a type of information cascade, where funds with lower precision than the ISS signal ($\theta < \beta$) always vote in accordance with ISS. Defining an "actively voting fund" as a fund with higher precision than ISS and a "passive fund" as a fund with lower precision than ISS, the model predicts that actively voting funds will disagree with ISS more often than passive funds.

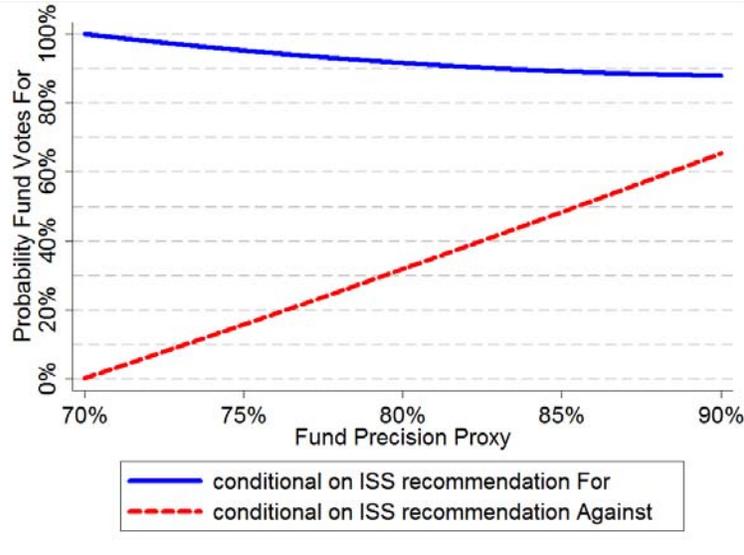
Figure A1. Fund Conditional Probabilities to Vote For based on the Model.

This figure plots fund conditional probabilities to vote For Management, with parameters $\alpha=0.9$ and $\beta=0.8$. Panels A plots the conditional probability for one fund over a range of precisions θ : $[0.7,0.9]$. Panels B plots the probability of observing For vote when we have a noisy proxy of the fund precision parameter θ : we assume that each value of the proxy is uniformly distributed in the $[\theta-0.1, \theta+0.1]$ interval. For example, if the fund precision proxy is equal to 0.7, than the true precision of the fund has an equal probability to be anywhere in the $[0.6,0.8]$ interval.

Panel A. Probability of Fund Vote conditional on ISS Recommendation as a Function of Fund Precision



Panel B: Probability of Fund Vote conditional on ISS Recommendation as a Function of Precision Proxy



APPENDIX II: VARIABLE DESCRIPTIONS

Unless noted otherwise, all variables related to the mutual funds come from the CRSP Mutual Fund database, variables related to firms come from the CRSP database and the Compustat annual database, and variables related to governance and director characteristics come for the RiskMetrics database. Variables are defined using the most recent data available prior to the firm's annual shareholder meeting at which the vote occurs. Means of all control variables are shown here.

Proxies for Funds' Net Benefits of Voting (2,516,507 votes)

Variable	Definition	Mean
Log(Family Size)	The log of the fund family total net assets in equity focused funds, in millions of dollars as of the month before each voting date.	10.1
Log(Fund Size)	The log of the fund total net assets, in millions of dollars.	6.0
MSA with High Fund Concentration	A dummy variable equal to one if the fund management company is located in one of the top ten MSAs based on number of mutual funds.	53.7%
Fund Turnover Rate	The minimum of aggregate purchases or aggregate sales of securities over the calendar year, divided by the average total net assets of the fund. For funds with multiple series, turnover represents a weighted average across series, where weights equal the total net assets of each series.	109.2%
Investment as % of Fund TNA	The ratio of fund holdings in the firm to fund total net assets.	1.023%
Investment as % of Firm Equity Value	The ratio of fund holdings in the firm to firm equity value.	0.164%
Predicted Active Voter	The principal factor extracted from our four fund-level proxies for net benefits of voting: fund size, membership in Top 5 family, location in Top Fund MSA, Fund turnover. The construction of this factor is detailed in the text and tabulated in Table 3.	0.050

Mutual Fund and Agenda Item Characteristics (2,516,507 votes)

Variable	Definition	Mean
Business Tie Between Family and Firm	A dummy variable equal to one if the fund family served as a service provider on a plan offered by a firm during the same year. Data is obtained from ERISA 5500 filings with the Department of Labor.	6.7%
Fund Expense Ratio	The total operating expenses of the fund as a percentage of fund total net assets. For funds with multiple series, the expense ratio represents a weighted average across series, where weights equal the total net assets of each series.	1.101%
ISS Recommends Voting with Mgmt.	A dummy equal to one if ISS recommends voting with firm management on this agenda item.	87.7%
Shareholder Proposal	A dummy equal to one if the agenda item was shareholder-proposed.	6.9%

Firm Control Variables (2,516,507 votes)

Variable	Definition	Mean
ISS Against Another Item	Dummy variable equal to one if ISS recommends voting against at least one other agenda item at the same firm and the same shareholder meeting.	0.542
Funds Support for Management	% fund votes For management, across all agenda items in prior calendar year.	0.906
Log(Total Firm Assets)	The log of the firm's total assets, in millions of dollars.	9.527
Excess Firm Return	Firm stock return in the 12 months preceding the annual meeting, minus the return on the value-weighted market index over the corresponding period.	0.074
Firm ROA	Firm net income / firm total assets.	0.060
Firm B/M Ratio	Book value of equity / market value of equity, where book value is defined as total assets minus liabilities, plus deferred taxes and investment tax credits (if available), minus the book value of preferred stock (defined using liquidating, redemption or carrying value of preferred stock, in that order of preference).	0.545
Firm Market Leverage	Book value of total debt divided by the market value of equity.	0.239
S&P 500	Dummy variable equal to one if the firm is a member of the S&P 500 Index.	0.731
Institutional Holdings	Total shares held by institutions as listed on 13f filings / shares outstanding.	52.3%
Majority Voting	Dummy variable equal to one if the firm uses majority voting for director votes, where majority voting is defined as a system under which directors must win a majority of votes cast by shareholders to win or retain their seats.	45.6%
Entrenchment Index	Count of 6 anti-takeover provisions: staggered boards, limits to shareholder amendments of the bylaws, supermajority requirements for mergers, supermajority requirements for charter amendments, poison pills, and golden parachute agreements. See Bebchuck, Cohen, and Ferrell (2009).	2.664
Dual Class	Dummy equal to one if the firm has two classes of common shares.	0.050

