

Decentralizing Voting Power

Finance Working Paper N° 1092/2025
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Abstract

The stewardship structure of investment funds typically involves fund managers, proxy advisors, or centralized groups, who determine proxy votes. Exploiting a voting-decentralization policy change at Vanguard, we examine how within-fund variation in stewardship structure affects voting outcomes. We find considerable disagreement – the newly enfranchised fund managers both oppose management recommendations more frequently and support shareholder proposals at a significantly higher rate than the stewardship group. Further, most of the fund managers vote actively and independently, rather than following proxy advisor recommendations. Our results have important policy implications regarding fund stewardship, shareholder democracy, regulation, and the role of proxy advisors.

Keywords: Governance, Pass-through voting, Proxy voting, Shareholder democracy, Proxy advisory firms, Voting choice, Voting

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Given their majority ownership positions in most U.S. publicly traded equities (Lewellen and Lewellen, 2022), institutional investors have the potential for substantial influence over firms' corporate governance. Historically, this influence has been exercised through active engagement, such as proxy voting – a fiduciary responsibility fulfilled through the investor's stewardship model (e.g., Appel et al., 2016; Bebchuk and Hirst, 2019b; Bolton et al., 2020; Bubb and Catan, 2022). Most large investment fund families such as Vanguard, BlackRock, Fidelity, and State Street meet this duty through employing a centralized stewardship group (Choi et al., 2013). Recently, however, these fund families have faced intense public scrutiny and political pressure regarding their proxy voting decisions. A common theme has been a call for decentralization away from the stewardship group model, including proposed legislation to force decentralization.¹ Moreover, large asset owners such as pension funds have expressed concerns regarding the alignment between their voting preferences and the actual proxy voting outcomes of their investment funds. As a result, they are considering asserting greater oversight and control over proxy voting decisions (e.g., Megaw et al., 2023; Webb, 2024). A natural question that arises is how such decentralization could change the stewardship structure model and subsequent voting outcomes. We address this question through use of a novel setting where, for a subset of its funds, Vanguard shifted voting authority away from its centralized stewardship group to the funds' external investment advisers.

Addressing this question is important for several reasons. First, although previous work examines the influence of proxy advisors and the role of investment funds as monitors through their proxy voting (e.g., Gillan and Starks, 2000; Ertimur et al., 2013; Iliev and Lowry, 2015), the

¹ See, for example, Malenko and Malenko, 2024; State Attorneys General, 2022; U.S. Senate, 2022. While Bebchuk and Hirst (2019b) suggest that the large index funds have incentives to be passive and underinvest in stewardship, politicians argue that they use their influence to advance their private interests and bills to introduce required voting decentralization has been introduced into each of the three most recent U.S. Congresses (U.S. Congress, 2022, 2023, 2025).

role of stewardship structures within fund families is not well understood and has led to considerable debate.² Second, prior literature examining voter ideology typically focuses on cross-sectional variation across fund families or portfolio managers (e.g., Bolton et al., 2020; Bubb and Catan, 2022). The analyses in these papers rely on a critical but untested assumption that the fund voting patterns reflect different ideologies of fund families or fund managers rather than correlated differences in the preferences of the underlying fund shareholders. Examining a setting that holds constant the investment fund while varying voting authority allows us to test this assumption.

Third, theoretical work questions whether centralized or decentralized institutional voting structures better serve shareholder interests. Malenko and Malenko (2024) highlight the tradeoff between preference alignment and information acquisition in delegated proxy voting and show that efficient outcomes may fail when voting is centralized. Similarly, Malenko and Malenko (2019) and Bebchuk and Hirst (2019b) express concerns that centralization—either through stewardship groups or the use of proxy advisors—can reduce vote informativeness and reinforce managerial entrenchment. In addition, Malenko et al. (2025b) provide theoretical evidence that the outcome of fund stewardship can be improved with decentralization. Specifically, they show that decentralization to fund managers, such as in the Vanguard decentralization event that we study, could have the potential to improve corporate governance. These concerns are not purely academic. The Business Roundtable (2025) argues that the proxy process is increasingly used to advance agendas disconnected from shareholder value, and calls for reforms that would constrain shareholder proposal rights and limit proxy advisor influence. Others advocate for granting voting rights to mutual funds' beneficial owners (Hart and Zingales, 2022a; U.S. Congress, 2022, 2023,

² For example, disagreement exists regarding who typically controls proxy voting, with some suggesting nearly all votes are decided at the fund family level (Bebchuk et al., 2017; Morningstar, 2017; Bolton et al., 2020), while others argue that the portfolio manager, which could be a subadvisor external to the fund family, generally has voting authority (ICI, 2008; Bubb and Catan, 2022; Brav et al., 2024).

2025). Thus, empirical evidence on how stewardship voting structures affect shareholder oversight and corporate governance is needed.

Overall, it is unclear whether decentralizing a fund's stewardship structure should lead to more or less disagreement with management, which is a common proxy in prior work for active monitoring (e.g., Easterbrook and Fischel, 1983; Appel et al., 2016; Heath et al., 2022). On one hand, arguments support the contention that centralization leads to more support for management because stewardship groups' incentives, expectations, and preferences may vary from those of individual fund managers. For example, centralized stewardship groups may be more likely than portfolio managers to internalize a fund family's incentives to support firm management, including current and potential business ties and board connections.³ On the other hand, some argue that the largest index fund leaders advance their own ideological interests at the expense of their fiduciary duty to shareholders, as stewardship groups are more likely to disagree with management by supporting shareholder proposals, particularly ESG-related proposals (State Attorneys General, 2022; U.S. Senate, 2022). In contrast to these arguments of built-in biases of a centralized stewardship group, such a framework could allow for more informed voting due to the pooling of resources across funds, reducing duplicative information gathering costs. By comparison, individual portfolio managers could opt for a low-cost heuristic approach of lockstep voting with management or the recommendations of a proxy advisor (Ertimur et al., 2013; Iliev and Lowry, 2015). Finally, it is possible that decentralizing the stewardship structure has no effect on voting.

To test these alternative hypotheses, we consider Vanguard's 2019 decision to shift voting authority from its stewardship group to the external investment advisers for 31% of its equity

³ See, for example, Davis and Kim (2007), Ashraf et al. (2012), Cvijanović et al. (2016), Duan et al. (2018), and Calluzzo and Kedia (2019).

funds. This setting allows us to hold constant the specific investment fund—as well as the firm, annual meeting, and specific proposal—and observe differences in voting patterns before and after the change, thus isolating the effect of the change in voting authority. Vanguard’s stewardship group retained voting authority over its internally managed funds throughout our sample period, providing an ideal benchmark against which to measure changes.

Univariate analyses of Vanguard funds’ voting pattern changes around the 2019 policy adoption indicate considerable voting disagreement across stewardship structures, with the decentralized votes more frequently cast against firm management recommendations than the Vanguard stewardship votes. To mitigate potential endogeneity concerns, we conduct difference-in-differences analyses with fund, firm, and proposal fixed effects which support these findings. In addition, we find this increased opposition to management’s recommendations in both management- and shareholder-sponsored proposals with the magnitude of opposition significantly larger for the shareholder proposals – decentralized voters are 21.5% more likely than the stewardship group to oppose management on those proposals.

Cross-sectional analyses provide insights into the mechanisms driving decentralized voters’ decisions. We find that differences between decentralized voters and the stewardship team exist across most proposal categories with the most prominent differences appearing in more support for shareholder proposals on environmental, social or governance issues. This finding is important because, to the extent that the decentralized voters in our setting are more closely aligned with beneficial owners, it is inconsistent with the claims expressed by many pundits and politicians that BlackRock, Vanguard and State Street (the Big Three) use their voting power to push firms toward an ESG ideology at odds with the values of their investors (State Attorneys General, 2022; U.S.

Senate, 2022). That is, our findings suggest that decentralizing voting power from the Big Three's stewardship groups may actually lead to increased support for ESG-related proposals.

One possible explanation for our findings is that the decentralized voters, rather than incurring the costs of information processing, may opt to follow the recommendations of proxy advisors, effectively transferring voting authority from one centralized group to another. However, our empirical tests demonstrate that this possibility does not occur – the overwhelming majority of the newly enfranchised voters exercise independent judgement with around 15% apparently relying entirely on proxy advisor recommendations to cast their votes.

We also consider whether voting costs can help explain the limited reliance on proxy advisors we find. We hypothesize that voters with more concentrated holdings face lower monitoring and engagement costs and receive greater benefits from active voting per unit of effort. Consistent with this hypothesis, we find that these decentralized voters are significantly less likely to align with proxy advisor recommendations relative to those with less concentrated holdings.

Finally, we examine the extent to which decentralized voters oppose firm management recommendations on contentious votes (where proxy advisor and management recommendations disagree), which Heath et al. (2022) argue is a measure of investor monitoring.⁴ The decentralized voters are 21% less likely than the Vanguard stewardship group to support management, an effect that is twice the size of the effect observed by Heath et al. (2022) when comparing voting differences between passively and actively managed funds. Overall, our findings suggest that on average decentralized voters are active voters who monitor management.

⁴ Gormley and Kim (2025) argue that alignment with a proxy advisor indicates less monitoring if a fund follows their recommendations indiscriminately. However, our evidence suggests that most voters in our sample do not vote in lockstep with ISS or Glass Lewis.

Our findings may be subject to limitations. One limitation is that the change in voting could reflect differences between index fund managers versus active fund managers. However, given that the magnitude of our results exceeds the differences Heath et al. (2022) find between index and active funds, it is unlikely that the changes we document are due solely to differences between voting by index and active fund managers. In addition, one may argue that the results we find regarding Vanguard's decentralization are not generalizable to other asset managers given Vanguard's size and previous proxy voting record. However, counter to this argument, the similarities among the large asset managers are well documented as they are often discussed and studied together (e.g., Azar et al., 2021; Bebchuk and Hirst, 2019a; Gormley et al., 2023) and are claimed to have similar ideologies and voting patterns (e.g., Bolton et al., 2020; Bubb and Catan, 2022). Further, as we show later, before the decentralization BlackRock and Vanguard's proxy voting records are remarkably similar, and State Street's is only a little different. While our findings are also relevant to other fund families, these three families are particularly important - their funds hold 46% of U.S. mutual fund assets and the vast majority of exchange-traded fund (ETF) assets (Morningstar, 2024).⁵ Moreover, BlackRock and State Street's shareholder bases contain a substantial number of large asset owners and advisers who would be similar to Vanguard's external advisers. Finally, the Malenko et al. (2025b) theoretical framework suggests that decentralization of proxy voting to these types of decisionmakers could be expected to be similar to what we find.

Our study makes at least four contributions. First, we examine a relatively unexplored aspect of investment fund voting: fund stewardship structure. To the best of our knowledge we are the

⁵ These fund families have considerable sway over many shareholder proxy votes; for example, Pinnington (2023) notes that Vanguard is one of the top five shareholders in every S&P 500 firm, holding an average stake of 10%.

first to examine the effects of within-fund variation in voting authority. Holding constant the fund, we find that shifting voting authority from a centralized stewardship group to an external investment adviser results in significant changes to voting patterns. Given that the largest fund families rely on the stewardship group model, our analysis of the Vanguard change provides important insights into how changing from a stewardship model to an alternative form of stewardship can affect fund voting. Importantly, our evidence is of practical significance to researchers who may need to carefully consider the entity or individual exercising voting authority over each fund, which is not always apparent in commonly used datasets such as ISS's Voting Analytics (VA). To assist with this, we plan to make our hand-collected mapping of Vanguard funds to their voting authority publicly available.

Second, our results complement prior research studying investor ideology (e.g., Bolton et al., 2020; Bubb and Catan, 2022; Montagnes et al., 2024). Our findings of significant differences in voting patterns within an investment fund when varying the voting authority supports the underlying assumption in this prior work that fund voting patterns reflect the ideology of the fund family or adviser rather than correlated differences in the risk preferences of the beneficial owners.

