

Selective Attention: Do Mutual Fund Incentives Affect their Voting? *

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Abstract

In a sample of ballot items for which proxy advisor recommendations oppose management, we find that the likelihood of a mutual fund actively voting (deviating from proxy advisor recommendations) is significantly higher when the fund has larger monetary incentives tied to the portfolio holding. To address endogenous portfolio selection issues, we find the same result in a sample of passive index funds for which portfolio allocations are exogenous. Firms that are more commonly held by less incentivized funds have lower CEO delta and lower CEO turnover-performance sensitivity.

Keywords: Proxy Voting, Mutual Funds, Proxy Advisors

JEL Classification:

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1. Introduction

Prior theoretical work ([Lewellen and Lewellen, 2022](#)) estimates the incentives of mutual fund managers, showing that fund holdings may draw greater attention from fund managers when greater monetary incentives (i.e., higher levels of compensation) are tied to that holding. These incentives are greater when funds are overweight in a particular stock relative to their peer group, and when fund flows are more heavily influenced by fund performance.

In our study, we examine the impact that these intra-portfolio monetary incentives have on the fund’s proxy voting practices. Prior work on fund voting generally examines the overall voting activity across all the fund’s holdings ([Matvos and Ostrovsky, 2010](#); [Iliev and Lowry, 2015](#); [Schwartz-Ziv and Wermers, 2022](#); [Brav et al., 2024](#)). Our study is among the first to examine within-portfolio differences in voting activity ([Appel et al., 2016](#); [Iliev et al., 2021](#); [Heath et al., 2022](#)), and the first to tie voting behavior to the fund manager’s compensation.

Our study builds on a measure by [Lewellen and Lewellen \(2022\)](#). In that study, the authors derive a framework for quantifying incentives for institutions to be engaged with their portfolio holdings. Their approach relies on the incremental fees that a fund manager earns from an increase in the value of their portfolio holdings. The measure considers both the direct, based on a change in assets under management, and the indirect, an increase in fund flows resulting from better performance, impact on manager fees. Our study examines the impact of this measure on the likelihood of a fund “actively voting,” or deviating from proxy advisor recommendations, in one of its portfolio holdings.

Most proxy ballot items pass with near-universal support. Our study therefore focuses on a more contested subset of ballot items- those in which proxy advisor Institutional Shareholder Services (ISS) provides a recommendation opposing the manager’s recommendation. The cases present a unique opportunity to observe cases where a fund may be relying on ISS recommendations as opposed to exercising its own judgment.

Our study begins with a regression that examines the likelihood that a fund votes differently from ISS as a function of the incentive [Lewellen and Lewellen \(2022\)](#), measured in dollars at the individual portfolio holding level. We run the test in several ballot item categories, including director elections, say-on-pay votes, governance and non-say-on-pay compensation, contentious votes (defined as those receiving vote be-

tween 45% and 55% support), and shareholder proposals. In all categories of votes, we find that the dollar incentive measure is positively related to the likelihood that a fund votes differently than ISS. In other words, if a fund has greater incentives tied to a particular holding, the fund is less likely to blindly follow the recommendations of the ISS.

We acknowledge that this result could be driven by endogeneity concerns. If a fund has chosen to go overweight in a particular stock, that may be an indication that the fund manager views the stock’s management team favorably and will support their recommendations over those of ISS. We address this concern in a second test run on a sample of passive index funds. These funds rely on market indexes to determine their portfolio allocations; the managers of the fund therefore do not have the option to overweight a particular holding, although they may hold greater weights of a particular stock than other stocks in their peer group due to different underlying indexes or the presence of actively managed funds in the peer group. In the sample of passively managed funds, we find the same result: greater incentives tied to a particular holding are associated with a higher likelihood of voting differently from ISS. The result is again significant in all ballot item types.

Our analysis next shifts to the impact of these incentives on firm-level voting outcomes. We first examine the level of support that proposals earn from mutual funds. If the average level of fund incentives is higher, then overall voting support from mutual funds is less likely to align with ISS recommendations, consistent with our fund-level tests. We find a similar result when only the passive funds are included in our test. However, we find that much of the impact of fund incentives is offset by non-fund voters, as our models generally find no or very little significant effect of incentives on the pass/fail outcome of the vote.

We next examine the impact of incentives on governance outcomes. If funds have greater incentives to monitor a particular firm, whether through voting or otherwise, then we would expect those firms to have better governance. Our tests focus on two CEO characteristics: CEO delta and turnover-performance sensitivity. We find that incentives lead to favorable outcomes in these measures. A higher percentage of incentivized funds is associated with higher delta, and higher turnover-performance sensitivity.

Our study contributes to the literature on fund engagement with portfolio firms (Iliev et al., 2021; Dey et al., 2024; Cabezón, 2024). Iliev et al. (2021) shows that investors’

governance research has a significant influence on informed voting. Numerous studies have demonstrated how hedge funds and shareholder activists employ more assertive tactics, such as proxy fights, to engage in monitoring efforts (Brav et al., 2008; Becht et al., 2009; Fos, 2017; Brav et al., 2024). Our study offers a more comprehensive analysis by examining a broad range of investors and companies, providing direct evidence of how fund incentives drive active monitoring. Our study also add to literature on mutual fund voting using N-PX voting disclosures (Matvos and Ostrovsky, 2010; Morgan et al., 2011; Iliev and Lowry, 2015; Li, 2018).

We further contribute to the literature on institutional investors' limited attention toward firms. While prior research has examined how limited investor attention affects asset pricing, stock returns, and earnings management (Fich et al., 2015; Lu et al., 2016; Kempf et al., 2017), our study shifts the focus to the impact of shareholder attention on corporate decision-making. Specifically, we investigate how institutional investors' attention influences corporate decisions like CEO compensation and CEO turnover sensitivity.

2. Institutional Background and Conceptual Framework

2.1 Institutional Shareholders Service (ISS) and Information Flow

Institutional Shareholders Service (ISS) plays a pivotal role in a company’s corporate governance, offering fee-driven recommendations to their clients on shareholder and management proposals. They offer a spectrum of services to their clients, encompassing governance evaluations, voting guidance, etc. ISS has a set of policies that guide its recommendation. ISS frequently engages with its clients, refining its policy guidelines to align with their client preferences. In essence, ISS facilitates clients in making well-informed voting decisions at a reduced cost (Malenko and Malenko, 2019). Recent works have shown that firms receiving ISS recommendations exhibit a notable increase in engagement between the firm and its institutional investors in the year after a low SOP vote (Dey et al., 2024).

The big two proxy advisory firms, Institutional Shareholders Service (ISS) and Glass Lewis control over 97% of the entire proxy market and provide recommendations to investors on all major corporate decisions, such as director elections, executive compensation, mergers and acquisitions, environmental and social issues, and corporate governance policies. ISS covers roughly 42,000 meetings in 115 countries and has over 3,400 institutional clients. A survey of corporate directors (Hayne and Vance, 2019) and institutional investors (McCahery et al., 2016) suggests that an important role of proxy advisory firms is to help facilitate interactions between firms and investors. (Dey et al., 2024) adds more evidence about how proxy advisory firms can facilitate firm shareholder engagement. Nonetheless, the decision for shareholders to engage in governance highly depends on the funds’ fees and ownership stakes (Corum et al., 2021).