Director Control Variables (2,131,300 votes)

Variable	Definition	Mean
Independent Director	Dummy = 1 if director is classified as independent by IRRC	0.799
Incumbent Director	Dummy = 1 if director is on board in previous year	0.957
Director is CEO	Dummy = 1 if director is CEO of this firm or another firm	0.184
Director Ownership > 1%	Dummy = 1 if director owns >1% of firm voting power	0.067
Number of Outside Board	# other boards (of co's in IRRC) on which director sits	0.821
Director Attended < 75%	Dummy = 1 if director attended <75% board mtgs last year	0.002
Log(Director Tenure)	Log(1+# years that director has served on board)	1.918
Director Above 65	Dummy = 1 if director is > 65 years old	0.349
Female Director	Dummy = 1 if director is female	0.153
Compensation Committee	Dummy = 1 if director serves on compensation committee	0.288
Compensation Chair	Dummy = 1 if director chairs compensation committee	0.091
Audit Committee	Dummy = 1 if director serves on audit committee	0.301
Audit Chair	Dummy = 1 if director chairs audit committee	0.092
Nominating Committee	Dummy = 1 if director serves on nominating committee	0.263
Nominating Chair	Dummy = 1 if director chairs nominating committee	0.076

CEO Control Variables (248,393 votes)

Variable	Definition	Mean
Abnormal Compensation	Residual from a regression of compensation on $\log(\text{Assets})$, prior year stock return, and industry and year dummies, where the sample equals all ExecuComp firms during our sample period. This approach follows Cai, Garner and Walkling (2009).	1.662
CEO Ownership	Shares owned by the CEO excluding options / shares outstanding	0.893
CEO Chairman	Dummy equal to one if the CEO is also chairman of the board	0.745
Log(CEO Tenure)	$\log(1 + \# \text{ years that this person has served as CEO})$	1.697
CEO Above 65	Dummy equal to one if the CEO is over 65 years old	0.044
CEO Female	Dummy equal to one if the CEO is a female	0.021

Table 1: Descriptive Statistics

This table describes the voting patterns of funds and the recommendations of management and ISS in % across the three different types of proposals: director, compensation, and governance. The sample consists of 2,516,507 votes by 2,177 mutual funds across 239 different fund families in the 2006 – 2010 period. The votes represent 39,635 separate agenda items in 5,858 shareholder meetings at 1,602 different firms.

Panel A: Frequency of votes with managements vs. ISS

	Director	Compensation	Governance
Management Recommends Voting FOR	100	68.8	30.3
ISS Recommends Voting with Mgmt.	93.0	69.1	39.2
Fund Votes with Mgmt. Recommendation	93.8	77.8	60.6
Fund Votes with ISS Recommendation	93.8	77.9	75.1
Shareholder Proposal	0	31.2	70.0
Observations	2,131,300	248,393	136,814

Table 2: Percent of funds voting with ISS rec., based on funds' net benefits of informed voting

To compare funds with high versus low net benefits of informed voting, this table shows the percent of funds in each group to vote with ISS in more than 99% of cases between 2006 – 2010. We require at least 10 votes per fund.

Proxies for high net benefits of voting are: above-median fund family size, above-median fund size, fund located in an MSA with above-median fund concentration, and below-median turnover. Funds not belonging to each of these groups are considered to have low net benefits of voting. Variables are defined in more detail in Appendix II.

Asterisks denote that the difference between the high and low net benefits of voting groups are significantly different from zero at the 1% (***) , 5% (**), or 10% (*) levels.

Panel A: Relation between Funds net benefits of informed voting and agreement with ISS

Measure of HIGH Net Benefits of Informed Voting	% of Funds following ISS recommendation		
	High Group	Low Group	Difference
High Family Size	12.4	36.6	-24.1***
High Fund Size	17.8	31.5	-13.8***
Fund in MSA with High Fund Concentration	20.3	32.4	-12.1***
Low Fund Turnover	21.6	30.1	-8.4***
High Predicted Active Voter (Factor Analysis)	12.0	36.4	-24.4***

Table 3: Probit model for director votes

The sample consists of 2,867,504 votes on director proposals between 2006-2010. Each observation represents the vote of one mutual fund on one director at one shareholder meeting at one company. In each probit regression, the dependent variable equals one of the fund votes with management, zero otherwise. Columns 1 and 2 present the cases where ISS recommends voting Against and For management, respectively. Independent variables include proxies for funds' net benefits of voting and control variables related to the mutual fund, company, and directors. Dummy variables denoting director membership and chairmanship of the compensation, auditing, and nominating committees, as well as year and industry fixed effects are also included in each regression. The reported coefficients are the marginal effects - the change in the probability to vote with management for an infinitesimal change in each independent, continuous variable and, the discrete change in the probability for dummy variables. Standard errors are corrected for clustering of observations at the fund level (z-statistics are in parenthesis). Asterisks denote statistical significance at the 1% (***), 5% (**), or 10% (*) levels. Variables are defined in Appendix II.