Third, our evidence provides timely foreshadowing on the potential effects of “pass-through” voting programs, which several of the largest fund families have recently introduced.⁶ While this change has the potential to significantly affect voting outcomes, little empirical evidence exists to help in forecasting the consequences. Although our evidence on decentralizing voting authority from a stewardship group to fund investment advisers may or may not be generalizable to retail investors in these programs, the evidence is relevant to institutional fund shareholders, who play a

⁶ BlackRock began offering its Voting Choice program in 2022 to fund shareholders in the U.S. and U.K. (BlackRock, 2022) and Vanguard and State Street Global Advisors followed in 2023 with their own voting choice programs (State Street Global Advisors, 2022; Vanguard, 2023, 2024).

major role in existing pass-through voting programs.⁷ Beyond suggesting that institutional pass-through voters may be, on average, more oppositional to management and more supportive of shareholder proposals, the results imply that among pass-through voters with broad holdings and high monitoring costs, reliance on proxy advisors may increase. This increasing reliance may be amplified by the structure of recent voting choice programs offered by the large asset managers, whereby shareholders pick a proxy advisor recommendation package rather than voting on each shareholder proposal.

Finally, our findings add to the literature on mutual fund sub-adviser relationships which Chen et al. (2013) find exist in over 40% of mutual fund families. Prior studies examine external investment adviser performance (Chen et al., 2013; Chuprinin et al., 2015) and contractual mechanisms for mitigating agency conflicts with fund families (Moreno et al., 2018). We provide novel evidence on external adviser voting and document that, when given the opportunity, these advisers disagree frequently with fund family stewardship groups on corporate voting matters.

1. Data and Setting

To study the effects of decentralizing voting we examine a novel setting in which Vanguard shifted its voting decisionmaker for a subset of funds. In 2019, Vanguard’s stewardship group transferred voting authority for its externally managed funds to the (external) investment advisers, citing a goal of “creating a greater alignment of investment management and investment stewardship on a fund-by-fund basis” (Booraem, 2019). In our primary analyses we focus on the voting patterns of Vanguard mutual funds and ETFs and examine their voting patterns in a six-

⁷ For example, when BlackRock initiated a voting choice program they first restricted availability to only their institutional clients, stating that 40% of their \$4.8 trillion in index equity assets would be eligible (BlackRock, 2021). Institutional mutual fund shareholders, like the investment advisers in our setting, are buy-side institutions managing funds on behalf of beneficiaries (e.g., fund shareholders, pension plan participants, etc.).

year period surrounding the policy change.⁸ In addition to director elections, shareholders vote on a variety of management-sponsored proposals, such as mergers and acquisitions (M&A) and executive compensation. These votes are often required by either a regulatory regime (e.g., state law, the SEC), stock exchange rule, or corporate charter; some management proposals are binding, while others (e.g., so-called say-on-pay votes) are advisory to the corporate board. Proxy statements also include shareholder-initiated proposals, which are precatory (i.e., only advisory) to the board.⁹ We examine both management and shareholder proposals, and in some analyses separately consider specific types of proposals.

We implement our empirical framework by using information from Vanguard's website and its SEC Form N-PX filings to manually identify Vanguard's externally managed funds and link this information to the ISS VA dataset, which aggregates mutual fund voting records.¹⁰ Important to our setting, ISS groups funds into families based on the fund management company (i.e., Vanguard), not the investment adviser. Starting from the ISS VA dataset, we construct a novel dataset that identifies the entity exercising voting authority over each vote by a Vanguard fund. To identify votes by external investment advisers, we manually reconcile fund names and votes with Form N-PX disclosures and Vanguard's website; we explain this process in detail in Appendix B.

We describe our sample selection procedures in Table 1. The dataset contains the votes of all Vanguard mutual funds from 7/1/2016 to 6/30/2022.¹¹ We use 6/30/2019 as the cutoff date for the

⁸ We use a six-year period to have a balanced pre (7/1/2016-6/30/2019) and post (7/1/2019-6/30/2022) period, and because Vanguard began implementing a fund shareholder voting choice program in 2023 (Vanguard, 2023, 2024).

⁹ Despite being advisory, evidence suggests that voting outcomes on shareholder proposals induce firm action (e.g., Ertimur et al., 2010).

¹⁰ Since 2003, mutual funds have been required to disclose their proxy votes to the SEC on Form N-PX. Note that these disclosures do not specify the number of shares voted and rather for each proposal state whether the fund voted "For", "Against", "Abstain/Withhold", or "Did Not Vote". Effective for disclosure periods ending 6/30/2024, the SEC recently enacted a new rule requiring enhanced disclosures including the number of shares voted. <https://www.sec.gov/news/press-release/2022-198>

¹¹ Vanguard ETFs are share classes of their mutual funds and all share class votes are aggregated to the fund level.

pre/post-period based on Vanguard's statement as to the timing of the decentralization (Booraem, 2019). Further, after that point Vanguard's Form N-PX filings link votes to specific investment advisers. We drop duplicate observations and those that are: a) missing management recommendations, b) related to proposals that provide information about voter characteristics, or c) related to ballot items on which the fund did not vote.¹² Additionally, if Vanguard is one of multiple managers in a fund or votes in elections between 6/30/2019 and 12/31/2019 during the transition, we exclude these observations because these votes are not decided by a decentralized voter (see further discussion of this in Appendix B). We supplement this dataset with proxy advisor recommendations from the leading advisors ISS and Glass Lewis.¹³ As shown in Table 1, these subsamples are smaller due to recommendation availability and observations that do not match precisely enough to meet our fuzzy matching criteria.¹⁴ We also create a subsample of contentious votes where firm management and one or both of the proxy advisors make opposing recommendations (Heath et al., 2022). Finally, in additional analyses we merge our primary sample with data from Refinitiv for fund holdings.¹⁵

In Table 2 we present descriptive statistics on Vanguard's voting and the effects of the 2019 voting decentralization policy. For the three-year period before the policy change, Panel A

¹² Some cases of non-voting are related to proxy fights in which the fund votes on one of multiple ballots (management and dissident), so dropping the non-voted ballot avoids double-counting. In multi-ballot proxy fights the ISS VA dataset classifies the dissident's recommendations as "management recommendations" and we correct for this issue.

¹³ As Hu et al. (2024) show, many mutual funds that subscribe to Glass Lewis's recommendations and use its voting platform request customized voting advice and this advice differs from the proxy advisor's benchmark voting recommendations. In our analysis, we compare the investment advisers' votes to those of the proxy advisors' benchmark recommendations, similar to prior literature (e.g., Iliev and Lowry, 2015; Bolton et al., 2020; Bubb and Catan, 2022; Brav et al., 2022; Shu, 2024), as customized advice is unobservable to us and the benchmark policies are likely the most influential.

¹⁴ Our focus on ISS and Glass Lewis potentially limits the implications of our findings for voting independence if investment advisers vote in line with another proxy advisor. However, such a limitation does not seem likely given their predominance. While several proxy advisors exist, as of 2021 ISS and Glass Lewis control 90% of the proxy advisory market (Shu, 2024). See the end of Appendix B for discussion of the procedure for obtaining and merging in these recommendations which results in a smaller sample size for these analyses.

¹⁵ We manually match the ISS VA dataset and Thompson S12 dataset based on fund name and characteristics.

illustrates that Vanguard had 134 unique mutual funds that voted 2.7 million times on over 460,000 unique proposals. We identify 40 unique funds with at least one external investment adviser as of 2019. After the policy change the investment advisers of these funds receive proxy voting authority (and Vanguard retains no voting authority). Crucially, Vanguard's stewardship group retains voting authority over all internally managed funds during the period we study. As shown in Panel A, there are 90 unique funds that Vanguard continues to exercise voting authority over following the policy change, providing our primary comparison group.¹⁶ In Panel B, we present descriptive statistics by proposal category using a similar classification scheme as Brav et al. (2022).

2. Empirical Analysis

2.1 Univariate evidence

Motivated by the growing influence of the large fund families and related attention from academics and policy makers regarding their stewardship structure (e.g., Bebchuk and Hirst, 2019a/b; Malenko and Malenko, 2024), we begin by conducting univariate analyses of the Vanguard funds' voting patterns around the 2019 policy change.

We first confirm that prior to the policy change, Vanguard's stewardship group—and not the individual Vanguard fund managers independently—appears to exercise voting authority over all funds regardless of manager.¹⁷ Similar to Choi et al. (2013), who examine lockstep voting in uncontested director elections, we examine whether Vanguard votes uniformly across its funds; specifically, we calculate the percentage of unique ballot items on which Vanguard's funds vote

¹⁶ The number of funds differs in the pre and post periods due to a combination of fund closures, mergers, and new fund creations. Our research design accounts for these funds by including fund fixed effects; our results are also robust to excluding these funds from our analyses (untabulated).

¹⁷ The individual fund managers may certainly have influence on the stewardship team's decisions, but regardless of the source of the decision, we do not find differences across the individual internally managed funds with regard to proxy voting, either before or after the 2019 policy change.

the same.¹⁸ Prior to the 2019 policy change, out of 101,356 unique ballot items on which both internally and externally managed funds vote, we find that Vanguard funds vote uniformly on 99.98% of ballot items (untabulated). In contrast, following the policy change a smaller percentage, 90.6%, of the ballot items are voted uniformly, which is relatively infrequent given the large number of non-contentious ballot items on shareholder proxy ballots. For the period following the policy change, Figure 1, Panel A displays the percentage of uniform voting by Vanguard funds on contentious votes (i.e., votes on which a proxy advisor and firm management have opposite recommendations) in the different categories. When we restrict the sample to Vanguard's internally managed funds (green bars), the figure shows uniform voting across all categories; however, when we include externally managed funds (blue bars) the figure demonstrates considerable disagreement across funds. This disagreement is particularly pronounced in shareholder proposals related to social and environmental topics but exists to some extent in all proposal categories.

In Figure 1, Panel B, we broaden the sample to include all proposals and find similar results, albeit with smaller magnitudes of disagreement, which reflects that the majority of proxy votes are non-contentious. This evidence confirms that Vanguard's funds vote in lockstep prior to the policy change (Choi et al., 2013), and shows that following the change considerable disagreement exists across Vanguard funds, which is completely driven by the decentralization of proxy voting authority to the externally managed funds.¹⁹

¹⁸ Similar to Iliev and Lowry (2015), we aggregate votes into “For” and “Against” where “Against” is defined as any votes other than “For” (e.g., “Withhold” or “Abstain”). Note that in all analyses other than the Table 4 summary voting statistics we drop non-voted votes, which are distinct from votes of “Withhold” or “Abstain.”

¹⁹ For ease of exposition, in our analyses we often refer to votes originating with Vanguard’s stewardship group as “Vanguard” and those with external investment advisers as “decentralized.”

To determine disagreements between the decentralized votes and Vanguard's stewardship group votes, we compare votes across ballot items, conditional on the recommendations of corporate management and a leading proxy advisor. In Panel A of Table 3, we present the full sample of votes by Vanguard funds following the policy change, excluding say-on-frequency votes.²⁰ Unconditionally, the Vanguard stewardship group and investment advisers allocate their votes across "For", "Against", "Abstain/Withhold", and "DNV" (did not vote) similarly, with the Vanguard and decentralized votes being "For" 92% and 90% of all ballot items, respectively. Conditioning on the firm's management recommendation, we find that voting patterns are similar when management recommends voting for a proposal. However, when management recommends voting against a proposal, the decentralized votes are twice as likely as the Vanguard votes to oppose the management recommendation: the decentralized voters support the proposal 33% of the time and Vanguard's internally-managed funds support it 16% of the time. Given that management typically recommends voting against shareholder proposals, this pattern suggests decentralized voters are more likely to support shareholder proposals in disagreement with management.

In Panel B of Table 3, we separate votes into "consensus" and "contentious" categories based on whether management and one or both of the proxy advisors have the same or opposite recommendations, respectively, which we group into "Yes" (recommends voting "For") and "No" (recommends anything other than "For"). We find that the voting differences between the Vanguard stewardship group and the decentralized voters exist in both types of votes. For the consensus votes where the proxy advisors and management both recommend voting against the

²⁰ We exclude say-on-frequency votes from this table because they require the voter to specify the number of years rather than voting in favor or against the proposal.

proposal, Vanguard supports 2% of the proposals and the investment advisers support 12%. Further, on contentious votes, the decentralized voters are more likely to side with a proxy advisor than management, relative to the Vanguard stewardship team.