Recent corporate governance literature has questioned the role that proxy advisory firms play in firms. For instance, Daines et al. (2010) investigated proxy advisory firms and corporate governance rating firms and showed that their recommendations do not provide any useful information for shareholders. Other critics also pointed out that even if ISS recommendations prove to be advantageous, the information conveyed through shareholder voting remains rudimentary as it is limited to “For”, “Against”, or “Abstain” and only tells one side of the narrative. Others also believe that the advantages of information flow between companies and shareholders may also be constrained by problems with information and preference aggregation (Levit

[et al., 2023](#)). Despite the criticism, some believe ISS plays an important role in firms. For instance, the institutional theory argues that private decentralized organizations (such as PAs) can have a powerful effect in shaping firm behavior due to the threat of economic sanctions ([Carnahan et al., 2010](#)).

3. Variable Construction, Data, and Descriptive Statistics

3.1 Construction of fund managers' incentive

To motivate the empirical analysis, we employ [Lewellen and Lewellen \(2022\)](#) framework of quantifying incentives for institutions to be engaged to measure our incentive variables for fund managers. A basic assumption in this framework is that if institutions have sufficient financial incentives associated with a portfolio holding, they will consequently allocate more attention to that firm. Fund managers' incentives to pay attention are measured as the payoff from taking an action— voting on shareholder and management proposals, monitoring the firm, engaging with management, etc., that affects the firm value. This approach relies on the extra fees a fund manager earns from an increase in the value of stockholdings in their portfolio, considering both the direct effect on assets under management when the stock value rises and the indirect effect stemming from performance-related fund flows.

Specifically, assume that the fund manager earns an annual fee equal to a predetermined percentage p of assets under management, where the fund's assets under management at the end of period $t+1$ equals

$$Fund\ AUM_{t+1} = Fund\ AUM_t \times \left(1 + \sum_{j=1}^N w_{j,t} R_{j,t+1} \right) + Fund\ Flow_{t+1} \quad (1)$$

where $R_{j,t+1}$ is stock j 's return in period $t+1$, $w_{j,t}$ denotes stock's weight in the Fund's portfolio at the start of $t+1$, and $Fund\ Flow_{t+1}$ denotes the net inflow of new money in period $t+1$. We allow Fund Flow to react to performance with a delay, but for straightforwardness, suppose it is connected to contemporaneous returns relative to a benchmark, then

$$Fund\ Flow_{t+1} = Fund\ AUM_t \times \left[\alpha + \beta \left(\sum_{j=1}^N w_{j,t} R_{j,t+1} - \sum_{j=1}^N v_{j,t} R_{j,t+1} \right) + e_{t+1} \right] \quad (2)$$

Where β is the flow-to-performance sensitivity and v_j is the weight of stock j in the benchmark portfolio. From both equations, the incentive to increase stock j 's value in a given year has both a direct component stemming from the additional fees associated with an increase in asset under management,

$$Direct\ incentives_{j,t} = p \times Fund\ AUM_t \times w_{j,t} \quad (3)$$

And an indirect or flow component coming from the additional fund inflows driven by the improved performance

$$Fund\ Flow\ incentives_{j,t} = p \times Fund\ AUM_t \times \beta \times (w_{j,t} - v_{j,t}) \quad (4)$$

The implied assumption is that Fund Flow reacts the same to all sources of relative performance, whether from stock-picking skill, engagement activities, luck, etc. This is true if investors observe the fund’s return but not the underlying cause. We combine both equations 3 and 4 to express the dollar incentives that fund managers receive from an additional increase in management fees in stock j ’s value.

3.2 Estimating Flow-to-Performance Sensitivity (β)

We estimate funds flow-to-performance sensitivity similar to the one described in [Lewellen and Lewellen \(2022\)](#) by regressing fund net inflow on past benchmark-adjusted returns, allowing for a delay in the arrival of new money. We first calculate the quarterly net inflow for each fund which is just equal to the growth rate of assets under management minus the fund’s quarterly portfolio return,

$$Fund\ Net\ Inflow_{it} = \frac{Fund\ AUM_{it} - Fund\ AUM_{i,t-1}(1 + R_{it})}{AUM_{i,t-1}} \quad (5)$$

The regressor variable for calculating the β is the fund’s benchmark-adjusted return, which equals R_{it} minus the value-weighted return of all funds of the same type, capturing the idea that investors are more likely to evaluate a fund’s performance relative to similar funds.

3.3 Data Sources and Matching

We collect data on ISS and management recommendations as well as votes cast by fund managers at both general and special meetings for our analysis. Beginning in 2003, the SEC mandated mutual funds to disclose their voting records on all held shares. This information is provided on Form N-PX, which is submitted to the SEC. ISS consolidated the voting records of the mutual fund families into its

Voting Analytics database. The database has detailed information on every agenda item for both annual and special meetings. The data provides information about the institution (Fund family), the fund identifying information, and the company the fund is voting on. It contains both management recommendations and the actual vote of the mutual fund.

In addition to the fund-level vote in the Voting Analytics database, we use a separate ISS database on voting outcomes. The voting outcomes database captures comprehensive details for each vote cast. This includes the nature of the item voted on (represented as `AgendaGeneralDesc`), the voting recommendation by the company’s management (`MGMTrec`), and the recommendation from ISS (`ISSrec`). It also records the total votes in favor of the proposal (`votedFor`), against (`votedAgainst`), abstained (`votedAbstain`), and those withheld (`VotedWithheld`). Additionally, the database captures the overall outcome of the vote (`voteResult`). Following the voting literature, we consolidate `votedAgainst`, `votedAbstain`, and `VotedWithheld` all to be equated to "Vote Against".

Data on mutual fund characteristics and its holdings were obtained from the CRSP Mutual Fund Database. Merging the CRSP Mutual Fund Database with the VotingAnalytics from ISS is complicated because no unique fund identifier is common to both datasets. We follow the guidance in the literature to ascertain the best possible match¹. We use N-PX filings to download all fund names and tickers from the SEC website. Using the fund and family name, we merge the downloaded fund names and tickers with the ISS Voting Analytics². Subsequently, we match the Voting Analytics having the tickers to the CRSP mutual fund database through ticker matching. Because tickers are only available in the EDGAR header files starting in September 2005, we restrict our sample to 2006. A comprehensive explanation of the matching process can be found in Appendix 1. From the CRSP mutual fund database, we also obtain time-varying controls at the fund level (e.g., expense ratios, fund total net assets, and turnover ratio).

We hand-collect insider ownership data from SEC Schedule 14A filings. Data on institutional shareholdings at the advisor level (13F) is obtained from the Thomson Reuters S-34 Files Database. Firm level controls are obtained from CRSP and

¹see, (Iliev and Lowry, 2015; Matvos and Ostrovsky, 2010)

²There exists a perfect match between the fund names in the Voting Analytics database and the names listed in the SEC filings.