	ISS Against management	ISS For management
<i>Fund proxies for Net Benefits of Voting</i>		
Log(Family Size)	0.0270*** (2.69)	0.0005 (0.43)
Log(Fund Size)	0.0210** (2.47)	-0.0019* (-1.87)
Fund in MSA with High Fund Concentration	0.0773*** (2.75)	-0.0180*** (-5.21)
Fund Turnover Rate	-0.0153 (-1.30)	0.0019* (1.70)
<i>Fund-firm relationship proxies for Net Benefits of Voting</i>		
Investment as % of Fund TNA	0.0153** (2.00)	-0.0005 (-0.79)
Investment as % of Firm Equity	0.0440*** (2.97)	0.0011 (0.98)
<i>Conflicts of interest proxy</i>		
Business Tie Between Family and Firm	0.1250*** (6.65)	-0.0253*** (-6.48)
<i>Control variables</i>		
Log(Total Firm Assets)	0.0041 (0.60)	0.0023*** (4.08)
Excess Firm Return	0.0223*** (2.74)	0.0020** (2.03)
Firm ROA	0.1829*** (4.97)	0.0008 (0.24)
Firm B/M Ratio	-0.0211** (-2.37)	-0.0025*** (-2.76)
Firm Market Leverage	0.0369 (1.58)	-0.0007 (-0.26)
S&P 500	0.0287	0.0036**

	(1.26)	(2.15)
Institutional Holdings	-0.0001	-0.0001***
	(-0.19)	(-4.42)
Majority Voting	0.0476***	0.0039***
	(6.16)	(4.96)
Entrenchment Index	-0.0032	-0.0013***
	(-1.18)	(-4.49)
Dual Class	-0.0616***	-0.0043***
	(-5.66)	(-3.24)
Independent Director	0.0102	0.0115***
	(1.48)	(8.68)
Incumbent Director	-0.0102	-0.0040***
	(-0.69)	(-3.89)
Director is CEO	0.0097***	0.0035***
	(2.63)	(7.52)
Director Ownership > 1%	-0.0053	0.0018***
	(-0.87)	(2.89)
Number of Outside Board Seats Held	0.0042***	-0.0015***
	(3.01)	(-6.71)
Director Attended < 75%	-0.1165***	-0.0751***
	(-5.05)	(-9.64)
Log(Director Tenure)	-0.0002	-0.0028***
	(-0.08)	(-4.99)
Director Above 65	0.0086**	0.0011***
	(2.30)	(3.19)
Female Director	0.0123***	0.0010***
	(4.11)	(3.32)
ISS Against Another Item	0.0149*	-0.0037***
	(1.75)	(-5.71)
Funds Support for Mgmt.	-0.0093	0.0330***
	(-0.38)	(9.42)
Fund Expense Ratio	0.1003**	-0.0096**
	(2.18)	(-2.34)
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Chi-squared test	1,050	3,650
Observations	149,228	1,982,072
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Table 4: Probit model for compensation and governance votes

The sample consists of 248,336 votes on compensation-related proposals (columns 1 and 2) and 136,002 votes on governance-related proposals (columns 3 and 4) between 2006-2010. Each observation represents the vote of one mutual fund on one agenda item at one shareholder meeting at one company. In each probit regression, the dependent variable equals one of the fund votes with management, zero otherwise. Columns 1 and 3 (2 and 4) present the cases where ISS recommends voting Against (For) management. Independent variables include proxies for funds' net benefits of voting and control variables related to the mutual fund and company, as listed in Appendix II. Columns 1 and 2 also include control variables related to the CEO, also listed in the Appendix. Year and industry fixed effects are also included in each regression. For brevity, these controls are not tabulated. The reported coefficients are the marginal effects - the change in the probability to vote with management for an infinitesimal change in each independent, continuous variable and, the discrete change in the probability for dummy variables. Standard errors are corrected for clustering of observations at the fund level (z-statistics are in parenthesis). Asterisks denote statistical significance at the 1% (***), 5% (**), or 10% (*) levels. Variables are defined in Appendix II.

	Compensation Issues		Governance Issues		Blanket Issues
	ISS Against Management	ISS For Management	ISS Against Management	ISS For Management	ISS Against Management
<i>Fund proxies for Net benefits of voting</i>					
Log(Family Size)	0.0502*** (4.17)	-0.0140*** (-4.63)	0.0279*** (2.90)	0.0020** (2.25)	0.3510*** (3.18)
Log(Fund Size)	0.0374*** (4.82)	-0.0091*** (-3.75)	0.0205*** (3.30)	-0.0015 (-1.37)	0.0288*** (3.91)
Fund in MSA with High Fund Concentration	0.0761*** (2.67)	-0.0159* (-1.78)	0.0952*** (3.81)	0.0115*** (3.24)	0.0644** (2.25)
Fund Turnover Rate	0.0043 (0.31)	0.0075*** (2.68)	0.0070 (0.55)	0.0060*** (4.37)	0.0137 (1.00)
<i>Fund-firm relationship proxies for net benefits of voting</i>					
Investment as % of Fund TNA	0.0130* (1.86)	-0.0057** (-2.52)	0.0127** (2.17)	0.0000 (0.05)	0.0129* (1.93)
Investment as % of Firm Shares	0.0271* (1.66)	0.0040 (1.34)	0.0013 (0.11)	-0.0032* (-1.81)	0.0101 (0.72)
<i>Family proxy for conflicts of interest</i>					
Business Tie	0.1681*** (7.78)	-0.0307*** (-4.82)	0.0982*** (5.34)	0.0110*** (4.39)	0.1231*** (6.04)
Number Observations	76,872	171,464	83,184	52,818	74,699

Table 5: Economic significance of firm-specific, agenda-specific and fund-specific factors

This table reports two goodness-of-fit statistics for several variants of the regressions in Tables 3 and 4. The Director Sample results (shown in rows 1 and 2) are based on the director regression shown in column 1 of Table 3 (director elections on which ISS recommended Against management). The Compensation (Governance) sample results are based on the compensation (governance) regression shown in column 1 (column 3) of Table 4. The Blanket Issues sample is based on the regression in the last column of Table 4. The first column shows the McFadden R^2 and the percent of observations that are classified correctly (based on a 50% cutoff) using all independent variables. The second column repeats the regression without the firm-level controls, which are listed in Appendix II. The third column repeats the regression without the director or CEO controls (but including the firm-level controls), which are similarly listed in Appendix II. The fourth column includes all controls except the business ties measure. The fifth column includes all controls except the four fund-level proxies for funds' net benefits of voting. Finally, the sixth column includes all controls except the four fund-level proxies and the two fund-firm relationship measures for funds' net benefits of voting.

