

All Shareholder Votes Are Not Created Equal

Abstract

Does shareholder identity influence corporate governance outcomes through voting? We show that directors facing a given level of dissent are twice as likely to leave when that dissent is from active fund shareholders rather than from passive ones. This outcome is driven by active funds' stronger disciplinary threat rather than informational edge. Despite their significant holdings, the so-called "Big Three" passive asset managers do not have greater influence than the average active fund. Our findings underscore that shareholder democracy depends on both the votes that are cast and on who is casting them.

Keywords: Shareholder Voting, Director Elections, Passive Investing, Shareholder Democracy

JEL Classification: G23, G34, G38, G40

1. Introduction

The hallmark of democracy is that a poor man’s vote carries the same weight as a rich man’s vote. Should this principle also apply to shareholder democracy, that all shareholder votes are treated equally, regardless of which investor casts them? Shareholders’ votes, similar to how citizens elect politicians, shape corporate policies directly through vote tallies. In addition, shareholder votes serve as signals of investor preferences, indirectly shaping corporate policies even when they do not achieve a majority (Levit & Malenko, 2011; Aggarwal, Dahiya, & Prabhala, 2019). Because shareholder votes are not anonymous, management may respond differently depending on who casts the vote, even though all votes count equally in determining the outcome. Understanding the signaling value of each vote, as well as how votes are treated differently, is essential when analyzing and regulating shareholders’ voting rights.

In this paper, we study the relationship between votes of different shareholders and their implications for firm management. We specifically focus on director elections, as they are among the most significant mechanisms by which shareholders influence corporate governance (Cai, Garner, & Walkling, 2009; Fos, Li, & Tsoutsoura, 2018). Unlike most other proposals, the long-term outcomes of director elections – such as whether a director continues to serve on the board after the election – can be systematically measured. As a result, director elections provide a natural laboratory for studying the signaling value of shareholder votes. Nonetheless, we believe our findings are likely applicable to broader settings, including for shareholder proposals addressing environmental, social, and governance (ESG) issues.

One of our main findings is that the identity of the investor casting the vote matters

in director retention. A dissenting vote by passive funds in a director’s election reduces the probability of the director remaining on the board three years later by 0.7 percentage points. In contrast, an active fund withholding its support decreases this probability by 1.5 percentage points – more than double the rate of its passive counterpart. Given that the unconditional probability of a director’s departure is about 20%, this discrepancy in the retention rate is significant. We further document that this discrepancy is robust to a variety of fixed effects and controls: (i) firm fixed effects account for firm-specific factors; (ii) year fixed effects control for market-wide trends affecting all firms; (iii) the more stringent firm-by-year fixed effects compare directors up for election in the same annual meeting, ruling out alternative explanations related to portfolio selection; and (iv) item-level controls, such as ISS and Glass Lewis recommendations, account for the specific circumstances of each director in a given year.

Does the difference in the sensitivity of director retention to dissenting votes stem from variations in the number of shares active and passive funds hold? For example, active funds may hold larger positions, either on average or specifically in situations where dissent is more likely. If so, the observed discrepancy could simply reflect differences in shareholding sizes. To test this hypothesis, we divide the sample of votes based on funds’ holding sizes and find that the basic pattern remains consistent: the sensitivity of board retention to dissenting votes is greater when the dissent comes from active shareholders. We also observe a similar pattern among votes by blockholders, where both active and passive shareholders possess very large holdings. Finally, the basic finding persists in regressions that directly control investors’ holding sizes, blockholder statuses, and assets under management. We conclude that while firms do take shareholder holding sizes into account, the identities of dissenting

votes also play a crucial role.

If the variation in director retention cannot be attributed to the number of shares held by each shareholder, what other factors could explain the differences in responses to active and passive funds? We explore two potential mechanisms, which we term the threat and information channels. Passive funds are generally unable to exit a position and are less likely to support activist slates in proxy contests (Kakhbod, Loginova, Malenko, & Malenko, 2023; Brav, Jiang, Li, & Pinnington, 2024). Consequently, their votes exert a weaker disciplinary threat compared to those of active funds. At the same time, passive funds may have less information about the firm than active funds (Bebchuk & Hirst, 2019; Heath, Macciocchi, Michaely, & Ringgenberg, 2022), and recognizing the potential lack of information from passive funds' votes, firm management might choose to be less responsive to them.

We find some evidence supporting the threat channel but not the information channel. If the threat channel is the case, the discrepancy in director retention should be smaller for firms with entrenched management. This is because entrenched management is less susceptible to shareholder threats, reducing the potency of opposing votes from active funds and bringing it closer to that of passive funds. Consistent with this, we observe that director retention in firms with entrenched management shows lower sensitivity to the votes of both active and passive funds, and, more importantly, the discrepancy between them disappears. In contrast, if the results were primarily driven by the information advantage of active funds, we would expect the gap to narrow for firms that are more transparent or for investors that are better informed. In such cases, the information advantage of active funds would diminish, making the importance of its votes closer to that of passive funds. However, using several proxies for shareholder information and firm transparency, we find that the gap remains largely

consistent. Thus, we conclude that there is insufficient evidence to support the information channel.

In recent years, both regulators and academics have expressed concerns over large index funds wielding outsize power (Coates IV, 2018). Using our framework, we investigate just how powerful the “Big Three” asset managers – Vanguard, BlackRock, and State Street – truly are. Our findings reveal that votes from Big Three funds carry no greater weight than those of other funds. This outcome is primarily due to the predominantly passive nature of their funds. While the active funds managed by the Big Three carry more weight than other active funds, votes from their passive funds are no more associated with director retention than those from an average active fund. As a result, concerns about the Big Three exercising excessive power may be overstated. Firms appear to be less responsive to votes from passive funds, even when those funds belong to the Big Three.

This paper makes several contributions to the existing literature. First, our discovery of the discrepancy in director retention based on dissenting votes from different shareholders challenges the traditional understanding of one-share-one-vote shareholder democracy. If voting were a one-period game without the possibility of exit, or if voter identities could not be observed, the total vote count would be all that mattered. In practice, however, management identifies voters, voting occurs repeatedly, and only certain investors have the ability to sell their shares. Our results underscore the need for a framework that accounts for these nuanced dynamics.