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3.4 Descriptive Statistics

Table 1 presents the voting summary of management and ISS recommendations as well as the fund voting records from 2006 to 2020. Panel A shows the overall voting patterns (including cases where ISS disagrees with management and cases where ISS agrees with management) in percentage across different categories. Following ISS’s categorization, proposals are grouped into four subcategories, Director-related proposals, Compensations, Governance, and Environmental and Social issues. “Contentious issues” represent the subset of proposals receiving voting support between 45% and 55% of the total vote cast; contentious proposal are also included the previous categories. Spanning from 2006 to 2020, the overall sample for director votes was about 29,667,317, Compensation-related issues were 3,444,466, 252,0385 on governance-related issues, 2081701 on Environmental and Social issues, and 225894 contention proposals.

In Panel A, we observe that management consistently recommends voting “For” directors 100% of the time. ISS and funds show little deviation in director elections, with both supporting management more than 98% of the time on average. Most of the variation arises in compensation, governance, and environmental and social proposals, which often involve more contentious issues. Management recommends voting “For” compensation proposals 94.9% of the time, while ISS and funds align with management 88.45% and 87.19% of the time, respectively. In contrast, management opposes more than half of the governance issues raised, recommending a “For” vote on only 46.91% of governance proposals. ISS, however, supports 85.18% of governance proposals, while funds agree with management 70.79% of the time and with ISS 78.22%. Management supports less than 1% of all environmental and social proposals, while funds vote in favor of 27.16% of these, and ISS recommends supporting 57.8% of the proposals. An interesting area for attention is the category of contentious votes, where funds follow ISS in 60.88% of cases and recommend voting “For” on 52.52% of the proposals

Most proxy ballot items pass with near-universal support. For instance, many director elections are uncontested, and ISS nearly always supports management recommendations in these votes. We focus our analysis on a more contested subset of ballot items—those in which proxy advisor ISS provides a recommendation opposing the manager’s

recommendation.

Panel B reports the summary of the ballot items for which ISS recommendations oppose management. In these cases of disagreement, funds side with management recommendations in 59.5% of director votes. In compensation issues, funds side with management 50.2% of the time, and in governance issues, 41.6%.

In the main regressions, we control for several firm and fund characteristics. Summary statistics of these variables are reported in Table 2. Panel A reports the summary of fund characteristics as well as the main dependent and independent variables measures. Our primary independent variable "Total Dollar incentive" is the log of additional monetary incentives the fund manager receives for managing the fund, calculated based on [Lewellen and Lewellen \(2022\)](#) incentive measure. The dummy variable *Fund_vote_different_from_ISS* is our main outcome variable for the fund level test. This measures the likelihood of funds deviating from ISS recommendations when ISS opposes management. Ln Total Net Asset (TNA Latest) is the log of net assets managed by the fund. Active Fund is an indicator that shows whether the fund is either actively managed or it is an index fund. Following [Heath et al. \(2022\)](#) we define an index fund as a fund with fund flag "D" in the CRSP Mutual Fund Database, and we classify all other mutual funds as active funds. Fund expense ratio and turnover are collected from the CRSP Mutual Fund Database. We also control for the % of common shares the fund owns as reported by the CRSP Mutual Fund Database.

In Panel B Table 2, we report the firm level characteristics. We aggregate the fund votes to the firm level to estimate the percentage of funds Voting with ISS (% of fund votes agree with ISS). Our primary outcome variable the percentage of funds that Vote with ISS is calculated as "Fund Vote For" divided by "Total Fund Vote" (Percent of Fund Support) if ISS recommends "For" and will be one minus the percent of fund support if ISS recommends "Against." With this, we are able to show the degree to which funds agree with ISS. For our independent variable, we aggregate the dollar incentives of the funds within each firm to get the average dollar incentives obtained from each firm by funds (Avg. Fund Dollar Incentive). With the same idea, we calculate the average dollar incentive for index funds (Avg. Index Fund Dollar Incentive). "One Year Return" is the firm's stock return in the 12 months prior to its annual meeting. Firm Size is the log of total market cap just before the meeting. For the accounting-based return, we used the return on assets (ROA) from the previous fiscal year, which is defined as net income divided by the firm's total assets. Tobins q

is defined as the Book value of assets (at) minus book value of common equity (ceq) plus the market value of common equity ($\text{csho} \times \text{prcc_f}$). We hand-collected insider ownership from SEC Schedule 14A filing.

4. Empirical Analysis and Results

4.1 Fund Managers' Incentive and Voting Behavior

We start by examining the likelihood of fund managers opposing ISS recommendations. We posit that if fund managers receive greater financial incentives from the firms in their portfolios, they are more likely to engage actively with those firms. Consequently, these managers are more inclined to make independent decisions that deviate from ISS recommendations. In line with [Iliev and Lowry \(2015\)](#), we define active voting as instances where fund managers conduct independent research on ballot items and, as a result, choose not to follow the recommendations provided by ISS. We use the monetary incentives received by fund managers as a proxy for their engagement ([Lewellen and Lewellen, 2022](#)). To assess this effect, we estimate the following regression:

$$\begin{aligned} Fund_vote_diff_ISS_{it} = & \theta Ln_Total_Dollar_Incentive_{it} \\ & + \beta Fund_Controls_{it} + \gamma Firm_Controls_{it} \\ & + \psi_i + \eta_t + \varepsilon_{it} \end{aligned} \tag{6}$$

In Equation 6, the outcome variable, *Fund_vote_diff_ISS*, is a dummy variable that equals one if the fund's vote differs from the ISS recommendation for firm *i*'s proposal in year *t*. The variable *Ln_Total_Dollar_Incentive* represents the logarithm of the monetary incentive that the fund manager receives for holding firm *i* in year *t* in their portfolio just prior to the annual meeting. Fund controls include Total Net Asset, Expense Ratio, Turnover Ratio, % of Common Shares fund Own, and Institutional Ownership. We included Firm Size, One Year Return, Book to Market, ROA, Leverage, and Investment as firm level controls. The term ψ_i captures fund fixed effects, η_t captures year fixed effects, and ε_{it} represents the error term. Standard errors are clustered at the fund level.

Insert Table 3

The results presented in Table 3 separate voting categories into several categories. First, we test the full sample of all management-sponsored proposals. We then examine subsets of management proposals in the categories of Director Elections, Say-

on-Pay votes, and Governance and Non-Say-on-Pay Compensation. We also include analysis on the subset of contentious proposals. Finally, we separately analyze all shareholder proposals.

Column 1 reports the results for the full sample of management proposals. We find that the dollar incentive measure is positively related to the likelihood of a fund voting differently from ISS. In other words, if a fund has greater incentives tied to a particular holding, the fund is less likely to blindly follow ISS recommendations.