	Subtracting one set of controls at a time					
	All controls	Minus firm-level controls	Minus director or CEO controls	Minus Business ties	Minus 4 fund measures	Minus 4 fund and 2 fund-firm measures
<i>Director Sample</i>						
McFadden R^2	5.7%	5.4%	5.6%	5.5%	3.4%	2.6%
% correct	62.7%	62.4%	62.5%	62.5%	58.5%	57.1%
<i>Compensation Sample</i>						
McFadden R^2	11.3	10.9	10.6	10.9	5.4	4.8
% correct	66.5	66.3	66.6	66.3	59.8	58.8
<i>Governance Sample</i>						
McFadden R^2	7.7	6.4	7.7	7.6	4.9	4.8
% correct	69.3	68.4	69.3	69.6	64.7	64.5
<i>4 "Blanket" Issues</i>						
McFadden R^2	8.5	7.6	8.5	8.2	4.9	4.6
% correct	69.3	68.9	69.3	69.6	64.0	63.5

Table 6: Specific examples of blanket recommendations

We identify four shareholder proposals with more than 100 observations in the 2006 – 2010 sample period on which management and ISS recommended opposite votes in almost all cases. These proposals include: the right to call a special meeting, requiring a majority vote for election of directors, requiring an advisory vote to ratify named executive officers' compensation, and declassifying the board. For each of these proposals, we tabulate the total number of proposals as well as the number where management recommended Against the shareholder proposal and ISS recommended For. Among this management Against – ISS For subsample, we tabulate the percent of active (passive) fund shares that voted For the proposal. We do this both for the subsample without business ties and the subsample with business ties.

	Shareholder Proposal Agenda Item			
	Right to Call Special Meeting	Require Advisory Vote to Ratify Named Exec. Officers' Compensation	Require Majority Vote for Election of Directors	Declassify the Board
# Total Proposals	127	214	216	166
# Proposals where Mgmt=Against, ISS=For	127	213	205	160
<i>Among the Mgmt=Against, ISS=For subsample</i>				
% Funds without Business ties that vote with ISS				
% Predicted Active Voter Funds	45.9%	23.1%	52.3%	89.9%
% Predicted Passive Voter Funds	67.9%	64.6%	71.3%	80.4%
% Funds with Business ties that vote with ISS				
% Predicted Active Voter Funds	38.5%	15.0%	42.2%	96.7%
% Predicted Passive Voter Funds	63.4%	52.2%	75.5%	81.2%

Table 7: Funds' tendencies to vote in a firm-specific manner

This table examines the relation between funds' net benefits of voting and their tendency, for a single agenda item, to vote in different directions across different firms. The sample consists of all funds that voted on one of the four governance-related issues on which ISS nearly always recommends against (the Table 5 sample): 'right to call special meeting', 'require advisory vote to ratify named executive officers' compensation', 'require majority vote for election of directors', and 'declassify the board'. Regressions are estimated at the fund-agenda level, such that each observation relates to funds votes across all firms with a particular agenda item on the ballot during one of the sample years. The dependent variable in column 1 is the standard deviation of the fund's votes across all firms with a vote on the particular agenda item. In column 2, the dependent variable equals $\min[\% \text{ votes with ISS}, 1-\% \text{ votes with ISS}]$. Both dependent variables range from 0 to 0.5, with higher numbers reflecting a greater tendency to vote in different directions for different firms. Columns 3 and 4 are similar, with the exception that all observations in which a fund family has a business tie with a firm on which it is voting are excluded. T-statistics are in parentheses.

	All Votes		Excluding Business Ties	
	Std Dev of fund's votes	Min[%votes with ISS, 1-%votes with ISS]	Std Dev of fund's votes	Min[%votes with ISS, 1-%votes with ISS]
Log(Family Size)	0.0106*** (6.62)	0.0081*** (7.36)	0.0104*** (6.35)	0.0077*** (6.95)
Log(Fund Size)	0.0081*** (4.48)	0.0042*** (3.37)	0.0092*** (5.09)	0.0049*** (3.89)
Fund in MSA with High Fund Concentration	0.0159** (2.42)	0.0123*** (2.74)	0.0167** (2.53)	0.0125*** (2.76)
Fund Turnover Rate	-0.0086*** (-3.55)	-0.0046*** (-2.76)	-0.0083*** (-3.44)	-0.0046*** (-2.76)
Adj-R-squared	0.367	0.312	0.365	0.309
Number Observations	4,149	4,149	4,063	4,063

Table 8: Changes in holdings after fund votes

For each company meeting, we tabulate the issues on which each mutual fund's vote was inconsistent with the ISS recommendation. We then calculate the average change in holdings for each fund in each firm, where change in holdings in each portfolio firm is measured as (fund shares owned after – fund shares owned before) / shares owned before the annual meeting. We regress this change in holdings measure on: a dummy equal to one if the fund disagreed with ISS on a least one issue up for vote in firm j (column 1), a dummy equal to one if the fund disagreed with ISS on all issues up for vote in firm j (column 2), and the percentage of issues up for vote in firm j on which the fund disagreed with ISS. Control variables are defined in Appendix II. All regressions also include year and industry fixed effects, and standard errors are clustered at the fund level. T-statistics are reported in parentheses.