Our results emphasize that the advisory role in shareholder votes is as significant as their tallying function. In other words, investors participate in corporate elections not merely to influence outcomes but also to express their opinions. In fact, pivotality may not be the pri-

mary factor in determining shareholders’ voting decisions. This finding relates to the debate in political science literature between “expressive voting” and “instrumental voting.” In this debate, a widely accepted assumption is that people derive an “expressive” or consumption benefit from voting (Fiorina, 1976). An alternative theoretical perspective suggests that people vote for “instrumental” reasons, meaning they believe their vote has a probability of being pivotal. While instrumental voting faces logical challenges when applied to political elections (Downs, 1957; Riker & Ordeshook, 1968), its relevance to shareholder voting remains an open empirical question, especially since many investors hold significant blocks of shares. Within the shareholder voting literature, some theoretical papers assume instrumental voting (Malenko, Malenko, & Spatt, 2024), while others assume expressive voting (Câmara, Matsusaka, & Shu, 2024).

Finally, our papers relate to studies examining shareholder democracy. Matsusaka and Ozbas (2017) and Broccardo, Hart, and Zingales (2022) theoretically demonstrate that empowering shareholders through voting rights can strengthen shareholder democracy. Over the years, the Securities and Exchange Commission (SEC) has introduced several rules to improve the effectiveness of shareholder voting. One particularly relevant to our results is the requirement, introduced in 2003, for mutual funds to disclose their votes, effectively enabling firms to respond to these votes. More recently, there have been rulemaking efforts to allow beneficial owners of mutual funds to vote directly through a process known as pass-through voting. While some studies suggest that pass-through voting has some positive effect (Herrmann, McInnis, Monsen, & Starks, 2024), others indicate that its success might be more nuanced (Malenko & Malenko, 2023). Our findings imply that for pass-through voting to more effectively improve shareholder democracy, policymakers should consider al-

lowing companies to identify how individual beneficial investors voted – in other words, the identity of voters is crucial in the context of pass-through voting.

2. Data

Our sample includes all votes on uncontested director elections at routine annual meetings of U.S. public firms from 2007 to 2020. ISS Voting Analytics provides mutual fund voting data, details on the final voting outcomes of these elections, and ISS’s own recommendations. Glass Lewis recommendations are obtained through a Public Records Law request directed to a large public pension fund (Shu, 2024). We exclude contested elections, using the dataset provided by Brav et al. (2024), as well as any director elections where the director received less than 70% of the final vote. These exclusions, which remove approximately 1.7% of votes from our sample, ensure that no single fund has a meaningful probability of being pivotal. These filters allow us to focus on how management responds to the signaling value of votes; nevertheless, our findings remain robust without these filters. Our key measure of fund voting is whether a fund voted against a particular director’s reelection. We define a dissenting vote as the fund voting “Against,” “Abstain,” or “Withhold,” and a supporting vote as the fund voting “For.”

The director information is sourced from Capital IQ’s Execucomp dataset. Our primary measure of directors’ career outcomes is an indicator variable equal to 1 if the director remains on the firm’s board three years after the election. If the firm exits the sample within three years of the election, we exclude that election from the analysis. We match the director dataset with the voting dataset using an algorithm designed to parse names from

each election’s item description.

Firm characteristics are obtained from the CRSP/Compustat database, while corporate governance qualities are sourced from ISS’s Governance dataset. We calculate an entrenchment index (E-index), ranging from 0 to 6, where higher values indicate greater entrenchment. The index encompasses information on staggered boards, limits on shareholder bylaw amendments, poison pills, golden parachutes, supermajority requirements for mergers, and supermajority requirements for charter amendments (Bebchuk, Cohen, & Ferrell, 2008). Mutual fund data, including ownership information, is sourced from the CRSP Mutual Fund Database. Both firm and fund characteristics are measured as of the calendar year preceding the year in which the votes were recorded.

For measures regarding informed voting, we examine whether funds viewed firms’ proxy statements prior to voting (Iliev, Kalodimos, & Lowry, 2021) or were located in one of the top 10 Metropolitan Statistical Areas with the highest concentration of funds (Iliev & Lowry, 2014). The first measure is derived from the SEC’s Edgar log file. This dataset includes each visitor’s partially anonymized IP address, the date and time of the view, and the accession number of the viewed file. We follow the procedure of Matsusaka and Shu (2021): (i) deanonymizing IP addresses using the cipher provided by Chen, Cohen, Gurun, Lou, and Malloy (2020), (ii) mapping the full IP addresses to organization names using linking datasets from MaxMind and the American Registry for Internet Numbers (ARIN), and (iii) matching the CIK-period of report with an annual meeting’s CUSIP-meeting date. If there is no record of a fund family in the Edgar log file for a given year, we omit it from the analysis for that year. Finally, to measure firms’ information environments, we use the divergence of analysts’ earnings forecasts (Diether, Malloy, & Scherbina, 2002). Monthly

analysts' forecasts are obtained from I/B/E/S. We calculate monthly divergence as (highest - lowest)/median among the forecasts, and then take the annual average as the measure.

Insert **Table 1** About Here

Table 1 presents summary statistics for our sample. Director departures from boards are relatively common, with 18% of directors leaving within three years of their election. However, dissenting votes by mutual funds are rare, comprising only about 3% of their total votes. This can also be reflected in final vote counts, where the average director in the sample receives 96% of the votes in support. In our sample, 46% of votes are cast by passive funds, while 0.2% are from blockholders who own more than 5% of a company's shares. On average, each fund holds 0.17% of shares.

3. Main Results

In this section, we examine the relationship between shareholder votes in director elections and the director's future career within the firm. Prior research has shown that dissenting votes can negatively impact a director's career, even when the director secures a supermajority of support or faces no contest in the election. Our key finding is that the magnitude of this relationship depends on the identity of the investors casting the dissenting votes.

We categorize votes based on whether they are cast by active or passive funds. Existing literature suggests that passive funds are less inclined to monitor their portfolio firms (Heath et al., 2022), acquire less information when voting (Iliev et al., 2021), and are more likely to

follow proxy advisor recommendations (Iliev & Lowry, 2014; Shu, 2024). **Figure 1** illustrates the relation between the probability that a director remains on a board within three years of a vote and the fraction of support he received by active (Panel A) and passive (Panel B) funds.

Insert **Figure 1** About Here

The figure displays the binned scatter plot illustrating the relationship, along with a best-fit line. For votes cast by active funds, there is a strong positive correlation between the probability of a director remaining on the board and the level of support they receive. Specifically, a one-percentage-point increase in support from active funds increases the probability of remaining on board by approximately 0.11 percentage points. In contrast, a one-percentage-point increase in support from passive funds raises the probability by only 0.01 percentage points – just one-tenth of the magnitude observed for active funds.