Overall, the univariate evidence suggests meaningful differences in voting between the Vanguard stewardship group and the decentralized voters. The latter more frequently disagree with firm management than Vanguard, and while they are more likely to side with a proxy advisor on contentious votes, they demonstrate a willingness to break with both the proxy advisors and management on some of the consensus votes.

A concern with the previous analysis is that differences in the voting of Vanguard's internally and externally managed funds may be the result of differences in the funds' holdings. To mitigate this concern, we limit our sample to ballot items with votes by both the decentralized funds and the internally-managed funds. In Figure 2 Panel A we present the distribution of the decentralized votes in agreement with Vanguard's votes on these ballot items.²¹ The figure shows that no decentralized external advisers vote uniformly with Vanguard after the change. Moreover, considerable heterogeneity exists across the decentralized votes with the modal agreement level at about 95% of ballot items. In Panel B we limit the analysis to shareholder ESG proposals and although we observe a similar distribution, there exists more heterogeneity as decentralized votes align with Vanguard as little as less than 30% of the time and as much as 100% of the time.

In Panels C, D, E and F, we limit the analysis to votes that have available proxy advisor recommendations. For all proposal categories, Panels C and E show the percentages of ballot items on which each of the decentralized votes agrees with the proxy advisor recommendation. Again,

²¹ Note that while there are 40 funds with at least one external investment adviser, in some cases these funds have multiple advisers in a multi-manager arrangement. In these cases, we define each fund-adviser as a separate decentralized voter, consistent with Vanguard's reporting on Form N-PX following the policy change (see discussion in Appendix B).

we find considerable heterogeneity across the decentralized votes with the distribution centered near Vanguard's vote agreement with each proxy advisory firm of 93.5% (ISS in Panel C) and 94.5% (Glass Lewis in Panel E). Consistent with some decentralized voters outsourcing voting to a proxy advisory firm, we observe a small jump in the distribution in the 99-100% bin for both Glass Lewis and ISS. Finally, Panels D and F illustrate the distributions of the decentralized votes in agreement with proxy advisor recommendations and in comparison to the average Vanguard vote for only ESG shareholder proposals. We find that while considerable variation exists in the extent to which decentralized voters agree with the proxy advisors, the majority of decentralized votes lie to the right of Vanguard's average vote, suggesting greater average alignment of these voters with the proxy advisors than for the Vanguard internally managed funds. Overall, these analyses confirm the voting differences documented in Table 3. In later analyses we further examine heterogeneity across the decentralized voters to understand the underlying mechanisms.

In Table 4 we provide the identities of the external investment advisers with their number of votes on proposals on which Vanguard also votes, sorted by the percentage of disagreement with Vanguard's centralized stewardship team. As can be seen from the table, there exists wide variation in the number of votes, which reflects the funds' portfolio holdings as well. (Wellington and D.E. Shaw have the most votes after the decentralization with 57,488 and 43,052 votes, respectively.) There is also wide variation in the percentage of votes in disagreement with Vanguard's stewardship team. These differences can be due to differences between the decision-makers, such as their incentives, expectations, and preferences.

2.2 Difference-in-differences analyses of decentralized voting

In this section we build on the univariate analyses by implementing a difference-in-differences design in which we compare the voting of Vanguard mutual funds with authority transferred to

their managers against the voting of the same fund prior to the policy change as well as Vanguard's stewardship group over the full period. We specify the following equation for the voting outcome:

$$Voting\ Outcome_{ijt} = \beta_1 Decentralized_i \times Post_t + \beta_2 Decentralized_i + \beta_3 Post_t + FE + \varepsilon_{ijt}, \quad (1)$$

where, subscripts i , j , and t denote the unique Vanguard mutual fund, proposal and time period, respectively. Depending on the specification, *Voting Outcome* refers alternatively to voting with the management recommendation, voting for a proposal, or voting with a proxy advisor recommendation; *Decentralized* is an indicator variable equal to one if a fund has at least one external investment adviser; *Post* is an indicator variable for shareholder meetings occurring after 6/30/2019. The sample is at the unique fund-voter-ballot item level. *Decentralized* and *Post* are subsumed by various fixed effects (*FE*) in certain specifications. In the most basic fixed effects specification, we include year fixed effects to control for variation in voting that is constant across observations within a year and fund fixed effects to control for fund characteristics affecting voting that are constant over time. We also include firm fixed effects to mitigate the concern that changes in fund portfolios over time could explain our results. In some specifications we include fund-firm fixed effects which subsume fund and firm individual effects and additionally hold constant the relationships between funds and particular firms. Finally, we include fixed effects at the meeting or specific ballot item level, so variation is reduced to within meeting or ballot items, which occur on one specific day. Effectively, this final specification compares voting between Vanguard and decentralized voters on specific ballot items at a given shareholder meeting. Throughout our tests we employ two-way clustered standard errors by fund and firm.²²

²² We cluster by fund to account for within-fund correlation in voting and because this is the level of treatment assignment (Abadie et al., 2023). Following prior literature (e.g., Heath et al. 2022), we also cluster by firm to allow for correlation in voting across funds for the same firm as well as within-firm over time. Our primary inferences are similar if we cluster only by fund or firm.

2.2.1 Voting with management

We first analyze the effect of the Vanguard vote delegation on the extent to which the investment advisers and Vanguard's stewardship group vote with management. As discussed earlier, previous research provides evidence that the incentives, expectations, and preferences of fund families can influence their proxy voting. With regard to incentives, some prior research argues that mutual fund families have incentives to be overly deferential to firm management (e.g., Davis and Kim, 2007; Cvijanović et al., 2016; Bebchuk and Hirst, 2017; Duan et al., 2018). Some argue that other incentives affect voting, such as incentives to monitor or engage (e.g., Heath et al., 2022; Lowry et al., 2024).²³ Still others argue voting varies because of fund families' differing expectations or preferences, such as board connections (Caluzzo and Kedia, 2019), being designated ESG funds (Dikolli et al., 2022), fund managers' ESG training (Aiken et al., 2024), greenwashing strategic voting (Michaely et al. 2024), or different ideologies (Bolton et al. 2020; Bubb and Catan, 2022). While these arguments are quite varied, in common they imply that giving a fund's voting authority to other fund managers or fund shareholders, who might have different incentives, expectations, or preferences, could lead to decreased or increased managerial opposition in their voting.

Testing this possibility, in Table 5, Panel A we present results from OLS regressions of equation (1) where the voting outcome dependent variable is *WithMgmt*, an indicator variable for whether the vote agrees with management's recommendation. In column 1 we present the regression specification without fixed effects and in columns 2-5 we iteratively add year, fund, firm, fund-firm, meeting, and specific proposal fixed effects to the regression. Across all

²³ However, previous work provides evidence that index fund families actively vote their shares. Choi et al. (2013) and Iliev and Lowry (2015) demonstrate that their votes differ from those of a proxy advisor. Appel et al. (2016) show that index fund families' engagement with firms (including proxy voting) have an effect on firms' governance.

specifications the coefficient on *Decentralized x Post* remains stable and significant at the 1% level; the tightest specification in column 5 suggests the decentralized votes are 2.6% less likely to support management on average. Given that most proxy votes are non-contentious, a 2.6% difference is meaningful (we examine subsamples of votes where disagreement is more likely in later tests and find much larger magnitudes of disagreement).

As we predict, we find that when the votes are decentralized, significant differences arise in the voting tendencies no matter which specification we employ. In Figure 3 we modify the specification in column 5 with yearly interactions to examine dynamic effects over time and check for pre-trends. Consistent with the Vanguard funds voting in lockstep prior to the policy change, we observe the coefficients close to zero with little variation through June 2019; however, following the policy change we find the yearly coefficients to be significantly negative in each year. Overall, the results are consistent with the proposition that varied incentives, expectations, and preferences exist among mutual fund families. A further implication of these results, particularly for fund families such as BlackRock and State Street that have a significant proportion of institutions as shareholder, is that voting choice programs may lead to decreased voting in support of management recommendations.

We also examine whether the increased opposition to management recommendations holds for both management and shareholder proposals. In Table 5, Panel B we separate our full sample into management proposals in columns 1-3 and shareholder proposals in columns 4-6, and estimate equation (1) using different fixed effect specifications. Across all six columns the coefficients are significantly negative ($p < 0.01$), suggesting decentralized voters are less likely than Vanguard to support management recommendations on both management and shareholder proposals. However, the size of the coefficient varies dramatically between the specifications for management versus

shareholder proposals. The results in columns 3 and 6 suggest that although the decentralized voters are 1.6% less likely to support management on management proposals, they are 21.5% less likely to follow management's recommendations on shareholder proposals. The difference in these coefficients is significant across all corresponding columns at the 0.1% level. Overall, while decentralized voters exhibit greater opposition to management regardless of proposal sponsor, they are much more likely to oppose management on shareholder proposals, which is not surprising given that most management proposals are not controversial.

3. Mechanisms

We conduct several analyses to better understand the mechanisms that would underlie decentralized voters' choices. Specifically, we examine decentralized voting conditional on the proposal category (e.g. M&A, climate, social proposal) and decentralized voters' propensity to rely on a proxy advisor.

3.1 Management Proposals

Previous research has demonstrated that shareholder voting varies by the proposal categories (e.g., Gillan and Starks, 2000; Iliev and Lowry, 2015; Brav et al., 2022; He et al., 2023). Consequently, we examine the decentralized voting patterns across distinct ballot item topics. While director elections are the most commonly voted ballot items, shareholder meetings also include management and shareholder proposals across a variety of topics. In Table 6, Panel A we present the voting statistics for decentralized votes on management proposals after the policy change (7/1/2019 to 6/30/2022). Again for comparison purposes we limit the sample to those votes that have ISS recommendations and Vanguard stewardship group votes.²⁴ The table demonstrates the differences between the decentralized votes and both the proxy advisor recommendations and

²⁴ In Panel A of Tables 7 and 8 we focus on ISS recommendations rather than Glass Lewis due to its larger sample.

the Vanguard stewardship group votes. Relative to Vanguard, decentralized voters are generally less supportive of all types of management proposals with the exception of accounting-related proposals, on which they do not differ. Panel A also shows that the decentralized voters vary in their agreement or disagreement with the ISS recommendations. In some cases, they vote more in favor of the proposals (e.g., director elections, governance-compensation), and in other cases they vote less in favor (e.g., M&A transactions).

In Table 6, Panel B we examine specific proposal categories in estimating equation (1). Similar to Brav et al. (2022), we group management proposals into director elections, governance (board/shareholder rights, compensation, and other governance) and major transactions (issuance, buyback, distribution, stock split, conversion, and M&A).²⁵ We focus on our tightest specification of equation 1 that includes fund-firm and specific proposal fixed effects and find results consistent with the univariate statistics in Panel A. The decentralized voters are significantly more likely to disagree with firm management than is the Vanguard stewardship team across all proposal categories ($p < 0.01$) with magnitudes ranging from 1.2% to 4.5% for the management proposals.

3.2 Shareholder Proposals

Focusing on shareholder proposals, in Table 7, Panel A we divide the shareholder proposals into four categories: environmental, social, governance, and other topics. We again find that the decentralized voters differ from both ISS and the centralized Vanguard stewardship group. In particular, we find that the decentralized voters are more supportive of the shareholder proposals than Vanguard. Given that management typically recommends voting against all shareholder proposals, this implies greater opposition to management across all proposal categories. Moreover,

²⁵ For brevity we do not tabulate proposals that we categorize as relating to accounting/auditor approvals or “other” proposals as these are typically non-contentious and/or rare.

there exists more variation in the support levels for ESG shareholder proposals. Whereas the Vanguard stewardship group votes in favor of 11-21% of these proposals, the decentralized voters provide votes that are more than twice as likely to support them. Panel A also shows that although the decentralized voters tend to vote more in favor of ESG proposals than Vanguard, they tend to be less supportive than ISS.

In Panel B of Table 7, we conduct a multivariate regression to examine the magnitude of the differences between the Vanguard stewardship team and the decentralized voters while controlling for fund-firm and proposal fixed effects. We find that the extent of disagreement in voting is even greater for shareholder proposals, with magnitudes ranging from 18% to 25.9% for shareholder proposals (as compared to 1.2% - 4.5% for management proposals in Table 6). To the degree that the investment advisers in our setting are more closely aligned with beneficial owners, this pattern suggests fund shareholders may be more supportive of shareholder ESG proposals than the Big Three.²⁶ Importantly, this finding is inconsistent with the claims of politicians who argue that the Big Three use their voting power to push an ESG ideology that is inconsistent with the values of their investors (State Attorneys General, 2022; U.S. Senate, 2022).