	Dependent Variable =		
	%ΔShares held by the mutual fund in firm j		
Fund disagrees with ISS on at least 1 issue up for vote in firm j	-2.89*** (-4.74)		
Fund disagrees with ISS on all issues up for vote in firm j		-4.81*** (-3.65)	
% issues where Fund disagrees with ISS (in firm j)			-4.88*** (-4.10)
Business Tie between fund family and firm	-0.92 (-1.18)	-1.26 (-1.59)	-1.00 (-1.29)
Investment as % of Fund TNA	-1.59*** (-6.33)	-1.60*** (-6.38)	-1.59*** (-6.36)
Investment as % of Firm Equity	0.02 (0.06)	-0.06 (-0.15)	-0.02 (-0.05)
# agenda items	0.20*** (4.33)	0.12*** (2.73)	0.13*** (3.01)
Log(Total Firm Assets)	1.45*** (3.92)	1.41*** (3.79)	1.41*** (3.79)
Excess Firm Return	4.88*** (5.96)	4.92*** (6.00)	4.88*** (5.96)
Firm ROA	-0.93 (-0.49)	-0.83 (-0.43)	-0.81 (-0.43)
Firm B/M Ratio	1.09 (1.32)	1.13 (1.36)	1.11 (1.34)
Firm Market Leverage	-3.52*** (-2.64)	-3.84*** (-2.87)	-3.62*** (-2.70)
S&P 500	0.50 (0.54)	0.44 (0.48)	0.48 (0.52)
Institutional Holdings	0.18*** (7.51)	0.18*** (7.57)	0.18*** (7.53)
Majority Voting	-0.30 (-0.89)	-0.35 (-1.03)	-0.35 (-1.03)
Entrenchment Index	-0.25* (-1.76)	-0.28* (-1.95)	-0.27* (-1.85)
Dual Class	-1.53** (-2.49)	-1.50** (-2.45)	-1.45** (-2.37)
# Observations	276,401	276,401	276,401

Table 9: Returns for active voter funds compared to passive funds

The dependent variable in each of these panel regressions is a measure of monthly fund abnormal performance, alpha, over the 2006 – 2010 time period. To form alpha, we estimate rolling four factor regressions of monthly fund returns over months $t-36$ to $t-1$ on the three Fama-French factors and the Carhart momentum factor. Alpha in month t equals actual returns in month t minus expected returns, where expected returns are calculated based on the aforementioned regression coefficients multiples by time t factors. These monthly abnormal fund returns are regressed on a measure of fund activist voting, which we proxy as the percent of governance and compensation agenda items in which the fund vote deviated from the ISS recommendation. In column 1 this is measured across the entire 2006 – 2010 sample period, and in column 2 it is measured on an annual basis. Control variables include the log of fund total net assets, the log of fund age, the fund expense ratio, fund turnover, and new money growth into the fund. New money growth equals $[\text{fund total net assets}_t - \text{fund total net assets}_{t-1} * (1 + \text{fund return}_t)] / \text{fund total net assets}_{t-1}$. All control variables are lagged one period.

	Dependent variable = fund alpha	
% voting against ISS _{06 - 10}	0.0919** (2.25)	
% voting against ISS _{yr t}		0.1013* (1.91)
Log(Total net assets)	-0.0016 (-0.39)	0.0012 (0.25)
Log(Fund Age)	-0.0189 (-1.45)	-0.0068 (-0.45)
Expense ratio	0.0455** (2.46)	0.0500** (2.18)
Fund Turnover	0.0013 (0.17)	0.0005 (0.06)
New Money growth	-0.0024 (-1.59)	-0.0038** (-2.29)
Adj-R-squared	0.03	0.03
Observations	87,923	53,434

Figure 1. Distribution of Funds by average support for management and agreement with ISS.

The sample consists of 2,516,346 votes by 2,014 mutual funds in 2006 – 2010 with more than 10 votes. For each fund, we calculate the percent of votes consistent with the recommendation of management (top panel) and with the recommendation of ISS (bottom panel). Funds are placed into percentiles, as shown on the horizontal axis. The percent of the 2,014 mutual funds that fall within each percentile is plotted on the vertical axis.