To quantify the magnitude and statistical significance of this discrepancy in directors’ responses to votes from active and passive funds, we estimate the following equation:

$$\begin{aligned} \text{Director Retention}_{i,j,t} = & \beta_{\text{active}} \cdot \text{No}_{i,j,f,t} \cdot \text{Active}_f + \beta_{\text{passive}} \cdot \text{No}_{i,j,f,t} \cdot \text{Passive}_f \\ & + \gamma X_{i,j,f,t} + \text{Fixed Effects} + \epsilon_{i,j,f,t} . \quad (1) \end{aligned}$$

Each observation represents a fund vote in an election. The dependent variable is an indicator variable that equals 1 if director j remains on the board of firm i three years after their election in year t . For explanatory variables, $\text{No}_{i,j,f,t}$ is a vote-level indicator that equals 1

if fund f votes “Against”, “Abstain”, or “Withhold”, Active_f (or Passive_f) is a fund-level indicator variable that equals 1 if fund f is an active (or passive) fund, $X_{i,j,f,t}$ is a vector of control variables that include the non-interaction term $\text{No}_{i,j,f,t}$. We also include a variety of fixed effects. The coefficients β_{active} and β_{passive} capture the relationship between a director’s retention and dissent from active and passive shareholders, respectively. The difference, $\beta_{\text{passive}} - \beta_{\text{active}}$, captures the discrepancy in these relationships and is the main focus of this regression analysis. The standard errors are double-clustered at the firm and director levels.¹

Table 2 reports the regression results. Column 1 presents the OLS estimate without fixed effects. An active fund dissenting in a director’s election is associated with a 3.0 percentage point reduction in the likelihood that the director will serve another three years. In contrast, a dissent by a passive fund corresponds to only a 1.6 percentage point decrease. This difference is statistically significant, as indicated at the bottom of the table.

Insert **Table 2** About Here

There are several alternative hypotheses and confounding factors that could drive the results, aside from the idea that companies respond differently to different types of shareholders. One possibility is that different funds may choose to invest in companies based on factors correlated with managerial responsiveness. For example, active funds might prefer firms with less entrenched boards compared to passive funds.

¹Since the explanatory variables (at the vote level) are more granular than the dependent variable (at the election level), it is essential to cluster the standard errors at least at the election level. In our main model, we adopt a more stringent test by clustering at both the firm and director levels to further account for potential correlations in error terms within specific firms or among specific directors. Additionally, the estimated discrepancy remains statistically significant when robust standard errors are computed using the delta method.

To address this concern, column 2 incorporates firm and year fixed effects, while column 3 includes firm-by-year fixed effects. These fixed effects account for both time-invariant and time-varying characteristics at the firm level. In other words, the regression in column 2 compares directors serving within the same firm, whereas the regression in column 3 compares directors standing for election at the same annual meeting.

The estimates with these fixed effects are similar to those in column 1, though slightly smaller. This suggests that while firm characteristics might play a role, they do not fully account for the observed discrepancies. It is worth noting that while the firm-by-year fixed effect is the most stringent and eliminates any portfolio selection confounding effects, it however also absorbs much of the variation that explains funds' dissenting votes – such as poor firm performance. For subsequent analyses, we report results using firm and year fixed effects rather than firm-by-year fixed effects, though the findings remain qualitatively similar under both approaches.

Another confounding possibility is that a director's quality may simultaneously affect their career outcomes and the differing voting patterns of active and passive funds. For example, a busy director who serves on multiple boards might be viewed as less desirable by active funds compared to passive investors. This busyness could increase their likelihood of departing the board while also attracting more dissenting votes from active shareholders. Moreover, a director's quality can vary over time, making director fixed effects insufficient as a control.

To mitigate the potential confounding effects related to director quality, we include recommendations from two major proxy advisors, ISS and Glass Lewis, as controls in our regressions. In columns 4 to 6, we observe that favorable proxy advisor recommendations

are strongly and statistically significantly associated with a director’s likelihood of remaining on the board. Nevertheless, the difference between the coefficients for active and passive shareholders’ dissent votes remains largely unchanged, suggesting that directors’ quality is unlikely to explain the observed discrepancy.

The difference in the sizes of active and passive funds’ holdings might also drive the observed differential in managerial responsiveness. Active funds often hold more concentrated and substantial positions (Kacperczyk, Sialm, & Zheng, 2005), and firms may be more responsive to their largest shareholders regardless of whether those shareholders are active or passive. In this case, it is the size of the holdings, rather than the voters’ identity as active or passive, may be the determining factor.

To explore this possibility, we first examine whether the holding sizes of passive and active funds differ. The mean, median, and 95th percentile holdings for passive funds are 0.17%, 0.18%, and 1.08% of the firm’s outstanding shares, respectively. By comparison, the corresponding figures for active funds are 0.16%, 0.14%, and 0.91%. These statistics indicate that passive funds hold slightly larger positions on average. It remains to be seen whether such a small difference is sufficient to fully explain the findings presented in Table 2.

Insert **Table 3** About Here

To rule out the alternative explanation related to holding size, we repeat the analysis of Equation 1 by dividing the sample based on different fund holding sizes. In columns 1 to 3 of **Table 2**, we observe that the discrepancy in the sensitivity of board retention between passive and active funds’ dissenting votes persists regardless of whether the holding size is

low, medium, or high. This finding rejects the alternative hypothesis that the gap observed in Table 2 is due to active funds having larger holdings and that companies' differential responses are driven by these size differences.

Additionally, we find that companies' response rates are considerably higher for blockholders, particularly those holding more than 5%. This is consistent with Edmans (2009) that blockholders can discipline managers through exiting. Interestingly, we observe a non-monotonic effect of fund holdings. A one standard deviation increase in holdings reduces the response rate by 0.8 percentage points (0.53×1.6). However, a two-standard-deviation increase – enough to qualify as a blockholder – raises the response rate by 1.7 percentage points ($2.53 - 0.53 \times 1.6$). There are several potential explanations for this; for example, fund holdings may correlate with other fund characteristics. We don't indulge in testing these as they are not the main inquiry of this paper. Nonetheless, it is worth noting that the initial decline in response rate is not economically significant: the 90th percentile of fund holdings is just 0.4%. Companies appear to focus primarily on very large shareholders, such as blockholders.

4. Mechanism

In this section, we discuss two plausible mechanisms that might explain the differing sensitivity of director retention and dissenting votes depending on whether they come from active or passive shareholders. One possibility is that passive funds, due to their mandate, cannot threaten to exit even if they disagree with firm management. We refer to this as the threat channel. The second possibility is that passive funds are less informed than active funds,

which we refer to as the information channel. These two explanations are not mutually exclusive.