To better understand the investment advisers' increased support for shareholder proposals, we disaggregate proposals at the ISS agenda item level and group similar proposals together at a more granular level. We focus on the sample of shareholder ESG proposals in the post-period on which Vanguard and at least one external investment adviser vote, keeping votes related to agenda items with at least ten unique proposals. We calculate the difference in proportionate support for each agenda item between the investment advisers and Vanguard and display these differences on the

²⁶ Prior to 2023, there were few so-called “anti-ESG” proposals brought to a vote (10 in 2020, 8 in 2021 and 33 in 2022) and they received few votes (an average of 3% or less in each year). Consequently, in our results support for shareholder ESG proposals does not represent support for these types of proposals. See <https://corpgov.law.harvard.edu/2023/06/01/anti-esg-shareholder-proposals-in-2023/>.

vertical axis of Figure 4 along with the number of unique proposals in each agenda item on the horizontal axis. Positive values reflect greater support for the agenda item by decentralized voters relative to Vanguard, and, consistent with the aforementioned results, the majority of agenda items cluster above zero. This clustering occurs for agenda items related to environmental, social, and governance proposals, although for several governance and social proposals Vanguard is more supportive on average. In contrast, all agenda items related to environmental proposals are supported at least as much by decentralized voters as Vanguard.

In Panel C of Table 7 for each of the ESG categories, we present the five categories of agenda items with the largest positive difference in support between the investment advisers and the Vanguard stewardship team. Although for some agenda items, in particular social proposals, Vanguard never supports the shareholder proposals, for other agenda items Vanguard provides support, but less frequently than the decentralized voters.

3.3 Proxy advisor reliance

In this section we further analyze the effects of decentralized voting by examining how much the external investment advisers appear to rely on proxy advisors given their votes in common with the two leading proxy advisors. Because stewardship groups, such as the Vanguard stewardship group, work for a portfolio of funds rather than one particular fund and are typically not involved in portfolio management, they may have different incentives, expectations, and preferences than decentralized voters associated with a particular fund. Although a stewardship group creates an additional layer of intermediation, it may help mitigate proxy voting costs by reducing duplicative information processing across funds, similar to a proxy advisor (Ertimur et al., 2013; Blankepoor et al., 2020). If voting is decentralized to the individual investment adviser and the adviser relies on the advice of a proxy advisor, then the centralization has arguably merely

shifted from an internal centralized group (the stewardship group) to an external one (the proxy advisor), who may have incentives to create controversy (Malenko et al., 2025a).

Thus, relative to Vanguard, the external investment advisers may not have the incentives, expectations and preferences to be active, independent voters given the costs of active voting may outweigh the perceived benefits. Consequently, some of these investment advisers may employ a more cost-effective approach by outsourcing their voting decisions to a proxy advisor. In Figure 2 and Panel A of Tables 7 and 8 we have already demonstrated differences in the voting of the decentralized voters with the proxy advisor recommendations, indicating that they do not all outsource their voting. In order to gain further insights into how these considerations could affect the pass-through voters, we estimate how much the decentralized voters align with a proxy advisor. In Table 8, Panel A (Panel B) we present results from OLS regressions of equation (1) where the voting outcome dependent variable in this case, *WithISS* (*WithGL*), is a measure of how much the decentralized fund votes align with those of ISS (Glass Lewis). Column 1 reports the regression results without any fixed effects and columns 2-5 report the results when we iteratively add fixed effects. The coefficients on *Decentralized* \times *Post* across the different specifications are consistently not distinguishable from zero in both Panels A and B. Thus, we find no evidence that, on average, decentralized voters are more likely to vote with the leading proxy advisors than the Vanguard stewardship group. Combined with the evidence in Panels C and E of Figure 2 that at least some of the investment advisers rely wholly on the proxy advisor, this suggests heterogeneity across the decentralized voters in their incentives to be active voters. In order to understand the mechanisms underlying this heterogeneity, we consider the decentralized voters' incentives to be active in the next section.

3.4 Portfolio concentration

The evidence in Figure 2 and Table 8 shows that the decentralized voters vary in their reliance on and alignment with a proxy advisor, suggesting they also face differing sets of incentives, expectations and preferences. Voters with more concentrated holdings should face lower information processing costs because of the smaller number of firms they need to monitor. Similarly, if the voters hold relatively larger positions in particular firms, they should realize greater benefits from actively voting. We posit that the decentralized voters with more concentrated holdings will be more likely to vote actively and thus less likely to rely on proxy advisory firm recommendations.

To test this prediction, we calculate the funds' portfolio concentration. We obtain data from the Refinitiv mutual funds holdings database and estimate each fund's portfolio holdings concentration on the filing date closest to the proxy votes. We employ two measures of portfolio concentration. First, we calculate a *Herfindahl Index* by taking the sum of the squared percentage of portfolio holdings comprised by each security in the fund's portfolio. Second, we determine the inverse of the number of securities in the portfolio ($1/\text{Number Securities}$).²⁷ We use these measures to conduct two tests which examine the relationship between portfolio concentration and decentralized voter alignment with, or outsourcing to, a proxy advisor.

First, we adapt the regression specification in equation (1) with the voting outcome dependent variable, *WithMgmt*, by interacting *Concentration* with *Decentralized x Post* in triple differences specifications. We then split the sample into contentious votes (i.e., those in which management and either or both proxy advisors have opposing recommendations) and report the results in Table 9 Panel A. The intuition of this test, similar to Iliev and Lowry (2015), is that decentralized voters

²⁷ For more information on the calculations see Appendix A.

with more concentrated holdings will be more likely to actively vote and reach a voting conclusion that differs from at least one of the proxy advisors. Consistent with this intuition, in columns 1 and 3, when proxy advisors oppose management, we find that more concentrated decentralized voters align significantly more with management ($p < 0.05$). Alternatively, when management and the proxy advisors align, as shown in the subsamples in columns 2 and 4, decentralized voters with more concentrated holdings are significantly less likely to align with management and the proxy advisors.

Second, we limit the sample to votes by decentralized voters with available holdings data following the Vanguard policy change and aggregate observations to the unique fund-manager-year level, resulting in 160 observations. While voters could rely on proxy advisors to varying extents, which our previous test captures, a strong signal of outsourcing to an advisor is voting almost perfectly in lockstep with their recommendations. We define *Outsource* as an indicator variable equal to one if greater than 99% of all votes by the fund-manager during the year align with either ISS or Glass Lewis and zero otherwise and regress an average measure of *Concentration* on this variable. Table 9, Panel B reports the results; consistent with the results in Panel A, we find that decentralized voters with more concentrated holdings are significantly less likely to outsource their voting to a proxy advisor. This result has implications for decentralizing voting, particularly to institutional shareholders. Voters facing higher costs or lower benefits of active voting may choose to outsource their voting to a proxy advisor, or not vote at all, whereas voters with larger positions may vote more independently.²⁸

²⁸ Shu (2024) provides evidence that proxy advisors appear to align their recommendations with their clients' preferences. Thus, the apparent complete outsourcing does not necessarily mean that the proxy advisor is making the voting decision independently. See, also Camara et al. (2024).

4. Additional Analyses

In our final sets of analyses we provide additional evidence on the relationship between fund stewardship structure and active monitoring and also examine the generalizability of our results to other large fund families.

4.1 Monitoring

A debate has arisen about the monitoring abilities of index funds as compared to actively managed funds (Heath et al. 2022; Gormley and Kim, 2025). Malenko et al. (2025b) theorize that whether decentralization of proxy voting results in enhanced or reduced investment fund oversight of corporate governance depends on the changing structure of the investment manager industry and whether demand or supply side forces are dominating these changes. If the changes are being driven by demand-side forces, such as through investor heterogeneity and demand for funds that meet their preferences, then decentralized stewardship, when delegated to fund managers with strong incentives and concentrated holdings, can enhance the governance of these holdings. Thus, we examine whether the external fund advisers exhibit evidence of being effective monitors. *Ex ante*, the predictions are unclear. On the one hand, the external adviser voters may benefit more directly from positive fund performance than the stewardship group, which could then incentivize them to engage in greater monitoring of firm management. On the other hand, a number of impediments can prevent institutional investors from effective monitoring and engagement.²⁹ Given that the monitoring requires significant efforts and costs, these newly enfranchised voters could have less of an ability than the stewardship group to absorb the costs of processing firm

²⁹ For example, McCahery, Sautner and Starks (2016) find that the major impediments to engagement by institutional investors can be categorized as whether there exist incentives to engage, conflicts of interest, legal barriers, and investment management industry structure. Among the incentives to engage are whether the engagement will actually be rewarded monetarily.

disclosures and potentially engaging with management.³⁰ Thus, if the monitoring costs outweigh the benefits for given pass-through voters, then the pass-through institutional shareholders could be less effective monitors than the stewardship groups.

To examine this question, similar to Heath et al. (2022) we focus on contentious proposals, taking the view that a fund's votes on these proposals are likely to be most consequential for holding firm management accountable. We define contentious proposals as ballot items on which firm management and at least one proxy advisor provides opposing recommendations. If the investment advisers actively monitor management to a greater extent than the stewardship group, we expect that they are more likely to vote against management on contentious proposals. We test this using the subsample of contentious votes by estimating equation (1) where the dependent variable is *WithMgmt*. Panel A of Table 10 reports the results. Across multiple specifications with varying fixed effect structures, we consistently find a large, stable, and statistically significant negative coefficient on *Decentralized x Post*. Specifically, the result in column 5 suggests that in contentious votes, the decentralized voters are 21% less likely than Vanguard's stewardship team to support management.

We also examine whether these differences exist for both management and shareholder proposals. Thus, in Panel B we disaggregate the sample of contentious votes into management and shareholder proposal categories and focus on the specification with fund-firm and specific proposal fixed effects. We find that the coefficients on *Decentralized x Post* are not significantly different from zero for contentious director elections and management governance proposals

³⁰ For example, when BlackRock first offered decentralization of voting to asset owners in their large index funds, the Maine Employees Retirement System decided it was not worth the cost to take advantage of this program. The Maine Public Employees Retirement System (MainePERS) announced they were reconsidering this decision given a study they conducted in 2024 in which they found that out of 554 votes on shareholder proposals in 2023, the MainePERS votes would have concurred with the Blackrock votes on only 215 of those votes. See Webb (2024).

(columns 1-2). However, in columns 3-6 the coefficients on *Decentralized x Post* suggest that the decentralized votes are significantly less likely to support management on contentious major transactions and shareholder ESG proposals ($p < 0.05$). This more consistent effect across shareholder proposals compared to management proposals may reflect differences in the information processing costs, which constrain decentralized voter monitoring.

4.2 Generalizability

Finally, we provide evidence on the similarity of Vanguard's voting to other large fund families. Generalizing our findings beyond our setting requires an assumption that Vanguard is representative of other large fund families. In Table 11 we present descriptive evidence on the voting similarities of Vanguard, BlackRock, and State Street from 7/1/2016 to 6/30/2019 (three years before the change in Vanguard's proxy voting policy). The table shows the percentage of "For" votes for the 98,310 ballot items in the ISS Voting Analytics (VA) dataset with a vote by all three asset managers and for which we have a benchmark recommendation from ISS.³¹ As the table shows, the voting of Vanguard and BlackRock is remarkably similar across both management and shareholder proposals, with State Street showing slightly more voting in favor of shareholder proposals. All three fund families vote more similarly to one another than to ISS recommendations on shareholder proposals in particular. Additionally, in untabulated analyses we find that, similar to Vanguard, BlackRock and State Street's stewardship structures are highly centralized – they vote in lockstep across their fund families in 99.4% and 99.7% of unique proposals during our sample period. Overall, this evidence suggests that our findings regarding decentralizing a fund's stewardship structure may generalize to other fund families beyond Vanguard.

³¹ Requiring ISS recommendations does not affect these patterns— inferences are identical if we only require voting by all three fund families.