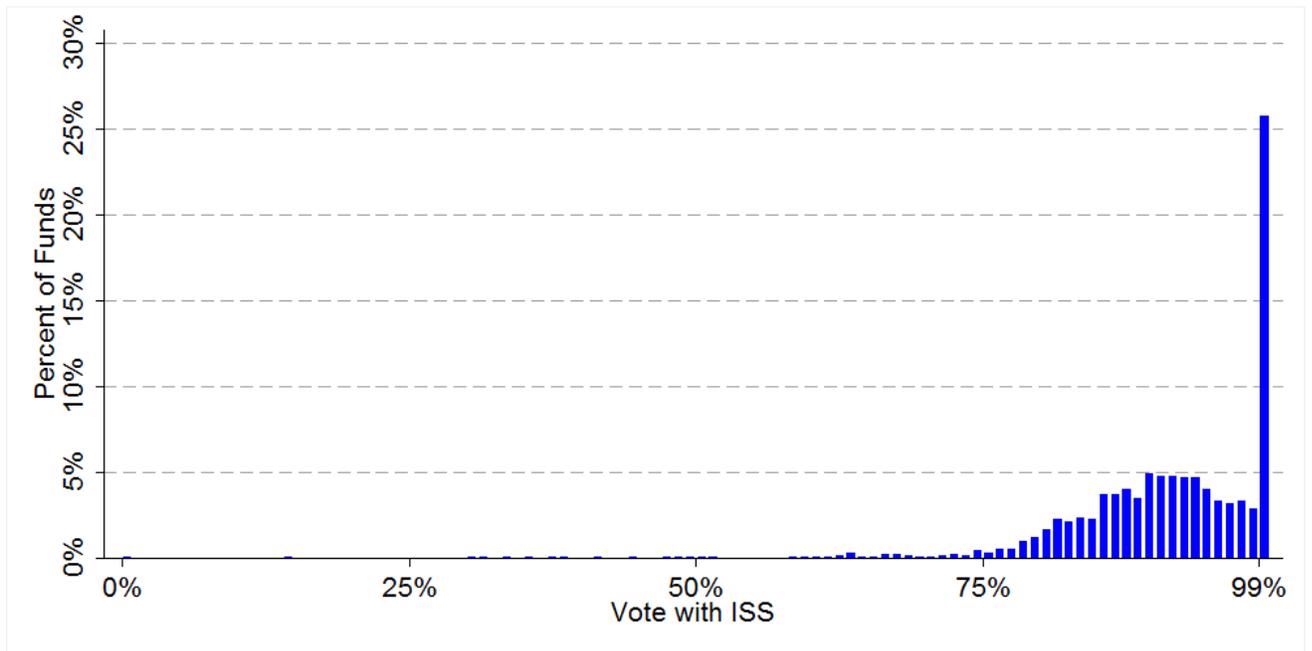
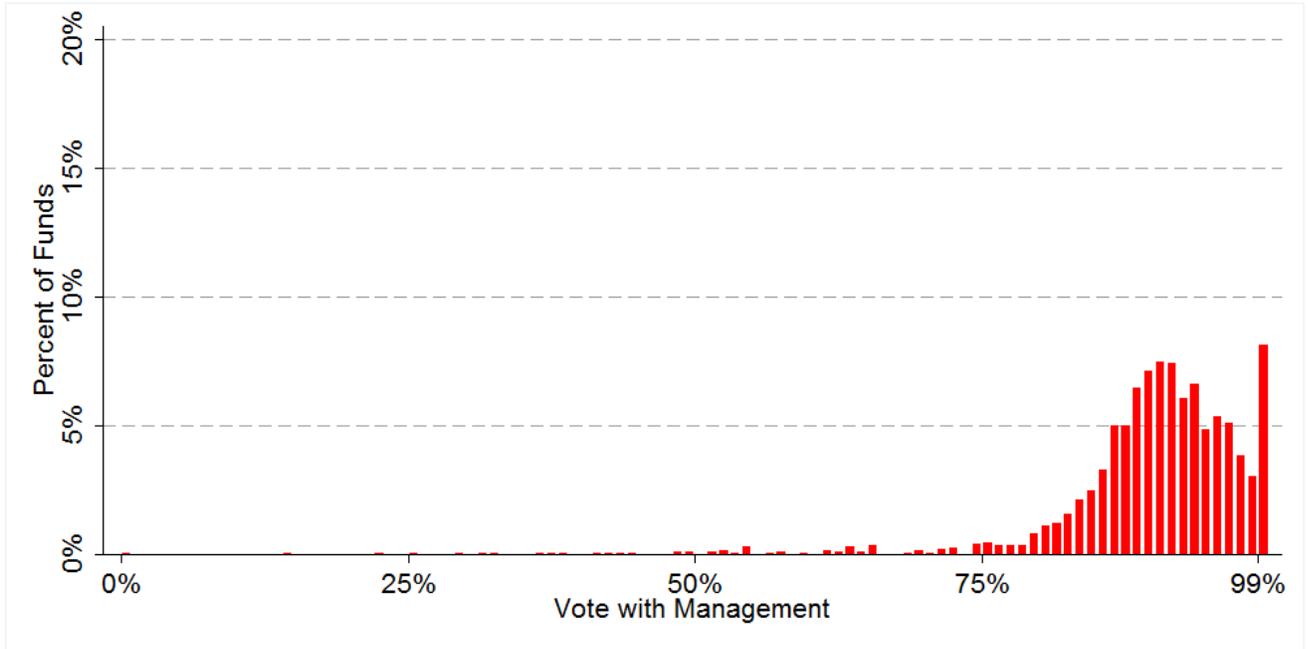


Figure 2. Distribution of Funds by vote type

Panel A consists of 2,131,088 director votes across 2,004 funds, Panel B on 247,408 compensation votes across 1,773 funds, and Panel C on 134,952 governance votes across 1,513 funds. The Figure 1 description provides further details.