4.1. The Threat Channel

Passive funds are required to hold a representative sample of an index and cannot sell shares, even if they disagree with management. In contrast, active fund managers can sell a stock if they disagree with management, which can drive the stock price down – an outcome undesirable for the board. As a result, the board may be more inclined to respond to the dissenting votes of active funds than those of passive funds. However, this dynamic might not hold if management is entrenched, with directors' tenure effectively secure. While passive funds lack the leverage to threaten management, entrenched management renders active funds' threats equally ineffective. As a result, the disparity in directors' responsiveness to votes from active versus passive funds would likely diminish in such firms.

To test this hypothesis, we repeat the analysis of Equation 1, estimating the coefficients separately for entrenched and non-entrenched firms.

$$\begin{aligned}
\text{Director Retention}_{i,j,t} = & \beta_{E,\text{active}} \cdot \text{Vote No}_{i,j,f,t} \cdot \text{Active Fund}_f \cdot \text{Entrenched}_{i,t} \\
& + \beta_{E,\text{passive}} \cdot \text{Vote No}_{i,j,f,t} \cdot \text{Passive Fund}_f \cdot \text{Entrenched}_{i,t} \\
& + \beta_{NE,\text{active}} \cdot \text{Vote No}_{i,j,f,t} \cdot \text{Active Fund}_f \cdot \text{Not Entrenched}_{i,t} \\
& + \beta_{NE,\text{passive}} \cdot \text{Vote No}_{i,j,f,t} \cdot \text{Passive Fund}_f \cdot \text{Not Entrenched}_{i,t} \\
& + \gamma X_{i,j,f,t} + \text{Fixed Effects} + \epsilon_{i,j,f,t} .
\end{aligned} \tag{2}$$

Entrenched $_{i,t}$ is an indicator variable that equals 1 if the firm’s entrenchment index is above a specified threshold. Since there is no consensus on what precisely constitutes entrenched management, we have tested various thresholds. This approach also enables us to examine the coefficients for companies with varying degrees of entrenchment. To measure entrenchment, we use the E-index, which is based on six features of firm governance, such as poison pills and staggered boards (Bebchuk et al., 2008). Our primary interest lies in the discrepancies $\beta_{E,passive} - \beta_{E,active}$ and $\beta_{NE,passive} - \beta_{NE,active}$, particularly whether the former is smaller.

Insert **Table 4** About Here

In columns 1 to 3 of **Table 4**, we observe that the discrepancy in the sensitivity of a director’s continued board presence to the dissenting votes they receive from active and passive investors appears only in unentrenched firms. In entrenched firms, dissenting votes do not seem to be related to directors’ tenure, regardless of whether they are cast by active or passive investors. This pattern is robust across the three thresholds of the E-index we examined to define whether a firm is entrenched. Furthermore, in column 4, we directly interact the E-index with the explanatory variables in Equation 1. The results suggest that the discrepancy in the consequences of passive and active funds’ votes diminishes as the E-index increases, ultimately disappearing for firms with an E-index greater than three.

Insert **Figure 2** About Here

Figure 2 provides a visual representation of this finding. The sample of firms is split

based on their degree of entrenchment, rather than the dichotomy presented in Table 4. Two key observations emerge from this figure. First, the sensitivity of a director’s continued board presence to dissenting votes decreases as the firm becomes more entrenched. This pattern holds true for dissenting votes from both active and passive funds. Moreover, the discrepancy between active and passive funds’ votes appears only in firms with a low entrenchment index. In short, entrenched management is less susceptible to shareholder threats, reducing the potency of opposing votes from active funds and bringing it closer to that of passive funds. These findings are consistent with the hypothesis that the observed discrepancy in Table 2 arises primarily from the disciplining effect of dissenting votes by active investors, which disappears in firms with entrenched management.

4.2. The Information Channel

Passive funds conduct less research on corporate governance (Iliev et al., 2021; Heath et al., 2022). As a result, the signals conveyed by their votes may hold less value for companies (Levit & Malenko, 2011). Furthermore, such votes might be less able to accurately reflect investor preferences due to their limited informational content. This could lead company boards to be less inclined to respond to votes from passive shareholders, potentially contributing to the discrepancy observed in Table 2. If this is the case, then the discrepancy would be smaller when the passive shareholders are actually informed, bringing their information content closer to those of active shareholders.

To test this hypothesis, we use two measures of informed investors. The first measure, specifically related to voting, classifies votes based on whether the investor has viewed the

company’s proxy statement on the SEC’s website prior to voting. Iliev et al. (2021) provide evidence that viewing firms’ proxy statements is a reasonable measure for investor information and attention, even though investors may access other sources of information, such as Bloomberg terminal or proxy advisor recommendations. The second measure considers the geographic location of the mutual fund. We define a fund as more informed if it is located in one of the top 10 Metropolitan Statistical Areas (MSAs) with the highest concentration of funds. These funds face lower costs of acquiring information and are more likely to be active voters (Iliev & Lowry, 2014). For both measures, we fail to find evidence suggesting that informed votes narrow the differences between active and passive funds.

Insert **Table 5** About Here

In column 1 of **Table 5**, the negative coefficient on “No \times Active” echoes our previous findings: the association between director retention and dissenting votes is stronger (i.e., more negative) if the votes come from active shareholders. Moreover, the non-statistically significant coefficient on the interaction with the indicator variable ‘Edgar Visit’ fails to support the hypothesis that conducting governance research enables passive shareholders to catch up to active funds. Similarly, we observe a near-zero coefficient in column 2 for the interaction term with whether the fund is located in a Top 10 MSA location.

Finally, we also examine the differences in firms’ information environments. Prior literature has shown that firms with diverging analysts’ earnings forecasts are more complex, resulting in differences of opinion among investors (Diether et al., 2002). We postulate that, among these firms, the information advantage of active investors would be more pronounced,

attracting greater attention from company boards. In such firms, the discrepancy between active and passive shareholders’ votes in shaping board responses would be stronger. Using different definitions for the divergence in analysts’ forecasts, we fail to find any association between the discrepancy and the divergence.

These results suggest that the differences between active and passive funds’ dissenting votes in determining director retention are unlikely to stem from a lack of information on the part of passive investors.

5. “Big Three” Funds

Passive investing has gained significant popularity over the past two decades. Vanguard, BlackRock, and State Street—collectively known as the “Big Three” funds—have accumulated substantial assets and now collectively own about 20% of publicly traded U.S. firms (Morningstar, 2024). Their considerable ownership stakes have drawn increasing scrutiny from both regulators and academics. One major concern is the substantial influence they wield over corporate governance and decision-making. BlackRock CEO Larry Fink’s annual letters to CEOs are widely circulated but have recently faced criticism. In response, Congress passed the INDEX Act, aimed at curbing the power of large index providers. Facing the scrutiny, asset managers have begun offering pass-through voting options for investors.

But just how influential are the “Big Three” funds? To answer this question, we regress director retention on dissenting votes, where we include an interaction term that indicates whether the fund belongs to a Big Three family.

Insert **Table 6** About Here

In the first column of **Table 6**, we observe that votes from Big Three funds are more closely associated with director retention. However, the point estimate is not statistically different from zero, failing to support the hypothesis that votes from Big Three funds are more significant.

To understand why this is the case, we repeat the analysis of Equation 1, estimating the coefficients separately for Big Three funds and non-Big Three funds. The results in columns 2 and 3 indicate that while votes from active funds within the Big Three family are more strongly associated with director retention, there is not much difference between the votes of the Big Three’s passive funds and those of other active funds. Results in column 4, which allow us test the statistical significance for the difference, essentially tell us the same story. Since the majority of funds in the Big Three family are predominantly passive — 73 percent compared to 14 percent for non-Big Three funds — the passive nature of Big Three funds can primarily explain the result in Column 1. All this evidence suggests that concerns about the Big Three exercising excessive power may be overstated. Firms appear to be less responsive to votes from passive funds, even when those funds belong to the Big Three.

6. Alternative Explanations

In this section, we discuss possible alternative explanations to the empirical patterns observed in the main analysis. We develop an instrumental variable to rule out the alternative explanations.

In Section 3, we demonstrated that active and passive shareholders have differential effects on director retention. The effect is robust to various multi-way fixed effects and controls on firm, fund, and election levels. However, it is still possible that some omitted variables drive both fund voting patterns and the retention of directors. To explain the differential effects that we document, such omitted variables have to affect the voting pattern of active funds more than that of passive funds.

One potential example is a negative shift in the general attitude towards board members serving for a long tenure. As a result, the director may not choose to continue serving on a board, increasing the turnover and reducing the retention. In the meantime, investors are also less inclined to support the re-election of a director. If this negative shift in attitude is larger among active shareholders relative to passive shareholders, it could mean that the differential effect between active and passive votes is driven by this omitted endogenous variable.

We use the historical voting pattern of funds to instrument for their current voting pattern following Matvos and Ostrovsky (2010). The idea is that funds' voting patterns are highly sticky in the time series and heterogeneous in the cross section. As a result, the instrument is likely independent of the shift in the general attitude in the time series. Specifically, we construct the instrument following

$$\text{Instrument}_{i,f,t} = \frac{\sum_I \text{NoVote}_{I \neq I, f, t-1}}{\sum_I \text{AllVote}_{I \neq I, f, t-1}}, \quad (3)$$

where i indexes firm, f indexes fund, and t indexes year. Intuitively, the instrument that predicts how fund f votes on firm i 's director in year t is its tendency to vote no in all firms

other than firm i in the last year.² We use this instrument for the no votes in a two-stage least square (2SLS) estimate. The first stage of the 2SLS estimates the following equation:

$$\text{No}_{i,j,f,t} = \beta \times \text{Instrument}_{i,f,t} + \gamma X_{i,j,f,t} + \delta_i + \lambda_t + \epsilon_{i,j,f,t}, \quad (4)$$

where $X_{i,j,f,t}$ is a vector of control variables on firm, fund, and proposal levels and δ_i and λ_t are firm and year fixed effects, respectively. **Table 7** column 1 reports the result.

Insert **Table 7** About Here

We see that the past voting pattern of a fund strongly predicts its future voting behavior, consistent with the observations made by Matvos and Ostrovsky (2010). **Table 7** column 2 reports the result of the second stage estimates. We see that the no votes by active funds have an economically and statistically significant effect on director retention. The point estimate is close to that in **Table 2**, suggesting that the OLS estimates are unlikely to suffer from omitted variable problems. The point estimate for passive funds is positive but not statistically significant on the 5% level. The differential effect between active and passive funds is over 3% and remains statistically significant. Overall, the IV estimates help rule out alternative explanations based on omitted variables that affect both director retention and the voting pattern of the funds.

²Not leaving out the focal firm i on the right-hand side in Equation 3 yields qualitatively similar results. We exclude the focal firm in the calculation following the original paper (Matvos & Ostrovsky, 2010) to avoid capturing specific fund-firm pair dynamics that may invalidate the exogenous assumption of the IV.

7. Conclusion

This paper investigates how shareholder votes in corporate elections can shape corporate policies. Our analysis reveals that the link between director retention and shareholders' dissenting votes is twice as strong when dissenting votes come from active shareholders compared to passive ones. While previous empirical research primarily focuses on voting outcomes, our findings highlight the importance of the identities of shareholders casting the votes. Shareholder votes matter not only in shaping election outcomes but also as signals of investor preferences. Boards of directors pay attention to these signals and respond differently depending on the type of investor.

Our findings challenge the traditional understanding that all votes are treated equally in corporate elections. Our results have implications for the broader literature on how shareholder influence is modeled and the motivations behind shareholder voting. There is a lack of consensus on the incentives driving shareholder votes: do they vote to influence outcomes, or do they vote to express their opinions?

Understanding these nuanced effects of shareholder voting is crucial for policymakers seeking to improve shareholder democracy. While the obvious policy is to enfranchise every investor's vote, recent legal scholars have argued against allowing passive funds to vote (Lund, 2017). Our results indicate that, even without new regulations, their votes are already undervalued by market participants. A more recent regulatory push involves allowing beneficial owners to vote in large index funds through pass-through voting. Our findings suggest that to make such a policy more effective, regulators should also consider requiring greater disclosure of pass-through votes.

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Figure 1. Scatter Plots of Director Retention & Shareholder Dissenting Votes

The figure plots the relation between the probability of a director remaining on the board for over three years after their election and the fraction of supporting votes by shareholder type. The function of the fitted line is reported on the top-left of the figure. Panel (a) shows the binned scatter plot of the relation between the probability and the level of active fund support while controlling for the level of passive fund support. Panel (b) shows the binned scatter plot of the relation between the probability and the level of passive fund support while controlling for the level of active fund support.

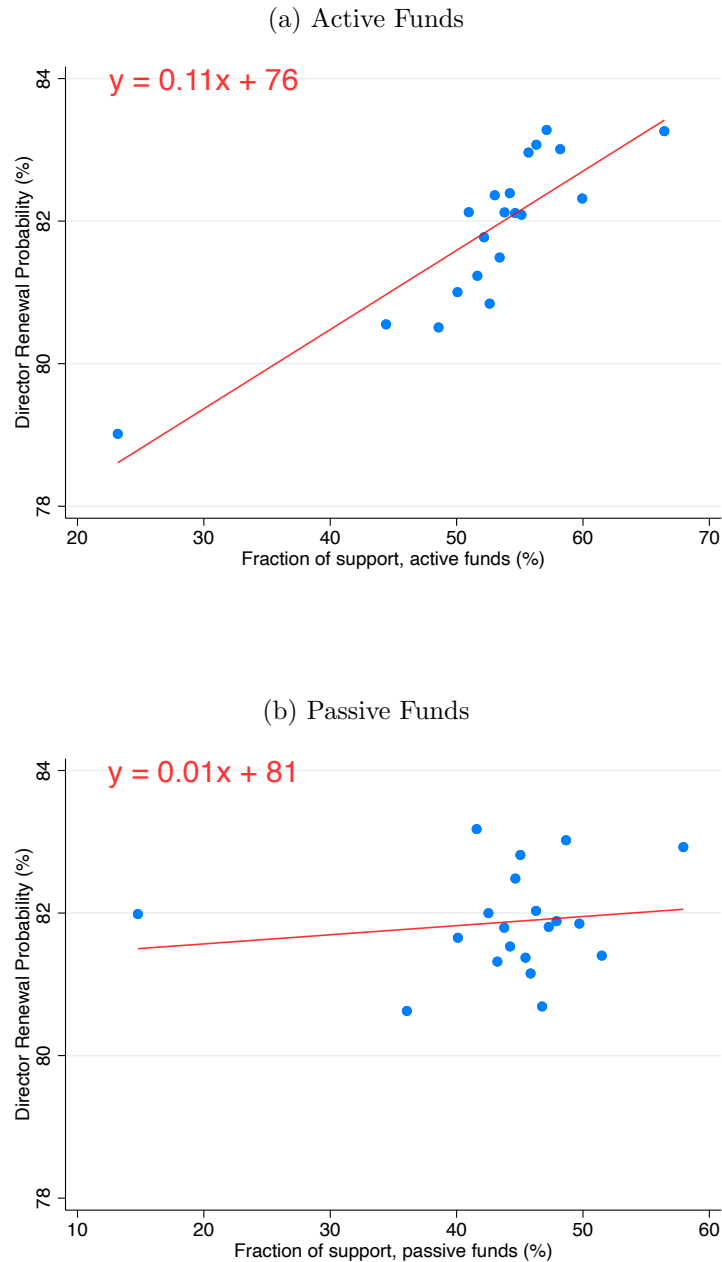


Figure 2. Sensitivity of Director Retention to Votes With Various Entrenchment

This figure presents the OLS coefficients for Equation 1, with the sample divided into three groups: firms with low, medium, and high entrenchment. The first group includes firms with an entrenchment index (E-index) between 0 and 1, the second group includes firms with an E-index between 2 and 3, and the third group includes firms with an E-index greater than 4. The regressions include non-interaction terms, proxy advisor recommendations, as well as firm and year fixed effects. The vertical bars represent 95% confidence intervals, with robust standard errors double-clustered at the firm and director levels.

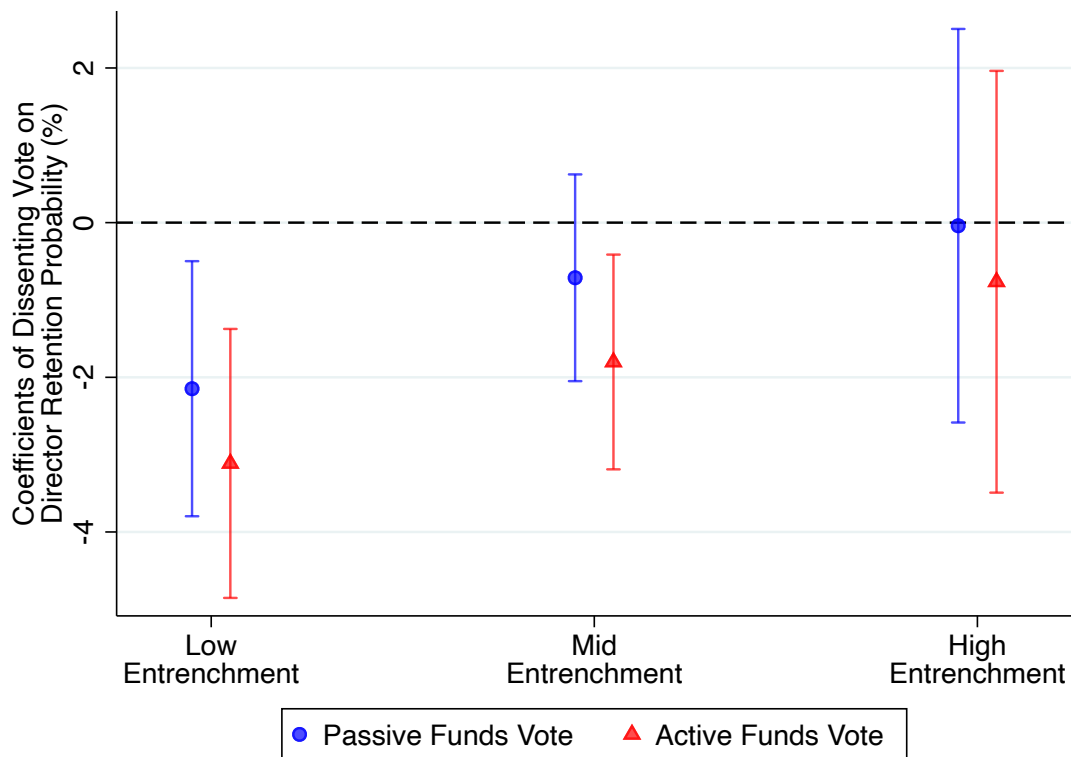


Table 1
Summary Statistics

The table provides summary statistics at the election level (Panel A) and vote level (Panel B). The sample comprises votes from director elections held during routine annual meetings of U.S. public firms from 2007 to 2020, excluding contested elections and those where directors received less than 70% of the final vote. “% Votes in Favor” indicates the fraction of votes supporting the director. “ISS/GL/Mgmt Recommended For” equals 1 if ISS, Glass Lewis, or management recommends voting for the director. “Director Retention” equals 1 if the director remains on the board after a specified period (indicated in parentheses). “Divergence in Analyst Forecasts” is the annual average of monthly forecast divergence, defined as (highest - lowest)/median. “E-Index” is the firm’s entrenchment index. “% of Shares Held” is the fraction of outstanding shares held by the fund, multiplied by 100. “Vote No” indicates whether the fund votes against the election. “Blockholder” equals 1 if “% of Shares Held” exceeds 1 or 5. “Visit Edgar” indicates whether the fund accessed the company’s proxy statement on the SEC’s website. “Top 10 MSA” denotes whether the fund is located in one of the top 10 MSAs by fund concentration. “Belong to Big 3 Family” indicates whether the fund is managed by BlackRock, Vanguard, or State Street.

(A) Election Level Statistics

	Mean	Std	p10	p50	p90	N
% Votes in Favor	0.96	0.05	0.91	0.98	1.00	123,581
= 1 if ISS Recommended For	0.97	0.18	1.00	1.00	1.00	74,941
= 1 if GL Recommended For	0.93	0.26	1.00	1.00	1.00	74,976
= 1 if Mgmt Recommended For	1.00	0.00	1.00	1.00	1.00	123,581
= 1 if Director Retention (1-Year)	0.97	0.17	1.00	1.00	1.00	120,673
= 1 if Director Retention (2-Year)	0.90	0.30	0.00	1.00	1.00	117,707
= 1 if Director Retention (3-Year)	0.82	0.39	0.00	1.00	1.00	114,522
Log(Assets)	8.52	1.76	6.23	8.48	10.86	123,581
Return on Assets	0.13	0.11	0.02	0.12	0.26	115,699
Divergence in Analyst Forecasts	0.40	1.64	0.03	0.09	0.65	55,797
E-Index	2.10	1.09	1.00	2.00	4.00	92,523

(B) Vote Level Statistics

	Mean	Std	p10	p50	p90	N
% of Shares Held	0.17	0.53	0.00	0.02	0.42	13,149,510
Log(AUM)	6.83	2.27	3.77	6.88	9.70	13,149,510
= 1 if Voted No	0.03	0.18	0.00	0.00	0.00	13,149,510
= 1 if Passive Fund	0.46	0.50	0.00	0.00	1.00	13,149,510
= 1 if Blockholder (1% cutoff)	0.04	0.21	0.00	0.00	0.00	13,149,510
= 1 if Blockholder (5% cutoff)	0.002	0.04	0.00	0.00	0.00	13,149,510
= 1 if Visit Edgar	0.16	0.37	0.00	0.00	1.00	6,224,664
= 1 if Top 10 MSA	0.72	0.45	0.00	1.00	1.00	12,627,090
= 1 if Belong to Big 3 Family	0.27	0.44	0.00	0.00	1.00	13,149,510

Table 2
Relationship Between Director Retention & Shareholder Dissenting Votes

The table presents OLS regression estimates examining whether a director remains on a company's board of directors within three years based on dissenting votes from active and passive shareholders.

$$\text{Director Retention}_{i,j,t} = \beta_{\text{active}} \cdot \text{No}_{i,j,f,t} \cdot \text{Active}_f + \beta_{\text{passive}} \cdot \text{No}_{i,j,f,t} \cdot \text{Passive}_f + \gamma X_{i,j,f,t} + \text{Fixed Effects} + \epsilon_{i,j,f,t}.$$

Each observation represents a fund vote in an election. The dependent variable is an indicator variable that equals 1 if director j remains on the board of firm i three years after their election in year t . $\text{No}_{i,j,f,t}$ is a vote-level indicator that equals 1 if fund f votes “Against”, “Abstain”, or “Withhold”, and Active_f is a fund-level indicator variable that equals 1 if fund f is an active fund. The control variables $X_{i,j,f,t}$ include non-interaction terms, firm-level fundamentals, and proxy advisor recommendations. Robust standard errors double-clustered by firm and director are reported in parentheses, where *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively. The standard errors for $\hat{\beta}_{\text{active}} - \hat{\beta}_{\text{passive}}$ are calculated using the delta method.

	(1)	(2)	(3)	(4)	(5)	(6)
Effect of Dissenting						
No × Active	-3.55*** (0.64)	-3.72*** (0.49)	-2.58*** (0.35)	-2.59*** (0.42)	-2.66*** (0.33)	-1.62*** (0.23)
No × Passive	-2.25*** (0.50)	-2.53*** (0.39)	-1.71*** (0.32)	-1.09** (0.45)	-1.07*** (0.38)	-0.55* (0.32)
Firm-Level Controls						
log(Market Cap)	0.83** (0.42)	1.61 (1.10)		0.17 (0.49)	-0.09 (1.45)	
log(Total Asset)	-1.95*** (0.42)	-7.00*** (1.68)		-1.76*** (0.50)	-8.09*** (2.23)	
Last-Year Firm Return	0.92*** (0.19)	0.47** (0.19)		0.98*** (0.23)	0.35 (0.27)	
Fund-Level Controls						
log(AUM)	-0.20*** (0.03)	-0.03* (0.01)	-0.01*** (0.00)	-0.14*** (0.03)	0.01 (0.01)	-0.01*** (0.00)
Number of Holdings	0.05 (0.07)	-0.04* (0.02)		-0.00 (0.09)	-0.02 (0.02)	
Last-Year Fund Return	-0.35*** (0.13)	-0.00 (0.07)		-0.37** (0.16)	-0.07 (0.07)	

Continued on next page

Table 2 – continued from previous page

	(1)	(2)	(3)	(4)	(5)	(6)
Election-Level Controls						
ISS Against				-1.43 (1.55)	-3.54** (1.60)	-3.52** (1.78)
GL Against				-1.43 (0.96)	-3.28*** (0.98)	-3.48*** (1.04)
Firm FE		Yes			Yes	
Year FE		Yes			Yes	
Firm \times Year FE			Yes			Yes
Adj. R-squared	0.002	0.056	0.199	0.002	0.053	0.178
Observations	11,908,889	11,908,889	11,908,884	8,827,910	8,827,910	8,827,910
$ \hat{\beta}_{\text{Active}} - \hat{\beta}_{\text{Passive}} $	1.32*** (0.43)	1.25*** (0.36)	0.93*** (0.24)	1.66*** (0.49)	1.61*** (0.41)	1.12*** (0.30)

Table 3
Confounding Effects of Fund Holding Size, AUM, and Blockholder Status

Columns 1 to 3 present OLS estimates examining the relationship between a director's continued presence on a company's board and dissenting votes from active and passive shareholders, with the sample split based on investors' holdings. Columns 4 and 5 provide similar estimates, with votes only from blockholders, defined as investors holding more than 1% or 5% of the company's outstanding shares. Column 6 displays the result from a regression where the explanatory variables include whether a vote is a "no" and its interaction with various factors (e.g., whether the fund is active, whether it is a blockholder, the size of the fund's holdings, and the fund's AUM). In all columns, non-interaction terms and proxy advisor recommendations are included in the regressions but are omitted from the table for brevity. Robust standard errors double-clustered by firm and director are reported in parentheses, where *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Split sample by "% Shares Held"			Blockholders		Interaction
	Low	Mid	High	> 1%	> 5%	
	(1)	(2)	(3)	(4)	(5)	
No \times Active	-3.70*** (0.34)	-2.65*** (0.42)	-1.46*** (0.42)	-2.52*** (0.88)	-6.20* (3.44)	-1.60*** (0.41)
No \times Passive	-1.03*** (0.35)	-1.01** (0.43)	-1.28** (0.62)	-0.72 (1.61)	1.50 (9.67)	
No						-1.63*** (0.44)
No \times Blockholder (1%)						-2.12** (1.04)
No \times Blockholder (5%)						-8.50* (4.36)
No \times % Shares Held						1.33** (0.61)
No \times Log(AUM)						0.18 (0.17)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R-squared	0.053	0.053	0.053	0.066	0.067	0.053
Observations	2,953,029	2,935,201	2,939,680	316,813	10,619	8,827,910

Table 4
Firm Entrenchment and Sensitivity of Director Retention to Votes

Column 1 presents OLS estimates that examine the relation between a director's retention and dissenting votes from active and passive shareholders by different levels of entrenchment of the firm management. In column 2, the regression omits the "No \times Passive" term, estimates the difference between the two groups directly (with the "No \times Active" term), and interacts this difference with E-Index. In all columns, non-interaction terms and proxy advisor recommendations are included in the regressions but are omitted from the table for brevity. Robust standard errors double-clustered by firm and director are reported in parentheses, where *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)
Low Entrenchment		
No \times Active \times 1[E-Index \in {0, 1}]	-3.11*** (0.89)	
No \times Passive \times 1[E-Index \in {0, 1}]	-2.15** (0.84)	
Mid Entrenchment		
No \times Active \times 1[E-Index \in {2, 3}]	-1.80** (0.71)	
No \times Passive \times 1[E-Index \in {2, 3}]	-0.71 (0.68)	
High Entrenchment		
No \times Active \times 1[E-Index \in {4, 5, 6}]	-0.76 (1.39)	
No \times Passive \times 1[E-Index \in {4, 5, 6}]	-0.04 (1.30)	
Continuous Interaction		
No		-1.24*** (0.40)
No \times Active		-3.10*** (1.10)
No \times Active \times E-Index		0.94** (0.49)
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Adjusted R-squared	0.053	0.053
Observations	8,827,910	7,989,377

Table 5
Information Environment and Sensitivity of Director Retention to Votes

This table presents OLS estimates that examine the relationship between a director's continued presence on a company's board and dissenting votes from active and passive shareholders, with three interaction terms. In column 1, the interaction term is an indicator variable equal to 1 if the fund family has accessed the meeting's proxy statements on the SEC website. Fund-years without any access are omitted from the regression. In column 2, the interaction term is an indicator variable representing whether the fund family is located in one of the top 10 MSAs with the highest concentration of funds. In column 3, the interaction term is the dispersion of analyst forecasts for the firm in the year, defined as (highest - lowest) / median. In all columns, non-interaction terms and proxy advisor recommendations are included in the regressions but are omitted from the table for brevity. Robust standard errors double-clustered by firm and director are reported in parentheses, where *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)
No	-0.68 (0.49)	-0.13 (0.39)	-1.56*** (0.48)
No \times Active	-1.25* (0.73)	-1.90*** (0.51)	-1.45*** (0.53)
No \times Active \times Edgar Visit	1.89 (1.42)		
No \times Active \times Top 10 MSA		0.09 (0.52)	
No \times Active \times Analyst Forecast Dispersion			-0.06 (0.26)
Controls	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Adj. R-squared	0.066	0.053	0.054
Observations	3,654,104	8,462,612	4,881,500

Table 6
Comparing Funds From “Big Three” Families With Other Funds

Column 1 presents OLS estimates examining the relationship between a director’s continued presence on a company’s board and shareholders’ dissenting votes, including an interaction term indicating whether the fund belongs to the “Big Three” families (Vanguard, BlackRock, and State Street). Column 2 presents OLS estimates of Equation 1, with the sample divided based on whether the fund is from the Big Three families. Column 4 presents OLS estimates of Equation 1, where the two key variables are interacted with indicator variables representing whether the fund is from the Big Three families. In all columns, non-interaction terms and proxy advisor recommendations are included in the regressions but are omitted from the table for brevity. Robust standard errors double-clustered by firm and director are reported in parentheses, where *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)
No	-1.75*** (0.26)			
No × Big Three	-1.00 (0.70)			
No × Active		-2.51*** (0.34)	-4.34*** (0.97)	
No × Passive		-0.34 (0.30)	-2.76*** (0.83)	
No × Active × Big Three				-4.26*** (0.95)
No × Passive × Big Three				-2.48*** (0.77)
No × Active × Not Big Three				-2.61*** (0.35)
No × Passive × Not Big Three				-0.40 (0.29)
Sample	All	Big-3 Funds	Non-Big-3 Funds	All
Controls	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adj. R-squared	0.053	0.052	0.057	0.053
Observations	8,827,910	6,574,670	2,253,237	8,827,910

Table 7
Relationship Between Director Retention & Shareholder Dissenting Votes —
IV Estimates

This table presents the instrumental variable estimates of the main specification in **Table 2** column 5. Column 1 reports the first-stage estimate that predicts the fund's voting no with the fraction of no votes cast by the fund in all other firms in last year following Matvos and Ostrovsky (2010). Column 2 reports the second stage of the 2SLS estimates. In all columns, non-interaction terms and proxy advisor recommendations are included in the regressions but are omitted from the table for brevity. Robust standard errors double-clustered by firm and director are reported in parentheses, where *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)
	No	Director Retention
Instrument	0.82*** (0.04)	
$\widehat{\text{No}} \times \text{Active}$		-1.92** (0.96)
$\widehat{\text{No}} \times \text{Passive}$		1.22* (0.66)
Controls	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	5,227,992	5,227,992
$ \widehat{\beta}_{\text{Active}} - \widehat{\beta}_{\text{Passive}} $		3.14** (1.42)