Columns 2 to 5 show the results for director elections, say-on-pay elections, governance and non-say-on-pay compensation, as well as contentious proposals. In all categories of votes, we find that fund managers deviate from ISS recommendations when their incentives are high. In column 6 we run a similar regression for shareholder proposals and find that funds are similarly likely to deviate from ISS recommendations when the proposal comes from shareholders.

4.2 Index Funds Voting and Endogeneity Concerns

Our previous analysis is inclusive of both actively and passively managed funds. We recognize that our baseline results may be subject to endogeneity concerns. For example, if a fund manager chooses to overweight a particular stock, it could suggest that the manager views the company’s management team favorably and, as a result, is more likely to support their recommendations over those of ISS. To address this issue, we conduct a second test using a sample of passive index funds. It is unclear, ex-ante, whether index funds are more likely to actively vote, as they tend to minimize fees and passively hold the market without engaging in firm-specific research. Moreover, these funds rely on market indexes to determine their portfolio allocations, meaning fund managers will not have much discretion to overweight specific holdings, although they may hold greater weights in certain stocks compared to their peers due to variations in underlying indexes or the presence of actively managed funds in the peer group. Consequently, we examine whether the observed voting dynamics differ among index funds to address this endogeneity concern.

Insert Table 4

Similar to the regressions in Table 3, we find a consistent result: greater incentives tied to a particular holding are associated with a higher likelihood of deviating from ISS recommendations. This result remains significant across all types of ballot items.

These results are consistent with index funds devoting considerable attention to the governance of firms in which they have significant financial incentives, and which, by definition, they are not able to sell because they represent a large portion of the underlying index ³.

4.3 Effect of Incentivized Funds on Firm Voting Outcome

In this section, we examine the effect of fund incentives on the aggregate fund votes that agree with ISS at the firm level. Our main outcome variable measures the percentage of fund votes that align with the ISS recommendation. The key independent variable is the average dollar incentive across all funds invested in the stock, weighted by the percentage of shares held by the fund.

$$\begin{aligned} \% \text{ of fund votes agree with ISS}_{it} = & \theta \text{Average_Dollar_Incentive}_{it} \\ & + \gamma \text{Firm_Controls}_{it} + \psi_i + \eta_t + \varepsilon_{it} \end{aligned} \quad (7)$$

Where *% of fund votes agree with ISS* is defined as follows:

$$\% \text{ of fund votes agree with ISS} = \begin{cases} \frac{\text{Fund Voted For}}{\text{Total Fund Vote}} & \text{if ISS recommends "For"} \\ 1 - \frac{\text{Voted For}}{\text{Total Fund Vote}} & \text{if ISS recommends "Against"} \end{cases} \quad (8)$$

As shown in Panel A, a negative and significant coefficient means that a substantial number of votes disagree with the ISS recommendation as the incentives of the funds increase. In column 1 of Panel A, it is shown that when ISS disagrees with management, the percentage of votes that agree with ISS decreases by 1.9% when funds are incentivized. This change is economically significant. A one standard deviation increase in the average dollar incentive leads to approximately a 13.2% ⁴ decrease in the percentage of fund votes that align with ISS relative to the mean.

³John C. Bogle the founder and former chairman of Vanguard Group expresses it. "... The old Wall Street rule was if you don't like the management, sell the stock. The new index fund rule is if you don't like the management, fix the management because you can't sell the stock" <https://www.morningstar.com/funds/bogle-index-funds-best-hope-corporate-governance>

⁴This percentage is computed as $(-0.019 \times 2.932)/0.421$

Insert Table 5

Furthermore, we run the regression with different categories. Across all categories, when there is a disagreement between ISS and management, ISS receives less support as the incentives of the funds increase. The magnitude increases in governance and non-say-on-pay, contentious proposals, and shareholder proposals⁵.

Previous literature has shown the influence of ISS in voting. Malenko and Shen (2016) observed that a negative recommendation from Institutional Shareholder Services (ISS), the major PA firm, on a say-on-pay proposal led to about a 25-percentage-point decrease in voting support for that proposal, indicating a substantial impact on shareholder voting behavior. Other studies by Iliev and Lowry (2015) and Larcker et al. (2015) have also acknowledged that ISS recommendations do influence voting outcomes to some extent. Following this and the results in panel A, we evaluate the likelihood a proposal will pass or fail in the direction of ISS recommendation. To assess this effect, we estimate the following regression:

$$ISS_win_{it} = \theta Average_Dollar_Incentive_{it} + \gamma Firm_Controls_{it} + \psi_i + u_t + \varepsilon_{it} \quad (9)$$

Where *ISS win* is defined as follows:

$$ISS\ win = \begin{cases} 1 & \text{if ISS recommends "For" and the outcome is "Pass"} \\ & \text{or if ISS recommends "Against" and the outcome is "Fail"} \\ 0 & \text{otherwise} \end{cases} \quad (10)$$

The outcome variable *ISS win the proposal* (*ISS win*) is a dummy that takes the value 1 if ISS recommends “For” and the outcome of the proposal is “Pass” or ISS recommends “Against” and the outcome is “Fail” and 0 otherwise. As shown in Table 5 Panel B, the results show less evidence of ISS’s outsize influence on voting outcomes, suggesting that ISS’s influence in voting results diminishes when funds are more incentivized. Column 1 assesses the likelihood of ISS winning the proposal for

⁵Since the literature is not clear whether withhold and abstain votes should be considered as “Against” we further analyze the case that strictly uses “For” and “Against” votes. Withheld and abstain votes normally occur in director votes. The results remain robust to the one shown in Table 5.

the full sample and columns 2 through 6 show different categories across our sample.

4.4 Effects of Incentivized Index Funds on Firm Voting Results

We next run the same analysis on the holdings of index funds to address endogeneity concerns. Similar to the analysis in Table 5, we use the weighted average dollar incentive for index funds as our main independent variable and follow the same empirical design.

Insert Table 6

As shown in Table 6 Panel A, the percentage of index fund votes that agree with ISS decreases as index funds' incentives increase. For the full management proposals, 1% increase in their incentives leads to about a 3.2% reduction in the percent of index fund votes that agree with ISS. The change is economically significant. A one standard deviation increase in the average index fund dollar incentive leads to approximately a 23.5% ⁶ decrease in the percentage of index fund votes that align with ISS relative to the mean.

We observe this behavior across all the categories we have in our sample. On director votes, a 1% increase leads to a 2.8% decrease in the index funds votes that agree with ISS. The effect is stronger among say-on-pay and governance and non-say-on-pay votes. For say-on-pay, the index funds deviate from ISS recommendation by about 6% if their incentives increase, and on governance and non-say-on-pay the votes that agree with ISS reduce by 4.3% if their incentives go up. The substantial decrease in the number of votes agree with the ISS recommendation is not because index funds are pro management. In the analysis that includes only shareholder proposals, we see a similar pattern in incentivized index fund votes. Column 6 which includes only shareholder proposals, incentivized index funds votes with ISS recommendations decrease by about 3.9% if their incentives increase by 1%. Overall, the results show fund financial incentives are a significant driver of fund voting outcomes.

As a second test, we examine the influence of financial incentives on the likelihood of the voting outcome aligning with ISS recommendations. Panel B of Table 6 reports the regression results for this test. We find no evidence that incentives drive the overall voting outcome, suggesting that the effect on the fund vote is likely offset by non-fund voters.

⁶This percentage is computed as $(-0.032 \times 2.946)/0.402$

4.5 Impact of Incentivized Funds on CEO Pay-Performance Sensitivity and CEO Turnover

We next analyze whether fund incentives affect the quality of firm governance. We focus our analysis on two governance outcomes: CEO Delta and CEO turnover-performance sensitivity.

[McCahery et al. \(2016\)](#) shows that institutional investors consider managerial compensation to be one of the most important governance mechanisms. We test whether higher ownership by incentivized funds will translate into more CEO pay-performance sensitivity (delta). We follow the approach used by [Coles et al. \(2013\)](#) to calculate the pay-performance-sensitivity.

If fund financial incentives affect the quality of monitoring, we would expect that CEO pay-performance sensitivity will increase with larger ownership by incentivized funds. We test this by estimating regression where the dependent variable is CEO pay-performance (delta) and our predictor is the incentive measure. The results are presented in Column 1 of Table 7. We find a positive and significant effect of the incentive measure, confirming our hypothesis. Columns 2 and 3 report similar tests using deltas derived based on stock and option holdings and reach a similar conclusion.

Insert Table 7

Furthermore, we hypothesize that the sensitivity of CEO turnover to performance will increase with larger ownership by incentivized funds. To test this, we estimate a logistic regression where the dependent variable is a dummy if the CEO departs after the meeting. Following [Coles et al. \(2014\)](#) we define Forced Turnover as one if the departing CEO is less than 60 years old, and zero otherwise. We control for performance using prior-year value-weighted abnormal returns. We include governance and firm controls including firm size, CEO tenure, CEO ownership, CEO duality, and independent board size. We include firm and year-fixed effects to control for variation within the firm over time. Our variable of interest is the interaction term, % Own by Incentivize Funds x One Year Return. We find a positive and significant effect, suggesting that higher fund financial incentives increase turnover-performance sensitivity, in line with our hypothesis.

5. Conclusion

Our study examines fund manager incentives to actively monitor their portfolio holdings. We find that within-portfolio variations in incentives drive a fund manager to either vote more actively or rely more on proxy advisor recommendations. Our study adds to an existing literature documenting the influence of proxy advisor recommendations and shows that these recommendations are more influential when fund manager incentives are low. These low incentives to monitor are also correlated with other negative governance outcomes, including lower CEO turnover-performance sensitivity and CEO delta.

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Table 1: Summary of Voting Records

Table 1 describes the voting patterns of funds and the recommendations of management and ISS (in percentage terms) across five different categories: director, compensation, governance, environment and social issue, and contentious. Contentious votes consist of votes that receive support between 45% and 55%. Panel A describes the voting pattern for the full sample. This includes all cases where ISS and management agree and cases where ISS and management disagree. Panel B includes a sample of all cases where Management recommendations differ from ISS Recommendations.

	Director	Compensation	Governance	E & S Proposals	Contention Proposals
Panel A: <i>Full Sample Voting Pattern</i>					
Percentage of Management Rec. For	100	94.9	46.91	0.7	40.7
Percentage of Fund Vote For	98.3	87.19	70.06	27.16	52.52
Percentage of ISS Rec. For	98.48	88.45	85.18	57.8	63.6
Percentage of Fund Votes with Management	98.31	88.94	70.79	73.18	41.77
Percentage of Fund Votes with ISS	98.02	88.7	78.22	65.98	60.88
Observations	29667317	3444466	2520385	2081701	225894
Panel B: <i>Sample where ISS and Management Disagree</i>					
Percentage of Management Rec. For	100	73.716	9.2422	0.2719	38.020
Percentage of Fund Vote For	59.500	44.355	57.077	43.678	51.275
Percentage of ISS Rec. For	0	26.283	90.757	99.728	61.979
Percentage of Fund Votes with Management	59.497	50.215	41.641	56.181	39.997
Percentage of Fund Votes with ISS	40.503	49.784	58.358	43.818	60.002
Observations	449434	384763	268172	1443195	201715

Table 2: Summary Statistics

The table presents summary statistics for mutual funds level characteristics and firm level characteristics. The sample includes all the cases where Manager's recommendations are different from ISS recommendations. The data spans from 2007 to 2020. Unless noted otherwise, all variables related to the mutual funds level characteristics 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 Fund voting records, Management, and ISS recommendation, come from the ISS database.

	N	Mean	Std. Dev	Min	Max	p25	Median	p75
<i>Panel A: Fund Level Descriptive Statistics</i>								
Fund vote different from ISS	2470035	0.514	0.5	0	1	0	1	1
Total Dollar Incentive	2039181	3.847	3.06	-10.915	14.169	1.928	4.038	6.025
Ln Total Net Asset	2460832	18.418	2.993	11.513	26.49	16.44	18.601	20.481
Institutional Ownership	2469196	0.74	0.214	0	23.447	.643	.773	0.878
Active Fund	2470035	0.721	0.449	0	1	0	1	1
Expense Ratio	2126675	0.009	0.006	0	0.027	0.004	0.009	0.013
Turnover Ratio	2126675	0.506	3.905	-99	7.02	.17	0.39	0.77
ISS Against	2470035	0.439	0.496	0	1	0	0	1
%Common Shares Fund Own	2470035	87.22	19.858	0	100	88.68	95.44	98.2
<i>Panel B: Firm Level Descriptive Statistics</i>								
Percentage of Vote Agrees with ISS Rec	14947	0.255	0.17	0.026	0.98	0.118	0.235	0.358
Percentage of Fund Vote with Agree ISS	14947	0.421	0.353	0.001	1	0.101	0.313	0.769
Avg. Fund Dollar Incentive	14947	6.369	2.932	-14.73	12.883	4.911	6.846	8.364
ISS win	14945	0.059	0.236	0	1	0	0	0
Firm Size	14946	14.345	2.14	8.415	20.906	12.728	14.072	15.709
Insider Ownership	14947	0.172	0.217	0	0.792	0.022	0.072	0.243
One Year Return	14945	0.034	0.456	-0.971	2.763	-0.218	-0.02	0.19
Leverage	14890	0.261	0.266	0	9.207	0.045	0.223	0.391
Investment	14932	0.05	0.06	0	0.737	0.015	0.032	0.064
Tobins q	14942	2.223	1.628	0.67	9.886	1.231	1.653	2.535
Book to Market	14943	1.084	0.868	0.044	72.069	0.834	0.979	1.154
ROA	14947	0.066	0.272	-9.842	1.746	0.052	0.112	0.164

Table 3: Funds Managers Incentive to pay attention

The sample consists of management and shareholder proposals between 2007 and 2020. We focus on cases where management recommendation differs from ISS recommendations. This subsample arguably contains a greater portion of more contentious votes and thus represents a strong testing ground for our hypothesis. In each regression model, the dependent variable equals one if the fund votes differently from ISS or zero, otherwise. The Independent variable is the log of dollar incentives fund managers receive for actively paying attention in firms. The full sample includes all management proposals no matter the category. We further split the sample into multiple categories to demonstrate that funds consistently monitor all sorts of proposals when their incentive increases. Since SOP votes are deemed to be very different in the literature, we separate them from other compensation-related votes. We define contentious votes as proposals receiving support between 45% and 55%. The last column includes all sample of shareholder proposals. The reported coefficients are the marginal effects - the change in the probability of voting differently from ISS for an infinitesimal change in each independent, continuous variable and, the discrete change in the probability for dummy variables. All columns include fund and year-fixed effects. Standard errors are corrected for clustering at the fund level. Asterisks denote statistical significance at the 1% (***), 5% (**), or 10% (*) levels.

	Dependent Variable = Fund vote different from ISS dummy					
	(1) Full Sample	(2) Director Elections	(3) SOP Elections	(4) Governance and Non-SOP Comp.	(5) Contention Proposals	(6) Shareholder Proposals
Total Dollar Incentive	0.015*** (11.36)	0.009*** (4.23)	0.016*** (11.40)	0.022*** (14.20)	0.011*** (5.76)	0.005*** (3.38)
Ln Total Net Asset	-0.000 (-0.16)	0.007* (1.77)	-0.005* (-1.94)	-0.007*** (-2.68)	0.004 (1.09)	0.010*** (3.67)
Institutional Ownership	0.049*** (12.51)	0.023*** (3.40)	0.070*** (14.53)	0.135*** (24.00)	0.148*** (20.33)	0.151*** (41.73)
Active fund	0.025*** (2.59)	0.039*** (3.05)	0.000 (0.02)	0.021 (1.36)	-0.006 (-0.48)	0.048*** (3.74)
Expense Ratio	-13.409*** (-4.22)	-9.330** (-2.05)	-22.303*** (-7.19)	-10.616*** (-3.27)	-20.249*** (-4.33)	-4.057 (-1.30)
Turnover Ratio	-0.001*** (-2.85)	-0.001*** (-3.13)	-0.000 (-0.27)	-0.001** (-2.17)	-0.001*** (-2.74)	-0.000 (-1.16)
%Common Shares fund Own	0.000 (0.08)	0.000 (0.01)	-0.000 (-0.63)	0.001 (1.51)	0.000 (0.94)	-0.000 (-0.34)
Firm Size	0.004*** (3.62)	0.006*** (3.32)	0.010*** (8.55)	-0.010*** (-7.44)	0.003 (1.45)	0.042*** (36.56)
One Year Return	-0.004** (-2.01)	0.016*** (4.81)	0.017*** (5.55)	-0.029*** (-9.27)	-0.023*** (-5.05)	-0.077*** (-26.40)
Book to Market	0.038*** (5.21)	0.095*** (4.98)	0.071*** (8.23)	0.001 (0.06)	-0.020 (-1.41)	-0.013 (-1.51)
ROA	0.092*** (18.84)	0.069*** (5.37)	0.104*** (15.65)	0.066*** (9.17)	0.109*** (10.58)	-0.109*** (-15.16)
Leverage	0.016*** (4.01)	0.031*** (4.09)	-0.020*** (-3.76)	0.035*** (6.94)	-0.111*** (-15.19)	0.086*** (28.83)
Investment	-0.095*** (-6.64)	-0.354*** (-10.92)	0.110*** (6.90)	-0.080** (-2.54)	0.070*** (2.58)	0.026* (1.71)
Constant	0.435*** (6.32)	0.284*** (2.69)	0.425*** (6.23)	0.622*** (7.35)	0.313*** (3.24)	-0.508*** (-6.21)
Fund FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Observations	809,376	311,836	289,216	205,587	140,002	1,110,657
R-squared	0.327	0.416	0.363	0.326	0.337	0.370

Table 4: Passive Fund Managers Incentive to Pay Attention

In this table, we provide further evidence to demonstrate the incentive for passive funds to be active monitors. We adopt the regression specification of Table 3. We consider cases where management recommendation differs from ISS recommendations. The dependent variable, Fund votes differently from ISS, equals one if the passive fund votes differently from ISS or zero otherwise. The independent variable is the log of dollar incentives fund managers receive for actively engaging in firms. The first 5 regression tests are based on management proposals and the last column includes shareholder proposals. Column 1 includes the full sample of management proposals no matter the category. We further split the sample into multiple categories to demonstrate that passive funds consistently monitor all sorts of proposals when their incentive increases. Again, we separate SOP from other compensation-related votes. We define contentious votes as proposals receiving support between 45% and 55%. The last column includes all samples of shareholder proposals. The reported coefficients are the marginal effects – the change in the probability of voting differently from ISS for an infinitesimal change in each independent, continuous variable, and the discrete change in the probability for dummy variables. All columns include fund and year-fixed effects. Standard errors are corrected for clustering at the fund level. Asterisks denote statistical significance at the 1% (***), 5% (**), or 10% (*) levels.

	Dependent Variable = Fund vote different from ISS dummy					
	(1) Full Sample	(2) Director Elections	(3) SOP Elections	(4) Governance and Non-SOP Comp.	(5) Contention Proposals	(6) Shareholder Proposals
Total Dollar Incentive	0.018*** (6.72)	0.015*** (3.12)	0.029*** (7.98)	0.015*** (4.96)	0.026*** (6.04)	0.008** (1.99)
Ln Total Net Asset	-0.002 (-0.29)	0.003 (0.36)	-0.012** (-2.02)	0.002 (0.38)	0.000 (0.05)	0.029*** (3.06)
Institutional Ownership	0.082*** (11.52)	0.031** (2.50)	0.094*** (11.57)	0.171*** (15.99)	0.205*** (15.31)	0.176*** (25.47)
Expense Ratio	-29.786 (-1.62)	-20.230 (-1.12)	-64.924*** (-3.99)	-23.068 (-1.53)	-26.933 (-1.25)	-34.165* (-1.85)
Turnover Ratio	-0.000 (-1.03)	-0.001 (-1.56)	-0.000 (-0.09)	0.000 (0.64)	-0.000 (-1.04)	0.000 (0.33)
%Common Shares fund Own	-0.001 (-0.42)	-0.003 (-1.25)	0.001 (0.39)	-0.001 (-0.56)	0.002 (0.94)	-0.006*** (-3.18)
Firm Size	0.003 (0.98)	0.003 (0.72)	-0.012*** (-3.03)	-0.001 (-0.37)	-0.032*** (-6.53)	0.050*** (13.29)
One Year Return	-0.013*** (-4.20)	0.011** (2.16)	0.014*** (2.60)	-0.054*** (-9.55)	-0.061*** (-8.55)	-0.106*** (-19.00)
Book to Market	-0.012 (-1.03)	0.021 (0.73)	-0.001 (-0.07)	0.016 (0.85)	-0.100*** (-5.21)	-0.011 (-0.90)
ROA	0.066*** (10.36)	-0.023 (-1.13)	0.121*** (13.32)	0.062*** (6.74)	0.169*** (11.33)	-0.029** (-2.19)
Leverage	-0.039*** (-6.38)	0.010 (0.82)	-0.106*** (-12.51)	0.019** (2.14)	-0.173*** (-15.19)	0.070*** (16.03)
Investment	-0.001 (-0.06)	-0.428*** (-6.77)	0.306*** (12.66)	0.091* (1.83)	0.276*** (6.41)	-0.069** (-2.05)
Constant	0.632*** (3.57)	0.753*** (3.15)	0.970*** (5.23)	0.500** (2.42)	0.723*** (2.94)	-0.263 (-1.40)
Fund FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Observations	279,058	102,406	103,608	72,848	49,010	274,415
R-squared	0.290	0.348	0.344	0.252	0.295	0.375

Table 5: Firm Level Voting Outcome

Panel A of table 5 reports the coefficient estimate of fund voting outcomes on average dollar incentives by the funds. We focus our analysis on cases where management recommendation differs from ISS recommendations. Column 1 includes all management proposals. Column 2 through column 4 categorized the management proposals further into different headings based on ISS item categorization. Column 5 delineates contentious management proposals—defined as proposals that receive support between 45% and 55%. Lastly, column 6 reports the results for all shareholder proposals. In Panel A, we explore the effects of fund incentives on the percentage of the fund votes that align with ISS recommendations. The dependent variable is the percentage of fund votes that agree with ISS recommendations for each proposal.

$$\% \text{ of fund votes agree with ISS} = \begin{cases} \frac{\text{Fund Vote For}}{\text{Total Fund Vote}} & \text{if ISS recommends "For"} \\ 1 - \frac{\text{Fund Vote For}}{\text{Total Fund Vote}} & \text{if ISS recommends "Against"} \end{cases}$$

The independent variable is the weighted average of the dollar incentive for funds that own the firm at the time of the meeting. The results for the full sample and across different categories all show that fewer fund votes agree with ISS recommendation when funds are more incentivized. The reported coefficient is the percentage change in voting outcome if the average dollar incentives of funds in the firm increase by 1%. All the regression incorporates firm and year-fixed effects. Standard errors are corrected for clustering at the date of the meeting. Asterisks denote statistical significance at the 1% (***), 5% (**), or 10% (*) levels.

	Dependent Variable = % of fund votes that agree with ISS					
	(1) Full Sample	(2) Director Elections	(3) SOP Elections	(4) Governance and Non-SOP Comp.	(5) Contention Proposals	(6) Shareholder Proposals
Panel A: Fund votes that agree with ISS recommendations						
Avg. Fund Dollar Incentive	-0.019*** (-4.77)	-0.019*** (-3.97)	-0.019 (-1.36)	-0.023*** (-2.84)	-0.027* (-1.92)	-0.030*** (-3.81)
Firm Size	0.002 (0.14)	0.009 (0.50)	-0.002 (-0.06)	-0.005 (-0.16)	0.062 (1.47)	-0.022 (-0.83)
Insider Ownership	-0.072 (-1.06)	-0.091 (-1.16)	-0.356* (-1.77)	-0.007 (-0.04)	0.437* (1.85)	-0.008 (-0.06)
Institutional Ownership	-0.055 (-1.19)	-0.063 (-1.13)	-0.189 (-1.11)	-0.088 (-0.76)	-0.107 (-1.08)	-0.032 (-0.35)
One Year Return	0.000 (0.02)	-0.016 (-1.12)	-0.097** (-2.50)	0.039 (1.53)	-0.071 (-1.41)	-0.010 (-0.35)
Leverage	-0.061** (-2.08)	-0.059* (-1.70)	-0.169 (-1.41)	-0.072 (-0.66)	0.072 (0.51)	-0.094 (-1.07)
Investment	0.044 (0.31)	0.107 (0.63)	-0.110 (-0.26)	-0.075 (-0.26)	-0.390 (-0.80)	0.493 (1.14)
Book to Market	-0.010* (-1.86)	-0.011 (-1.01)	-0.035 (-0.83)	-0.076*** (-2.74)	-0.051 (-1.39)	-0.051* (-1.67)
ROA	-0.024 (-0.76)	-0.026 (-0.74)	0.079 (0.62)	0.007 (0.14)	-0.183* (-1.95)	0.001 (0.01)
Constant	0.588*** (3.36)	0.472** (2.01)	0.930* (1.65)	0.907** (2.16)	-0.010 (-0.02)	1.072** (2.37)
Year FE	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES
Observations	11,725	8,933	849	965	1,131	2,457
R-squared	0.409	0.482	0.553	0.621	0.637	0.381
Panel B: ISS likelihood of winning election						
	Dependent Variable = ISS Win					
	(1) Full Sample	(2) Director Elections	(3) SOP Elections	(4) Governance and Non-SOP Comp.	(5) Contention Proposals	(6) Shareholder Proposals
Avg. Fund Dollar incentive	0.000 (0.52)	-0.000 (-0.46)	0.008 (1.53)	0.001 (0.24)	-0.003 (-1.52)	0.001 (0.40)
Controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES
Observations	11,720	8,929	849	965	1,131	2,457
R-squared	0.720	0.782	0.728	0.757	0.426	0.517

Table 6: Index Funds Firm Level Analysis

This table replicates panel Table 5 by isolating index funds vote at the firm level. The reported coefficient estimates the percentage of index fund votes on average dollar incentives received by index funds. We focus the analysis on cases where management recommendation differs from ISS recommendations. Column 1 includes all management proposals. Column 2 through column 4 categorized the management proposals further into different headings based on ISS item categorization. Column 5 shows all contentious management proposals—defined as proposals that receive support between 45% and 55%. Lastly, column 6 reports the results for all shareholder proposals. In Panel A of Table 6, we explore the effects of index fund incentives on the percentage of the index fund votes that align with ISS recommendations. The dependent variable is the percentage of index fund votes that agree with ISS recommendations for each proposal.

$$\% \text{ of fund votes agree with ISS} = \begin{cases} \frac{\text{Fund Vote For}}{\text{Total Fund Vote}} & \text{if ISS recommends "For"} \\ 1 - \frac{\text{Fund Vote For}}{\text{Total Fund Vote}} & \text{if ISS recommends "Against"} \end{cases}$$

The independent variable is the weighted average of the dollar incentive for all index funds that own the firm at the time of the meeting. The results for the full sample and across different categories all show that fewer index fund votes agree with ISS recommendation when index funds are more incentivized. The reported coefficient is the percentage change in voting outcome if the average dollar incentives of index funds in the firm increase by 1%. All the regression incorporates firm and year-fixed effects. Standard errors are corrected for clustering at the date of the meeting. Asterisks denote statistical significance at the 1% (***), 5% (**), or 10% (*) levels.