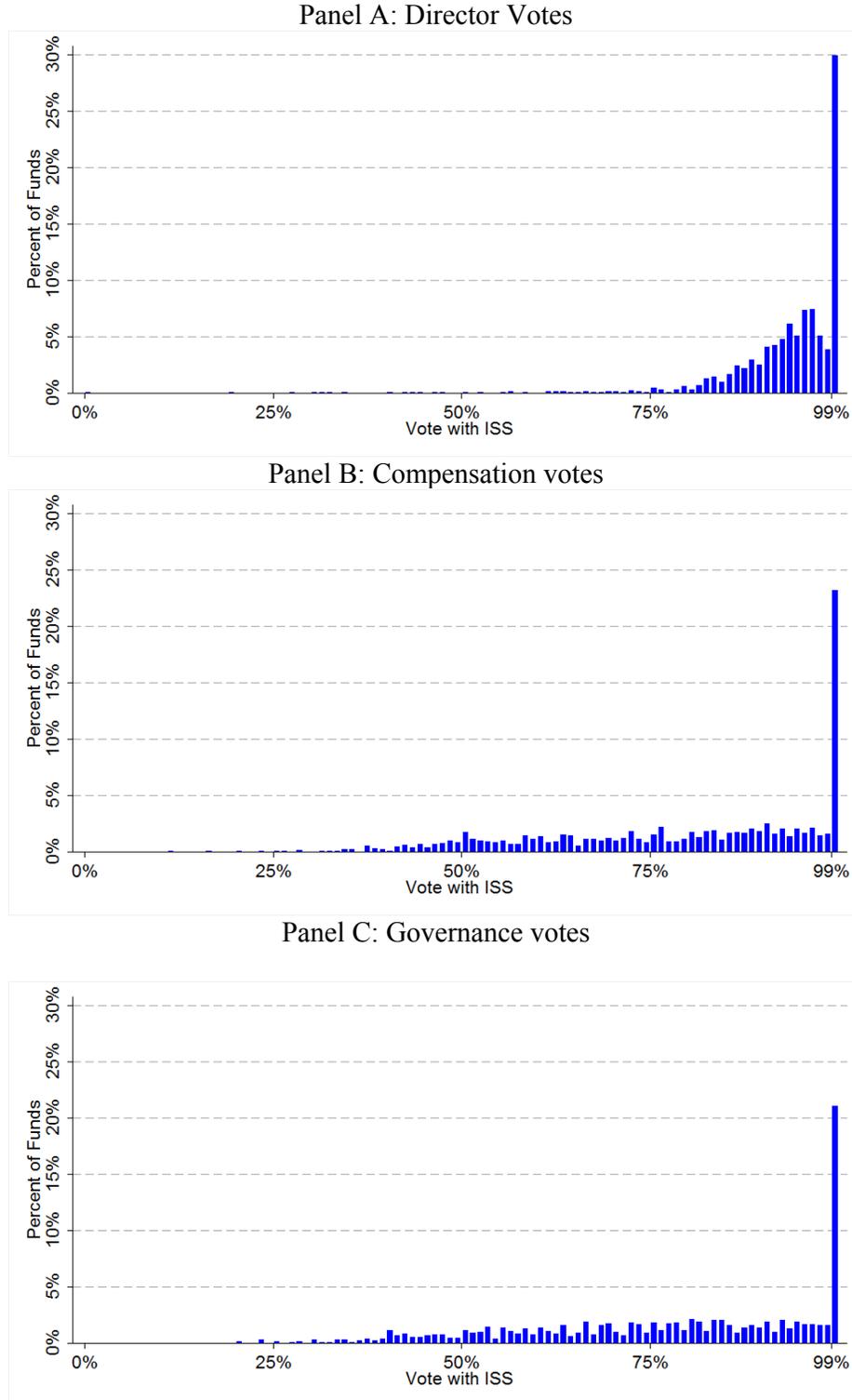


Figure 3: Fund characteristics vs. Fund-Firm relationship measures as proxies of Fund Activism

Each panel is based on a probit regression across the 2,131,300 director votes, where vote with management is the dependent variable and independent variables include the variables in Table 3, plus predicted active voter interacted with ISS recommendation (in Panel A) or the two fund-firm relationship proxies for net benefits of voting interacted with the ISS recommendation (in Panels B and C). ISS recommendation is a dummy variable equal to one if ISS recommends voting with management, zero otherwise. To form the panel, all independent variables are held at their mean except the proxy of interest. Predicted probabilities of voting with management are calculated for different values of the factor, conditional on ISS recommending for (solid line) and against (dashed line) management. Shaded regions show 95% confidence intervals.

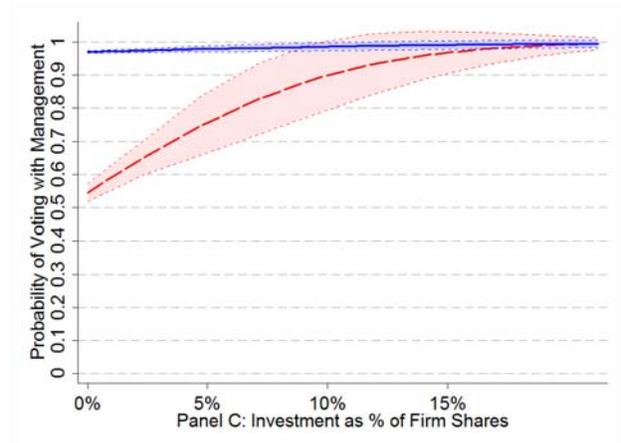
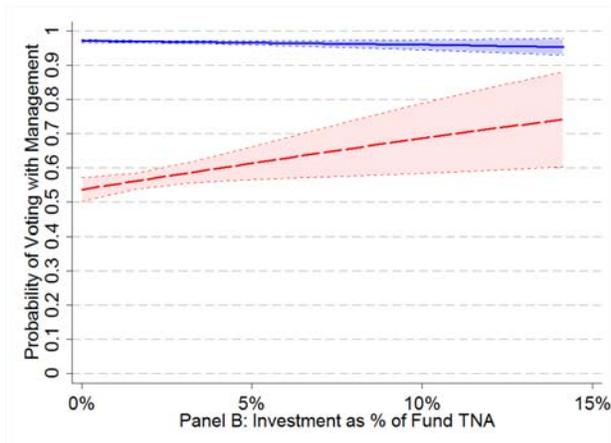
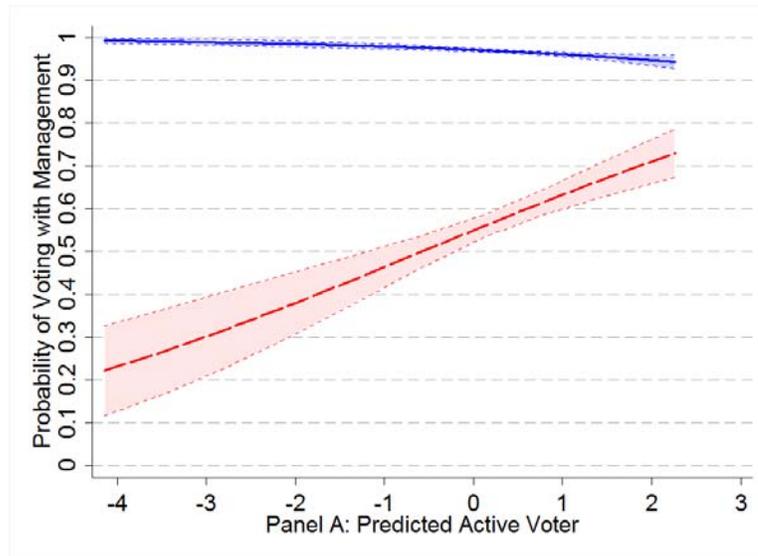
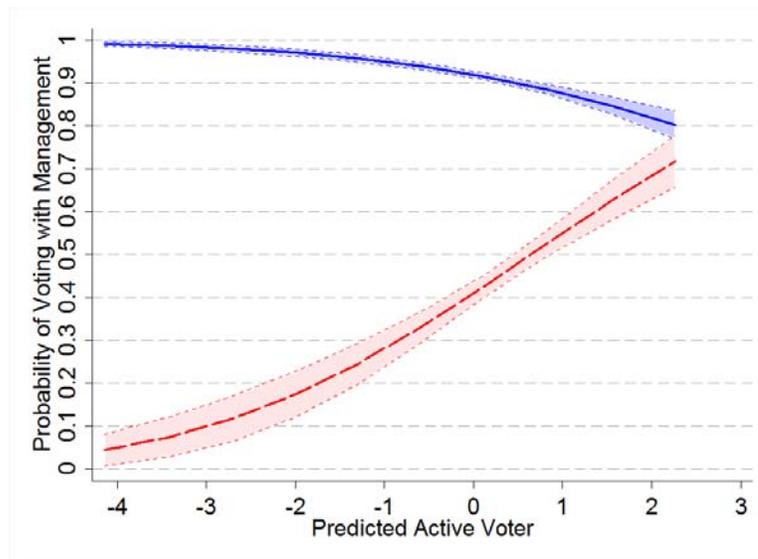
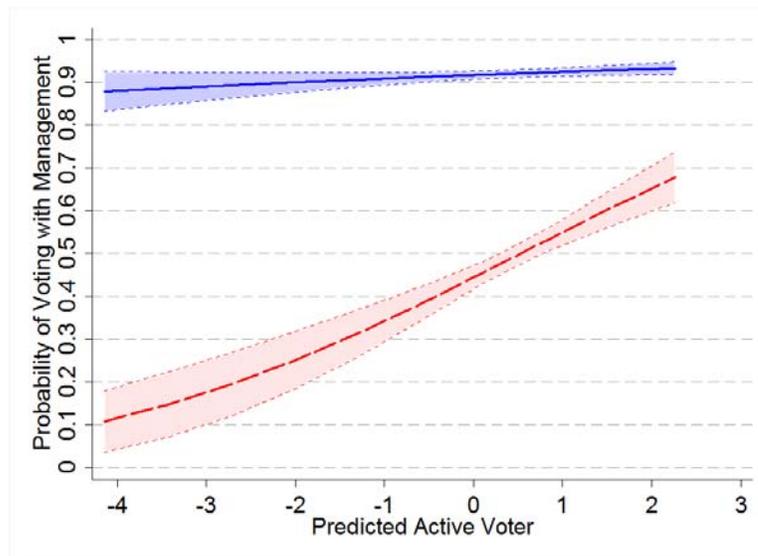