5. Conclusions

Shareholder voting is an important aspect of corporate governance with significant potential consequences (e.g., Maug and Rydqvist, 2009; Cuñat et al., 2012; Bar-Isaac and Shapiro, 2020; Hart and Zingales, 2022b; Dottling et al., 2024; Gao and Huang, 2025). Prior research suggests voters rationally weigh the costs and benefits of active engagement in voting and stewardship activities, and finds differences related to the fund strategy (e.g., active vs. passive), turnover, location, and fund and family size (Iliev and Lowry, 2015; McCahery et al., 2016; Heath et al., 2022; Dey et al., 2024). However, the literature has lacked evidence on the effects of the stewardship structure of a given fund (i.e., the party making voting decisions on behalf of the fund) on voting.

In this paper we provide this evidence by examining a novel setting in which Vanguard decentralized proxy voting authority from its centralized stewardship group to the investment advisers for a subset of its funds. Despite these groups having the same fiduciary duties to the fund shareholders and holding constant the particular fund (i.e., including its strategy, structure, and adviser), we find large within-fund voting disagreement resulting from this change in stewardship structure. Specifically, we find that compared to the centralized stewardship group, the external investment advisers are significantly more likely to oppose firm management, particularly on shareholder ESG proposals. We also find that while some investment advisers appear to outsource their voting to a proxy advisor when information processing costs are high, most appear to be active, independent voters. To the best of our knowledge we are the first to examine the effects of within-fund variation in voting authority, and in so doing provide evidence on effects that centralized stewardship groups and investment advisers have on voting within a fund stewardship

structure. Further, our findings have important implications for the literatures on investor ideology and sub-adviser relationships.

Finally, decentralization of voting power from stewardship groups is occurring not only to investment advisers (as in our setting), but also to fund shareholders in a growing number of pass-through voting programs at the world's largest asset managers. In 2022 and 2023, BlackRock, State Street, and Vanguard began programs to share voting authority with fund shareholders, both institutional and retail (BlackRock, 2022; State Street Global Advisors, 2022; Vanguard, 2023, 2024). These programs decentralize voting while incurring minimal additional informational costs for the fund family because the investment advisers and fund shareholders (or their proxy advisors) bear their own information processing costs.³² The rise of pass-through voting programs at major asset managers raises the question of whether fund investors more directly exercising their voice will alter voting outcomes. However, little empirical evidence currently exists: programs are still being rolled out, and the funds with existing programs have released limited information on shareholder choices.

As discussed earlier, the Malenko et al. (2025b) theory implies that decentralization of proxy voting can result in enhanced investment fund oversight of corporate governance if the changing structure of the investment management industry is being driven by demand-side forces. Thus decentralized stewardship, when delegated to fund managers with strong incentives and concentrated holdings, can enhance the governance of these holdings. Given that BlackRock and State Street have substantial amounts of large shareholders in their funds who would more closely resemble the Vanguard external advisers than retail investors, our results may provide timely

³² The programs allow customized voting for some institutional investors and choices among voting policy packages from a proxy advisor for other institutional investors and retail investors.

foreshadowing of the effects of programs that pass-through voting to fund shareholders, particularly for the large funds that have many institutional investors as shareholders.

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Appendix A: Variable definitions

Variable	Definition of variable	Data Source
Voting Outcome Dependent Variables		
<i>WithMgmt</i>	Indicator variable equal to one if voting the same as management recommends and zero if voting the opposite. Votes are aggregated into For ("For") and Against (anything other than "For"), similar to Iliev and Lowry (2015). For Say on frequency proposals this variable is one if the number of years recommended by management is equal to the number of years voted for by the fund and zero otherwise.	ISS Voter Analytics database
<i>WithISS</i>	Indicator variable equal to one if voting the same as ISS recommends and zero if voting the opposite. Votes are aggregated into For ("For") and Against (anything other than "For"), similar to Iliev and Lowry (2015). For Say on frequency proposals this variable is one if the number of years recommended by ISS is equal to the number of years voted for by the fund and zero otherwise.	Public Investment Fund FOIA request; ISS Voter Analytics; Shu (2024)
<i>WithGL</i>	Indicator variable equal to one if voting the same as Glass Lewis recommends and zero if voting the opposite. Votes are aggregated into For ("For") and Against (anything other than "For"), similar to Iliev and Lowry (2015). For Say on frequency proposals this variable is one if the number of years recommended by Glass Lewis is equal to the number of years voted for by the fund and zero otherwise.	ISS Voter Analytics; Shu (2024)
<i>VoteFor</i>	Indicator variable equal to one if voting for the proposal and zero otherwise.	ISS Voter Analytics
<i>Outsource</i>	Indicator variable equal to one if greater than 99% of all votes by the fund-manager during the year align with either ISS or Glass Lewis and zero otherwise. Consistent with Iliev and Lowry (2015) we require a minimum of 10 votes with available data to calculate this measure.	Public Investment Fund FOIA request; ISS Voter Analytics
Independent Variables		
<i>Decentralized</i>	Indicator variable equal to one if at least one of the fund's managers is an external investment adviser and zero otherwise.	Hand-collected from Vanguard and Form N-PX
<i>Post</i>	Indicator variable equal to one if the vote occurs after 6/30/2019 and zero otherwise.	ISS Voter Analytics
<i>Concentration – Herfindahl Index</i>	The sum of the squared percentage of portfolio holdings comprised by each security in the fund's portfolio in the SEC filing with the closest period-end to the vote by number of days. We require observations to have a filing within 180 days of the vote with available data.	Refinitiv mutual fund database
<i>Concentration – 1/Number Securities</i>	One divided by the number of unique securities in the fund's portfolio in the SEC filing with the closest period-end to the vote by number of days. We require observations to have a filing within 180 days of the vote with available data.	Refinitiv mutual fund database

Appendix B: Data description

In this appendix we provide detail on the dataset and steps taken to identify investment advisers (i.e. decentralized voters). We use the Vanguard Selected Value Fund (VSVF) as an example. VSVF is an actively managed fund with three investment advisers: Donald Smith & Co., Pzena Investment Management, and Cooke & Bieler. Each adviser is responsible for investing a portion of the fund's capital. This multi-manager setup is fairly common for Vanguard; of the 40 funds in our sample with at least one investment adviser, 16 have more than one investment adviser.

Policy change effects on Form N-PX

Prior to the 2019 policy change, all shares held by the fund were voted by Vanguard and the votes are reported on Form N-PX for the full fund. See the VSVF Form N-PX filing for 7/1/2018 – 6/30/2019 (the last pre-policy change filing) here:

https://www.sec.gov/Archives/edgar/data/1004655/000114420419042926/tv525429-8_whitehall0934.htm

Following the policy change, Vanguard breaks out the votes within each fund by the party exercising voting discretion (i.e., the investment adviser who invested in the firm). Below we provide several snippets from the VSVF Form N-PX filing for 7/1/2019 – 6/30/2020 (i.e., the first post-policy change filing) which can be found here:

https://www.sec.gov/Archives/edgar/data/1004655/000110465920101383/tm203004-7_npxa.txt

Within the Form N-PX filings following the policy change, the distinct managers' votes are identifiable under subheadings for each manager as shown below:

===== VANGUARD SELECTED VALUE FUND - COOKE & BIELER =====					
Each investment advisor's votes cast are shown separately below. The votes reported reflect votes cast at the Fund's/advisor's discretion and exclude any votes cast pursuant to a regulatory requirement.					
ACTIVISION BLIZZARD, INC.					
Ticker: ATVI Security ID: 00507V109 Meeting Date: JUN 11, 2020 Meeting Type: Annual Record Date: APR 15, 2020					
#	Proposal	Mgt Rec	Vote Cast	Sponsor	
1A.	Election of Director: Reveta Bowers	For	For	Management	
1B.	Election of Director: Robert Corti	For	For	Management	
1C.	Election of Director: Hendrik Hartong	For	For	Management	
III					
1D.	Election of Director: Brian Kelly	For	For	Management	
1E.	Election of Director: Robert Kotick	For	For	Management	
1F.	Election of Director: Barry Meyer	For	For	Management	
1G.	Election of Director: Robert Morgado	For	For	Management	
1H.	Election of Director: Peter Nolan	For	For	Management	
1I.	Election of Director: Dawn Ostroff	For	For	Management	
1J.	Election of Director: Casey Wasserman	For	For	Management	
2.	To provide advisory approval of our executive compensation.	For	Against	Management	
3.	To ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for 2020.	For	For	Management	
4.	Stockholder proposal regarding political disclosures.	Against	Against	Shareholder	

===== VANGUARD SELECTED VALUE FUND - DONALD SMITH & CO. =====

Each investment advisor's votes cast are shown separately below. The votes reported reflect votes cast at the Fund's/advisor's discretion and exclude any votes cast pursuant to a regulatory requirement.

===== VANGUARD SELECTED VALUE FUND - PZENA =====

Each investment advisor's votes cast are shown separately below. The votes reported reflect votes cast at the Fund's/advisor's discretion and exclude any votes cast pursuant to a regulatory requirement.

Policy change within our dataset

The ISS voting analytics (VA) dataset is based on Form N-PX filings and assigns a FundID to each fund. Prior to the policy change, Vanguard funds each have a single ID; however, starting 7/1/2019 Vanguard funds with external investment advisers have separate FundID's for each party exercising voting authority. For example, VSVF's FundID is 4874 prior to the policy change, but following the change there are unique FundID's in the VA dataset for each fund-manager combination (6009372, 6008509, and 6008510). Through a combination of reviewing the VA dataset, reconciling it to Form N-PX filings, and reviewing fund details and press releases on Vanguard's website, we identify Vanguard funds with external investment advisers and manually link FundID's related to the same fund before and after the policy change into a unique identifier for each fund. While our data in the post-period is at the fund-adviser level (e.g. VSVF-Pzena), as discussed, the data in the pre-period is at the fund level (e.g. VSVF). As a result, we use the unique fund identifier we created (which is at the fund level) to implement fund fixed effects in our regression specifications.

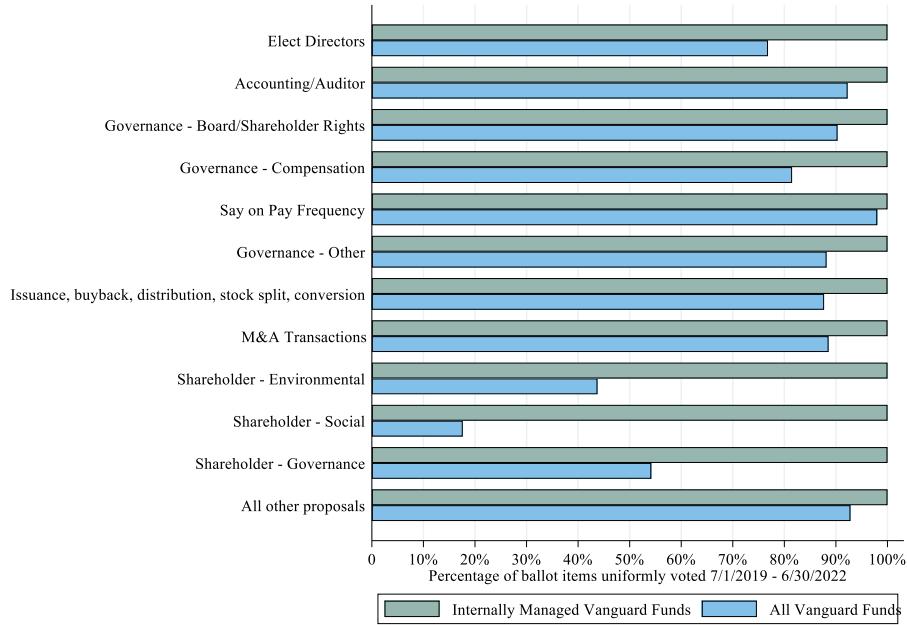
Other sample notes

Although Vanguard does not manage any of the capital of VSVF, it appears that the transition of voting authority to all managers within this fund was not fully complete at 7/1/2019. Per the Form N-PX subheadings, Vanguard voted in 10 meetings for VSVF from 7/1/2019-11/19/2019 but does not vote after this point. Similar cases involving a small number of votes occur in other externally managed funds as well. Additionally, in a few cases Vanguard is one of the managers in a multi-manager fund. We drop these votes in our sample selection so that all votes in externally managed funds following the policy change are ones over which decentralized voters exercised authority. Failing to drop these observations would bias our results because they would be treated as *Decentralized* voters in the fund fixed effect structure discussed above.

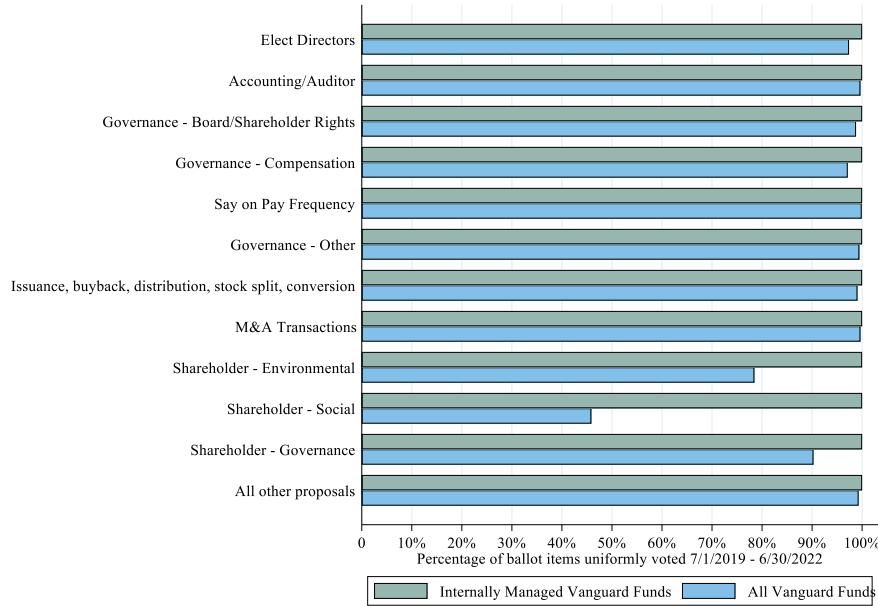
Finally, while historically ISS has provided researchers with its recommendations within the VA dataset, it no longer does so. In order to obtain ISS recommendations, we submitted a public information law request to a public investment fund who relies on ISS for their voting. We then merge this information into our dataset using a fuzzy matching procedure based on the company name, meeting date, and proposal description text. We supplement this data with ISS and Glass Lewis recommendations obtained from Shu (2024), who also uses public information law requests. The fuzzy merging procedure, along with vote availability from the advisor recommendation sources, account for the smaller sample in tests using ISS or Glass Lewis recommendations.

Figure 1: Lockstep voting

Panel A: Contentious Proposals

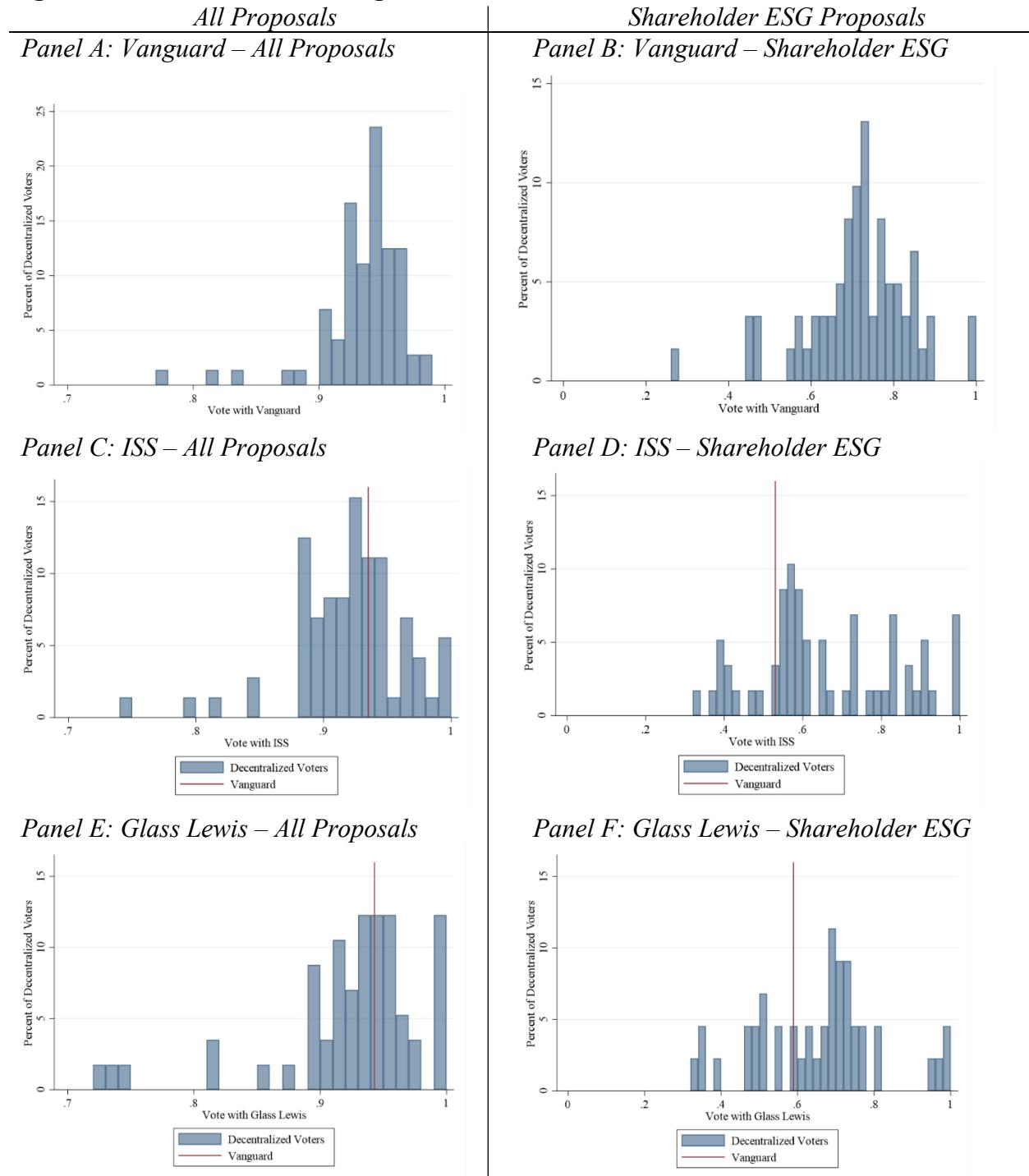


Panel B: All Proposals



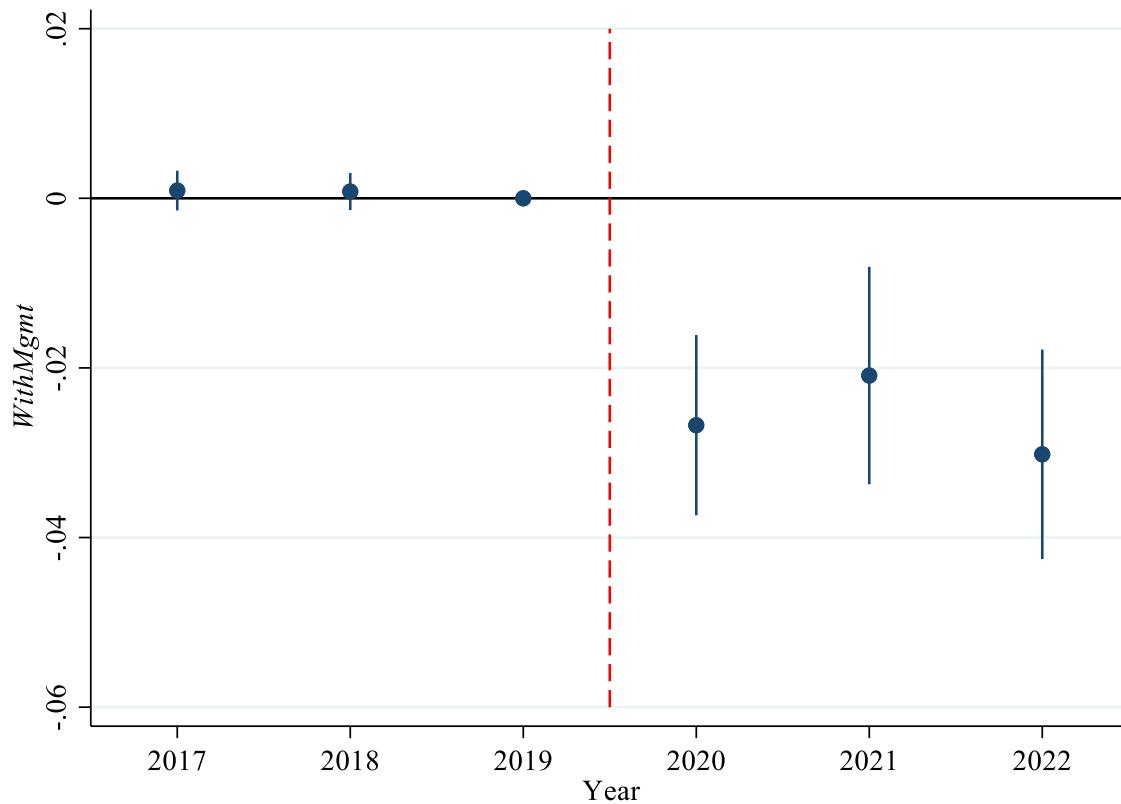
This figure presents the percentage of ballot items voted on by Vanguard funds in which all funds vote uniformly. The sample in Panel A (Panel B) is all unique ballot items in the contentious votes sample (primary sample) following the policy change (7/1/2019-6/30/2022). Green bars calculate uniform voting for the subset of funds that are internally managed while blue bars calculate uniform voting across all Vanguard funds. Ballot items are aggregated into twelve categories. Votes other than "For" are aggregated into "Against" (i.e. Withhold and Abstain are Against).

Figure 2: Decentralized voter alignment



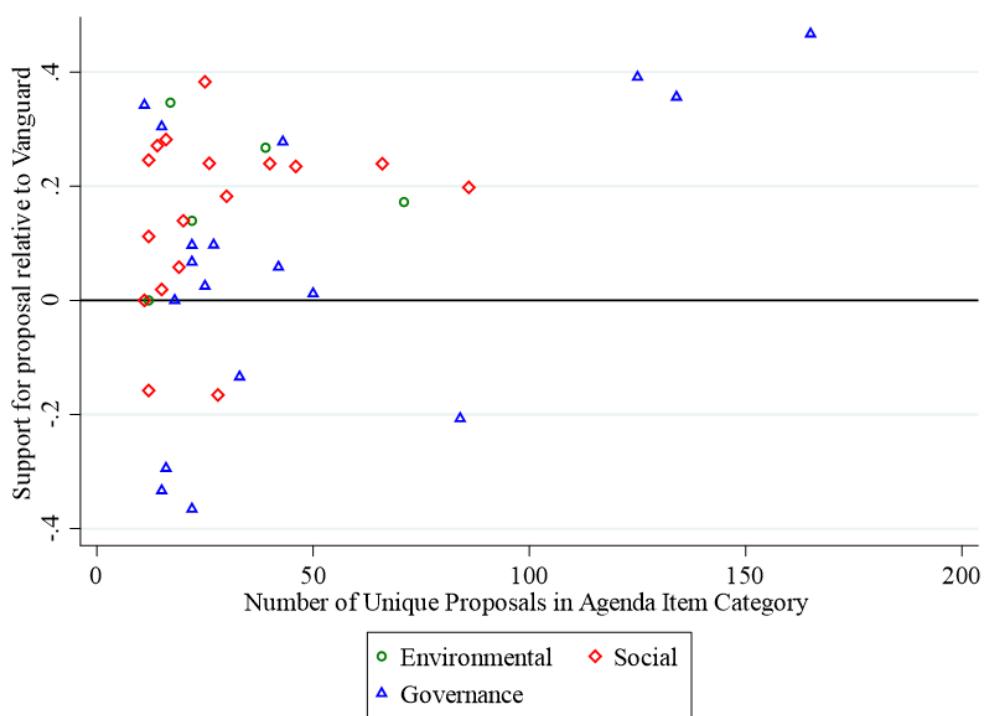
These figures present the distribution of decentralized vote alignment with Vanguard, ISS, and Glass Lewis. The x-axis is the percentage of ballot-items on which decentralized voters vote the same as Vanguard (Panels A and B), ISS (Panels C and D), and Glass Lewis (Panels E and F). The data presented here is at the fund-manager level and includes all fund-managers with at least 10 votes in the subsample. “Vote with” percentages are calculated from a sample of decentralized voter votes with a matching Vanguard vote (Panels A and B) and ISS or Glass Lewis Vote (Panels C-F). Panels B, D, and F additionally restrict the sample to shareholder ESG proposals. Votes other than “For” are aggregated into “Against” (i.e. Withhold and Abstain are Against). The red line in Panels C-F represents the proportion of Vanguard votes that align with the proxy advisor within the sample.

Figure 3: Coefficient plots – yearly effects on *WithMgmt*



This figure presents coefficient estimates from an OLS regression of equation (1), modified to include yearly interactions with *Decentralized*. The outcome variable is *WithMgmt*, an indicator variable equal to one if voting the same as the management recommendation and zero otherwise. The specification includes fund-firm and specific proposal fixed effects. 95% confidence intervals based on t-statistics calculated using standard errors clustered by fund and firm are shown and variable definitions are in Appendix A.

Figure 4: Shareholder E, S, and G proposal disagreement



This figure displays decentralized voters' support for shareholder proposals relative to Vanguard by unique agenda items. For proposals in each agenda item we calculate the decentralized voters' and Vanguard's average support for the proposal, presented as a proportion. The vertical axis displays the difference between decentralized voter and Vanguard support; positive values indicate higher support by decentralized voters. We require that agenda items have at least ten unique proposals. The sample is all votes in the post period (7/1/2019-6/30/2022) on which both Vanguard and at least one decentralized voter vote. Agenda items are defined by ISS.

Table 1: Sample Selection

All Vanguard votes 7/1/2016-6/30/2022 (fund-ballot item level)	6,058,184
Less: duplicates	(83)
Less: Missing Management Recommendations	(163)
Less: Informational Votes	(71,816)
Less: Vanguard votes in External Adviser Funds after 6/30/2019	(56,138)
Less: non-voted votes	(92,241)
Primary Sample	5,837,743
Less: ISS recommendation unavailable	(2,690,334)
ISS Recommendation Sample	3,147,409
Less: Glass Lewis recommendation unavailable	(1,667,419)
Glass Lewis Recommendation Sample	1,479,990
Less: non-contentious votes	(2,821,667)
Contentious Votes Sample	325,742

This table presents information on the sample selection procedures for our primary samples. The sample begins with the population of Vanguard mutual fund vote records obtained from the ISS Voting Analytics dataset for the period 7/1/2016-6/30/2022. The observational unit is the fund-ballot item level; in cases where multiple parties exercise voting discretion within the same fund (e.g. multiple managers), there are separate observations for each vote by a unique fund manager. We drop observations with data errors, that are informational votes, or on which the fund failed to vote. We also drop votes over which Vanguard exercised authority following the policy change within funds with at least one external investment adviser; these votes are related to cases where Vanguard manages a portion of the Fund's capital or voted in the Fall of 2019 as it implemented the policy change (see Appendix B discussion). Additionally, in two subsamples we drop observations for which we are unable to merge in the proxy advisor recommendation (see Appendix B). Contentious votes are defined as ballot items where firm management and one or both of ISS and Glass Lewis have opposite recommendations. Any modifications to these samples are discussed in the subsequent table footers; in some specifications observation counts are lower due to dropping singletons with respect to fixed effects.

Table 2: Vanguard policy change descriptive statistics

Panel A: Overall

	7/1/2016-6/30/2019	7/1/2019-6/30/2022	
	Vanguard Stewardship	Vanguard Stewardship	Decentralized Voters
# Funds	134	90	40
# Votes	2,744,730	2,868,280	224,733
# Unique Proposals	460,405	486,962	101,548
# Unique Meetings	52,772	54,781	9,655
# Unique Firms	13,609	13,886	4,108

<i>Panel B: By Proposal Category</i>		Unique	Unique	Unique		
Management Proposals	Votes	Proposals	Votes	Proposals	Votes	Proposals
Elect Directors	1,531,255	182,955	1,509,509	190,174	135,985	57,999
Accounting/Auditor	335,608	72,953	376,976	78,540	22,276	11,418
Governance - Board/Shareholder Rights	107,453	28,163	133,499	32,917	7,958	4,587
Governance - Compensation	303,045	42,035	315,689	47,716	25,248	12,384
Say on Pay Frequency	41,047	2,960	10,424	1,138	746	404
Governance - Other	100,509	31,131	137,389	36,205	6,109	3,528
Issuance, buyback, distrib., split, conversion	199,000	65,818	242,832	67,102	12,476	7,118
M&A Transactions	28,027	11,828	32,628	10,119	1,333	695
Other	44,574	14,280	53,541	14,707	2,721	1,540
Shareholder Proposals						
Shareholder - Environmental	5,660	404	4,292	407	1,009	219
Shareholder - Social	13,185	580	11,769	581	3,967	520
Shareholder - Governance	30,975	5,400	32,978	5,417	4,543	1,000
Other	4,392	1,898	6,754	1,939	362	136
Total	2,744,730	460,405	2,868,280	486,962	224,733	101,548

This table presents descriptive statistics on proxy votes surrounding Vanguard's 2019 voting choice policy change. Panel A provides overall votes and Panel B presents the number of votes by category. Decentralized voters are investment advisers of Vanguard funds who have authority over proxy voting following the 2019 policy change. Note that the number of funds differs in the pre and post periods due to a combination of fund closures, mergers, and new fund creation.

Table 3: Summary voting statistics

Panel A: All votes

	Vanguard Post				Decentralized Voter Post				Difference %For
	For	Against	Abstain	DNV	For	Against	Abstain	DNV	
Number of votes	2,664,641	148,638	44,626	47,550	205,462	14,179	4,354	4,509	
% votes	92%	5%	2%	2%	90%	6%	2%	2%	2%
Management Rec									
Yes	94%	4%	1%	1%	93%	3%	2%	2%	1%
No	16%	45%	17%	23%	33%	53%	6%	8%	-17%

<i>Panel B: Subsample with proxy advisor recommendations available</i>										
	Number of votes	1,489,033	73,870	15,453	13,444	171,349	11,508	2,396	3,074	
Advisor Rec	Management Rec									
Consensus										
Yes	Yes	99%	0%	0%	1%	97%	1%	0%	2%	2%
No	No	2%	85%	7%	6%	12%	79%	5%	4%	-10%
Contentious										
No	Yes	66%	24%	7%	2%	55%	26%	16%	2%	10%
Yes	No	30%	69%	0%	1%	47%	51%	1%	1%	-18%

This table presents comparisons of voting between Vanguard and decentralized voters in the post-period. Panel A shows the fraction of ballot items voted For, Against, Abstain/Withhold, or on which the fund failed to vote (DNV) from 7/1/2019-6/30/2022. In Panel A we use the primary sample except Say-on-frequency votes are excluded from this table because these votes specify a number of years rather than for/against; observations for ballot items on which the fund did not vote are also included for this table. In Panel B, the sample excludes votes for which no proxy advisor recommendations are available in our dataset. Contentious votes are defined as ballot-items where at least one proxy advisor and Management have different recommendations.

Table 4: External investment advisers and their voting disagreement percentages

Investment Adviser	Number Votes	Disagreement with Vanguard	Investment Adviser	Number Votes	Disagreement with Vanguard
Sprucegrove	1,931	23%	Wellington	57,488	6%
Oaktree	2,007	18%	Baillie Giffords	9,199	6%
Donald Smith & Co.	849	11%	Schroders	9,113	6%
Jennison	1,434	10%	Pzena	5,921	6%
Arga	2,404	10%	Primecap	22,049	5%
RS Investments	1,394	9%	Timesquare	2,793	5%
D.E. Shaw	43,052	9%	Frontier	4,166	5%
Sanders	1,940	8%	Cardinal	937	5%
Ariel	343	7%	Marathon	18,397	4%
Stephens	2,515	7%	Hotchkis & Wiley	5,218	4%
Arrowmark	2,541	7%	Aristotle	1,615	3%
Jackson Square	706	7%	Clearbridge	1,572	3%
Lazard	5,790	7%	Cooke & Bieler	1,165	3%
Los Angeles	8,233	7%	Edinburgh	50	2%

This table presents descriptives of the investment advisers in our sample. We restrict the sample to votes by investment advisers on which Vanguard also votes and tabulate the number of votes by each manager and the share of votes on which they disagree with Vanguard. To calculate disagreement, votes other than "For" are aggregated into "Against" (i.e. Withhold and Abstain are Against) and we correct for Say-on-frequency votes, which specify a number of years.

Table 5: Voting with Management

Panel A: All proposals

	(1)	(2)	(3)	(4)	(5)
Dependent Variable =			<i>WithMgmt</i>		
<i>Decentralized x Post</i>	-0.030*** (-3.09)	-0.028*** (-3.19)	-0.030*** (-4.62)	-0.027*** (-4.78)	-0.026*** (-4.71)
<i>Decentralized</i>	0.015*** (3.08)				
<i>Post</i>	-0.003* (-1.66)				
Observations	5,837,743	5,837,742	5,837,693	5,831,110	5,616,957
R-squared	0.001	0.007	0.157	0.309	0.964
Year FE	No	Yes	Yes	No	No
Fund FE	No	Yes	Yes	No	No
Firm FE	No	No	Yes	No	No
Fund-Firm FE	No	No	No	Yes	Yes
Meeting FE	No	No	No	Yes	No
Specific Proposal FE	No	No	No	No	Yes

Panel B: Shareholder vs management proposals

	Management Proposals			Shareholder Proposals		
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable =		<i>WithMgmt</i>			<i>WithMgmt</i>	
<i>Decentralized x Post</i>	-0.019*** (-3.18)	-0.016*** (-4.57)	-0.016*** (-4.47)	-0.289*** (-4.57)	-0.215*** (-3.65)	-0.215*** (-3.62)
Observations	5,679,699	5,672,714	5,473,139	157,809	148,483	136,142
R-squared	0.160	0.311	0.970	0.495	0.689	0.919
Year FE	Yes	No	No	Yes	No	No
Fund FE	Yes	No	No	Yes	No	No
Firm FE	Yes	No	No	Yes	No	No
Fund-Firm FE	No	Yes	Yes	No	Yes	Yes
Meeting FE	No	Yes	No	No	Yes	No
Specific Proposal FE	No	No	Yes	No	No	Yes

Column 1 vs 4 p <0.001

Column 2 vs 5 p <0.001

Column 3 vs 6 p <0.001

This table presents results from estimating equation (1) using OLS regressions. The unit of observation is unique fund-meeting-ballot item votes. The voting outcome variable is *WithMgmt*, an indicator variable equal to one if voting with the management recommendation and zero otherwise. The sample period is 7/1/2016-6/30/2022; *Post* is equal to one for observations after 6/30/2019. *Decentralized* indicates funds with an external investment adviser. In panel A we pool all proposals together and in panel B we split proposals by sponsor. We present t-statistics calculated using standard errors clustered by fund and firm in parentheses and variable definitions in Appendix A. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 6: Proposal categories: Management Proposals*Panel A: Category descriptive statistics for decentralized votes*

Management Proposal Category	Percentage of votes "For"		
	ISS	Decentralized Voters	Vanguard
Elect Directors	92%	94%	96%
Accounting/Auditor	99%	99%	99%
Governance - Board/Shareholder Rights	95%	94%	97%
Governance - Compensation	86%	89%	93%
Governance - Other	96%	96%	97%
Issuance, buyback, distribution, stock split, conversion	94%	94%	99%
M&A Transactions	97%	95%	99%
Other	82%	85%	86%

Panel B: Category Subsamples

Sample	(1)	(2)	(3)
	Director Elections	WithMgmt Management Proposals	Major Transactions
Decentralized x Post	-0.012*** (-3.11)	-0.029*** (-3.89)	-0.045*** (-5.64)
Observations	3,132,564	1,121,785	435,108
R-squared	0.971	0.978	0.953
Fund-Firm FE	Yes	Yes	Yes
Specific Proposal FE	Yes	Yes	Yes

This table presents analyses examining decentralized voter voting patterns by management proposal category. Panel A presents the share of votes or recommendations “For” proposals across 8 management proposal categories; the sample is all proposals with decentralized voter votes (i.e., in the post-period) with available Vanguard vote and ISS recommendation on the same proposal. Panel B presents OLS regressions of equation (1) separately for management proposal categories (director elections, governance and major transactions). The outcome variable is *WithMgmt*, an indicator variable equal to one if voting with the management recommendation and zero otherwise. The sample period is 7/1/2016-6/30/2022; *Post* is equal to one for observations after 6/30/2019. *Decentralized* indicates funds with an external investment adviser. We present t-statistics calculated using standard errors clustered by fund and firm in parentheses and variable definitions in Appendix A. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 7: Proposal categories: Shareholder Proposals

Panel A: Category descriptive statistics for decentralized votes

Shareholder Proposal Categories	Percentage of votes "For"		
	ISS	Decentralized Voters	Vanguard
Shareholder - Environmental	47%	36%	19%
Shareholder - Social	57%	32%	11%
Shareholder - Governance	71%	50%	21%
Other	16%	14%	7%

Panel B: Category Subsamples

Dependent Variable =	(1)	(2)	(3)
	WithMgmt	Shareholder Proposals	
Sample	E	S	G
<i>Decentralized x Post</i>	-0.233*** (-2.76)	-0.180*** (-2.87)	-0.259*** (-3.58)
Observations	8,527	25,568	57,272
R-squared	0.877	0.747	0.937
Fund-Firm FE	Yes	Yes	Yes
Specific Proposal FE	Yes	Yes	Yes

Panel C: Shareholder ESG agenda items with largest disagreement

Agenda Item	<i>Percentage of votes "For"</i>	
	Decentralized Voters	Vanguard
Environmental		
Community- Environmental Impact	46%	11%
GHG Emissions	59%	32%
Report on Climate Change	39%	22%
Climate Change Action	14%	0%
Nuclear Power - Related	0%	0%
Social		
Racial Equity and/or Civil Rights Audit	45%	7%
Miscellaneous Proposal - Social	28%	0%
Link Executive Pay to Social Criteria	27%	0%
Improve Human Rights Standards or Policies	25%	0%
Gender Pay Gap	28%	4%
Governance		
Amend Articles/Bylaws/Charter -- Call Special Meetings	52%	6%
Require Independent Board Chair	46%	6%
Provide Right to Act by Written Consent	40%	4%
Clawback of Incentive Payments	38%	4%
Submit Severance Agreement (Change-in-Control) to Shareholder Vote	48%	17%

This table presents analyses examining decentralized voter voting patterns by shareholder proposal category. Panel A presents the share of votes or recommendations “For” proposals across 4 shareholder proposal categories; the sample is all proposals with decentralized voter votes with available Vanguard vote and ISS recommendation on the same proposal. Panel B presents OLS regressions of equation (1) separately for proposal categories. Columns 1-3 disaggregate shareholder proposals related to environmental (“E”), social (“S”), and governance (“G”) topics. The outcome variable is *WithMgmt*, an indicator variable equal to one if voting the same as the management recommendation and zero otherwise. The sample period is 7/1/2016-6/30/2022; *Post* is equal to one for observations after 6/30/2019. *Decentralized* indicates funds with an external investment adviser. We present t-statistics calculated using standard errors clustered by fund and firm in parentheses and variable definitions in Appendix A. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Panel C presents the five agenda items with the largest positive disagreement between external investment advisers and Vanguard across each of the three shareholder proposal categories. We require that agenda items have at least ten unique proposals and calculate the percentage of votes for each proposal in the agenda item. The sample is all votes in the post period (7/1/2019-6/30/2022) on which both Vanguard and at least one external investment adviser vote. Agenda items are defined by ISS.

Table 8: Voting with proxy advisor

Panel A: Voting with ISS

Dependent Variable =	(1)	(2)	(3) WithISS	(4)	(5)
<i>Decentralized x Post</i>	0.004 (0.36)	0.007 (0.69)	0.003 (0.23)	0.007 (0.68)	0.007 (0.75)
<i>Decentralized</i>	0.003 (0.71)				
<i>Post</i>	-0.001 (-0.22)				
Observations	3,147,409	3,147,409	3,147,406	3,147,058	3,140,611
R-squared	0.000	0.006	0.163	0.251	0.961
Year FE	No	Yes	Yes	No	No
Fund FE	No	Yes	Yes	No	No
Firm FE	No	No	Yes	No	No
Fund-Firm FE	No	No	No	Yes	Yes
Meeting FE	No	No	No	Yes	No
Specific Proposal FE	No	No	No	No	Yes

Dependent Variable =	(1)	(2)	(3) WithGL	(4)	(5)
<i>Decentralized x Post</i>	-0.006 (-1.52)	-0.004 (-1.11)	-0.005 (-1.15)	-0.000 (-0.06)	-0.000 (-0.04)
<i>Decentralized</i>	-0.003 (-1.33)				
<i>Post</i>	0.011*** (4.49)				
Observations	1,479,990	1,479,990	1,479,990	1,479,990	1,479,859
R-squared	0.001	0.002	0.112	0.175	0.966
Year FE	No	Yes	Yes	No	No
Fund FE	No	Yes	Yes	No	No
Firm FE	No	No	Yes	No	No
Fund-Firm FE	No	No	No	Yes	Yes
Meeting FE	No	No	No	Yes	No
Specific Proposal FE	No	No	No	No	Yes

This table presents results from estimating equation (1) using OLS regressions. We use the ISS recommendation sample in Panel A and the Glass Lewis recommendation sample in Panel B. The outcome variable in Panel A (Panel B) is *WithISS* (*WithGL*), an indicator variable equal to one if voting the same as the ISS (Glass Lewis) recommendation and zero otherwise. *Post* is equal to one for observations after 6/30/2019. We present t-statistics calculated using standard errors clustered by fund and firm in parentheses and variable definitions in Appendix A. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 9: Portfolio concentration

Panel A: Concentration and alignment in contentious votes

Concentration Measure	Herfindahl index		1/Number Securities	
	(1)	(2)	(3)	(4)
ISS or GL against management?	Yes	No	Yes	No
Dependent Variable =	WithMgmt		WithMgmt	
<i>Decentralized x Post x Concentration</i>	11.166*** (2.65)	-0.538* (-1.95)	25.908** (2.04)	-1.344*** (-4.30)
<i>Decentralized x Post</i>	-0.391*** (-2.84)	0.001 (0.11)	-0.354*** (-2.83)	-0.001 (-0.19)
<i>Decentralized x Concentration</i>	-2.497 (-1.58)	0.139** (2.10)	-1.642** (-2.03)	0.154* (1.83)
<i>Post x Concentration</i>	0.107 (1.40)	-0.001 (-0.11)	0.228 (1.32)	-0.011* (-1.71)
<i>Concentration</i>	0.001 (0.06)	0.001 (0.88)	0.025 (1.12)	0.001 (0.43)
Observations	272,769	2,464,321	272,769	2,464,321
R-squared	0.952	0.873	0.953	0.873
Fund-Firm FE	Yes	Yes	Yes	Yes
Specific Proposal FE	Yes	Yes	Yes	Yes

Panel B: Concentration and outsourcing to proxy advisors

Concentration Measure	<i>Herfindahl index</i>		<i>I/Number Securities</i>	
	(1)	(2)	(3)	(4)
Dependent Variable =	<i>Outsource</i>		<i>Outsource</i>	
<i>Concentration - Average</i>	-8.802** (-2.27)	-8.611** (-2.20)	-14.138** (-2.43)	-14.042** (-2.36)
Observations	160	160	160	160
R-squared	0.049	0.051	0.057	0.060
Year FE	No	Yes	No	Yes

This table presents results from OLS regressions cross-sectionally examining the effect of portfolio concentration on voting patterns. In Panel A The unit of observation is unique fund-meeting-ballot item votes with available data. We keep all observations with one or more proxy advisor recommendations and available data to calculate portfolio concentration measures; we split this sample into contentious votes (columns 1 and 3) and all other votes (columns 2 and 4). *Post* is equal to one for observations after 6/30/2019. *Concentration* is defined as *Herfindahl Index* (columns 1-2) or *I/Number Securities* (columns 3-4). The outcome variable is *WithMgmt*, an indicator variable equal to one if voting with the management recommendation and zero otherwise. In Panel B the sample is decentralized voter votes in the post-period with available ISS or GL recommendations and is aggregated to the unique fund-manager-year level. *Concentration* is averaged over the fund-manager-year. The dependent variable is *Outsource*, an indicator variable equal to one if greater than 99% of all votes by the fund-manager during the year align with either ISS or Glass Lewis and zero otherwise. We present t-statistics calculated using standard errors clustered by fund and firm (Panel A) and fund (Panel B) in parentheses and variable definitions in Appendix A. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 10: Contentious votes
Panel A: Full Sample

	(1)	(2)	(3)	(4)	(5)
Dependent Variable =	<i>WithMgmt</i>				
<i>Decentralized x Post</i>	-0.160*	-0.185**	-0.196**	-0.205**	-0.206**
	(-1.66)	(-2.06)	(-2.25)	(-2.24)	(-2.26)
<i>Decentralized</i>	0.035				
	(1.44)				
<i>Post</i>	-0.081***				
	(-4.09)				
Observations	325,742	325,742	325,701	308,075	307,350
R-squared	0.016	0.087	0.447	0.639	0.954
Year FE	No	Yes	Yes	No	No
Fund FE	No	Yes	Yes	No	No
Firm FE	No	No	Yes	No	No
Fund-Firm FE	No	No	No	Yes	Yes
Meeting FE	No	No	No	Yes	No
Specific Proposal FE	No	No	No	No	Yes

Panel B: Category Subsamples

	(1)	(2)	(3)	(4)	(5)	(6)
DV =	<i>WithMgmt</i>					
Sample	Director Elections	Governance	Major Transactions			
				Management Proposals		
<i>Decentralized x Post</i>	-0.142	-0.095	-0.278**	-0.341***	-0.255**	-0.321***
	(-1.28)	(-1.11)	(-2.18)	(-3.03)	(-2.57)	(-3.29)
Observations	154,450	53,820	10,743	3,939	14,838	29,828
R-squared	0.972	0.968	0.976	0.904	0.783	0.918
Fund-Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Specific Proposal FE	Yes	Yes	Yes	Yes	Yes	Yes

This table presents results from estimating equation (1) in contentious votes using OLS regressions; contentious votes are defined as ballot-items where one or more proxy advisors and management have opposing recommendations. The sample is the contentious votes sample. *Post* is equal to one for observations after 6/30/2019. The outcome variable is *WithMgmt*, an indicator variable equal to one if voting the same as firm management's recommendation and zero otherwise. Panel A presents results in the full sample and Panel B presents results separately for different vote categories. Columns 4-6 disaggregate shareholder proposals related to environmental ("E"), social ("S"), and governance ("G") topics. We present t-statistics calculated using standard errors clustered by fund and firm in parentheses and variable definitions in Appendix A. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 11: Generalizability

Proposal Category	Vanguard	BlackRock	SSGA	ISS	Number of Proposals
<i>Management Proposals</i>					
Elect Directors	96%	95%	90%	92%	58,836
Accounting/Auditor	99%	97%	97%	98%	11,135
Governance - Board/Shareholder Rights	96%	95%	87%	93%	3,487
Governance – Compensation	95%	92%	89%	85%	11,186
Governance – Other	93%	93%	89%	90%	3,591
Issuance, buyback, distribution, stock split, conversion	99%	93%	91%	90%	6,198
M&A Transactions	99%	97%	94%	93%	404
Other	82%	80%	79%	76%	1,490
<i>Shareholder Proposals</i>					
Environmental	6%	6%	18%	43%	290
Social	4%	6%	20%	59%	473
Governance	27%	31%	35%	70%	1,012
Other	7%	7%	11%	14%	208
Total:					98,310

This table presents the percentage of “For” votes for ballot items voted on by Vanguard, BlackRock, and State Street (SSGA) funds over the 7/1/2016-6/30/2019 period for management and shareholder proposals. For comparison, the fourth column provides ISS benchmark recommendations for the same ballot items.

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