	Dependent Variable = % of Index fund votes that agree with ISS					
	(1) Full Sample	(2) Director Elections	(3) SOP Elections	(4) Governance and Non-SOP Comp.	(5) Contention Elections	(6) Shareholder Proposals
Panel A: <i>Index fund votes that agree with ISS recommendations</i>						
Avg. Index Fund Dollar Incentive	-0.032*** (-7.31)	-0.028*** (-5.32)	-0.059*** (-3.62)	-0.043*** (-4.56)	-0.028* (-1.67)	-0.039*** (-5.72)
Firm Size	0.004 (0.28)	0.007 (0.39)	0.030 (0.68)	0.068* (1.93)	0.049 (0.83)	0.059* (1.92)
Insider Ownership	0.036 (0.50)	0.014 (0.18)	-0.473* (-1.95)	0.399** (2.19)	0.422 (1.46)	-0.004 (-0.03)
Institutional Ownership	-0.009** (-2.05)	-0.089 (-1.52)	-0.226 (-1.35)	-0.311** (-2.58)	-0.130 (-0.80)	-0.043 (-0.45)
One Year Return	0.019 (1.62)	0.005 (0.37)	-0.078* (-1.74)	0.049 (1.48)	-0.079 (-1.37)	-0.056 (-1.62)
Leverage	-0.059 (-1.64)	-0.045 (-1.06)	-0.127 (-0.94)	-0.085 (-0.79)	0.136 (0.71)	-0.068 (-0.67)
Investment	0.140 (0.90)	0.248 (1.37)	-0.306 (-0.69)	0.074 (0.24)	-0.277 (-0.51)	-0.123 (-0.31)
Book to Market	-0.002 (-0.21)	0.005 (0.40)	-0.032 (-0.59)	0.004 (0.11)	-0.052 (-1.14)	-0.061 (-1.43)
ROA	-0.014 (-0.45)	0.010 (0.26)	-0.071 (-0.51)	0.023 (0.55)	-0.150 (-1.14)	-0.102 (-0.93)
Constant	0.557*** (2.99)	0.454* (1.93)	0.677 (1.06)	-0.132 (-0.27)	0.076 (0.10)	-0.307 (-0.58)
Year FE	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES
Observations	10,780	8,184	831	842	1,032	2,387
R-squared	0.434	0.510	0.571	0.682	0.600	0.506
Panel B: <i>ISS likelihood of winning elections when index funds are incentivized</i>						
	Dependent Variable = ISS Win					
	(1) Full Sample	(2) Director Elections	(3) SOP Elections	(4) Governance and Non-SOP Comp.	(5) Contention Elections	(6) Shareholder Proposals
Avg. Index Fund Dollar Incentive	-0.001 (-0.77)	0.000 (1.03)	0.006 (0.38)	-0.015** (-2.00)	-0.018* (-1.94)	0.005 (0.96)
Controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES	YES	YES
Observations	10,808	8,212	831	842	1,032	2,387
R-squared	0.306	0.476	0.558	0.468	0.395	0.388

Table 7: Effects of Incentivize Funds on CEO Compensation and Turnover

This table reports the coefficient estimates of CEO compensation and CEO turnover on incentivize fund ownership. The independent variable is ownership stake of incentivize funds in the firm. All regressions include firm and year fixed effects. t-statistics are reported in parentheses and are based on standard errors clustered at the firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10%, respectively.

Dependent Variable =	(1) Delta	(2) Share delta	(3) Option delta	(4) Forced CEO
% Own by Incentivize Funds	0.516*** (4.60)	0.449*** (3.44)	0.734*** (3.91)	-0.008 (-0.78)
One Year Return				-0.045** (-2.24)
% Own by Incentivize Funds $\times$ One Year Return				0.049** (2.13)
Controls	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES
Observations	12,757	12,618	9,822	12,760
R-squared	0.833	0.822	0.794	0.217

Appendix A.: Variable Descriptions

Variable Name	Definition	Source
<u>Institutional-level variables</u>		
Total Dollar Incentive	The monetary incentives fund managers receive (Ln Total Dollar Incentive used in regression)	CRSP Mutual Fund and CRSP Return Data
Ln Total Net Asset	Fund total net assets, millions of dollars (fund size)	CRSP Mutual Fund Summary data
Fund vote different from ISS	A dummy equal to one if funds vote differently from the ISS recommendation	ISS Voting Analytics
Institutional Ownership	The fraction of company shares held by the institution	Thomson Reuters s-34, and CRSP
Active Fund	Dummy variable equal to one if the fund is an active mutual fund (Fund flag not equal "D")	CRSP Mutual Fund Summary data
ISS Against	A dummy equal to one if ISS recommends an "Against" vote on a proposal	ISS outcome database
Expense Ratio	The total operating expenses of the fund as a percentage of the fund's total net assets	CRSP Mutual Fund Summary data
Turnover Ratio	The minimum aggregate purchases or aggregate sales of securities over the calendar year, divided by the average total net assets of the fund	CRSP Mutual Fund Summary data
% of Common Shares Fund Own	Percentage fund assets held in ordinary shares	CRSP Mutual Fund Summary data
ISS Win	Dummy variable equals 1 if ISS recommends "For" and the outcome of the proposal is "Pass" or if ISS recommends "Against" and the outcome is "Fail" and 0 otherwise	ISS outcome database
<u>Company-level variables</u>		
Percentage of Fund Vote Agrees with ISS Rec	Fund votes for divided by the total fund votes (percentage of fund vote for) if ISS recommends "For" or 1 minus the percentage of fund vote for if ISS recommends "Against"	ISS Voting Analytics
Percentage of Index Fund Vote with Agree ISS	Index Fund votes for divided by the total index fund votes (percentage of index fund vote for) if ISS recommends "For" or 1 minus the percentage of index fund vote for if ISS recommends "Against"	ISS Voting Analytics
Avg. Fund Dollar Incentive	Average of the dollar incentives all funds receive in a particular firm	CRSP Mutual Fund and CRSP Return Data

Continued on next page

Variable Name	Definition	Source
Avg. Index Fund Dollar Incentive	Average of the dollar incentives all index funds receive in a particular firm	CRSP Mutual Fund and CRSP Return Data
Insider Ownership	Total insider ownership at the end of the reporting period	SEC Schedule 14A filings
Firm Size	Price times shares outstanding ($prc * shrout$)	CRSP
One Year Return	Firm stock return in the twelve months preceding the annual meeting, minus the return on the value-weighted market index	CRSP
Leverage	Book value of total debt divided by the market value of equity	Compustat
Investment	Firm-level investment, defined as total long term debt + total current liabilities/firm total assets ($dltt + dlc$)/at	Compustat
Tobins Q	Book value of assets (at) minus book value of common equity (ceq) plus the market value of common equity ($csho * prcc.f$)	Compustat
Book to Market	Operating income before depreciation and amortization divided by total assets	CRSP and Compustat
ROA	Firm return on assets, defined as net income divided by firm total assets	Compustat