Figure 4: Probability to vote with management on compensation elections, conditional on ISS recommendation

The top (bottom) panel is based on a probit regression across the 248,393 compensation votes (136,814 governance votes), where vote with management is the dependent variable. Independent variables include predicted active voter interacted with ISS recommendation, mutual-fund and agenda-item characteristics, firm control variables, and (in compensation regressions only) CEO control variables, as detailed in Appendix II. The ISS recommendation is a dummy variable equal to one if ISS recommends voting with management, zero otherwise. To form the panel, all independent variables are held at their mean except the proxy of interest. Predicted probabilities of voting with management are calculated for different values of the proxy, conditional on ISS recommending for (solid line) and against (dashed line) management. Shaded regions show 95% confidence intervals.



Panel A: Compensation votes

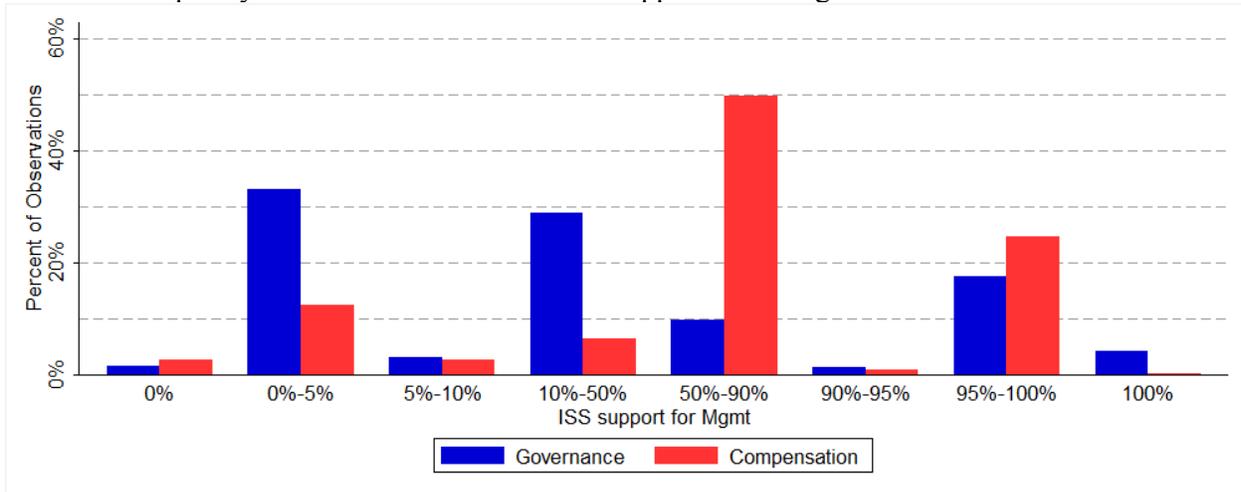


Panel B: Governance votes

Figure 5: Tendency of ISS to issue blanket recommendations

For each agenda item, we calculate the percentage of times ISS recommended voting in support of management across all firm-years in the sample. Agenda items are placed into bins based on this percentage: [0%], (0,5%], (5,10%], (10,50%], (50,90%], (90-95%], (95,100%), [100%]. Panel A shows the percent of observations that fall into each bin, separately for governance and compensation-related agenda items. Panel B shows the percent of time that active mutual funds vote consistent with the ISS recommendation in each of the delineated bins, for agenda items on compensation issues and governance issues.

Panel A: Frequency of ISS Recommendations in support of Management



Panel B: Mutual Fund votes consistent with ISS recs:

