

# (Re)call of Duty: Mutual Fund Securities Lending and Proxy Voting

Tao Li\*      Qifei Zhu†

June 2025

## Abstract

Taking advantage of a novel dataset on individual mutual funds' securities lending activities, we provide the first systematic evidence that mutual funds, especially ESG funds, recall loaned shares prior to voting record dates. Funds' recall-voting sensitivities differ based on their stated lending policies, ownership stakes in portfolio firms, and holding horizons, indicating heterogeneity in funds' perceived values of voting rights. Recalled shares are more likely to be voted against management proposals, and in favor of shareholder proposals and dissident slates in proxy contests. Recall-sensitive funds attract higher fund flows from institutional investors while foregoing a modest amount of lending revenue.

*JEL Classification:* G23, G32, G34, G38

*Keywords:* Securities lending, loan recall, proxy voting, ESG fund, corporate governance

---

\*University of Florida and ECGI. Email address: tao.li@warrington.ufl.edu.

†NUS Business School, National University of Singapore. Email address: QifeiZhu@nus.edu.sg.  
We thank Tim Adam, Vikas Agarwal, Shuaiyu Chen (discussant), Maxime Couvert (discussant), Richard Evans, Arseny Gorbenko (discussant), Peter Iliev (discussant), Mark Klein, Doron Levit, Kai Li, Michelle Lowry, Alberto Manconi (discussant), Pedro Matos, Christian Opp, Adam Reed, Pedro Saffi, and participants at the 2024 SFS Cavalcade North America, the Sixth Conference on Recent Advances in Mutual Fund and Hedge Fund Research, the 2025 FIRS, the 2025 Finance Down Under Conference, the Fourth Conference on Owners as Strategists, and Nanyang Technological University for helpful comments. We are grateful for the excellent research assistance provided by Qianqian Chen, Zikui Pan, Jiaqi Zhang, and Shimou Zhang.

# I. Introduction

Theory suggests that large shareholders, such as mutual funds, have strong incentives to monitor their portfolio firms, which reduces agency costs (Grossman and Hart, 1980; Shleifer and Vishny, 1986). The value of monitoring, however, is likely to vary greatly across funds. Mutual funds that receive higher benefits of monitoring are more incentivized to engage in such activities. However, it is difficult to directly measure how much different funds value monitoring. On the one hand, most asset managers ostensibly report that they value “voice,” especially proxy voting, which is one of the most important monitoring mechanisms (Hamlin, 2021). On the other hand, there is a debate on whether mutual funds actively vote proxies or outsource voting to proxy advisors (e.g., Iliev and Lowry, 2015; Malenko and Shen, 2016). In this paper, we study the heterogeneity across funds in their value of monitoring by inferring the income individual funds are willing to give up for proxy voting.

Nearly half of U.S. equity mutual funds engage in securities lending practices (Dong and Zhu, 2023). When a mutual fund lends out a portfolio stock, the voting right is transferred to the borrower. The fund, however, can terminate the loan by “recalling” loaned shares. To vote proxies, this fund must recall the loaned shares prior to the record date, and forego the associated lending revenue, which in turn is indicative of the value the fund puts on voting these shares. As we observe the heterogeneity across funds in lending and recall practices, we can infer different funds’ perceived value of voting rights across a spectrum of governance issues, and relate it to key fund characteristics. Furthermore, we examine whether recall activities influence funds’ voting practices.

To study these issues, we explore a novel dataset on individual mutual funds’ loaned stocks and their recall decisions. Specifically, we utilize mutual funds’ reported securities lending positions from regulatory filings and construct a dataset of recall activities at the quarterly frequency. We then connect the recall data with funds’ proxy voting records. We find that, on average, mutual funds are more likely to recall their loaned shares when a voting record date approaches. To study whether a fund’s recall policy affects its propensity

to recall loans, we hand-collect from mutual funds' registration statements their discussions of loan recalls in relation to proxy voting. Based on these disclosures, we classify funds into three groups: (i) funds that recall loaned shares on a case-by-case basis (65.9% of our sample funds), (ii) funds that generally recall shares for proxy voting (4.6%), and (iii) funds that generally do not recall shares for voting purposes (7.3%). The rest of our funds do not explicitly disclose recall policies. Mapping these disclosed recall policies to our recall data, we find that funds issuing "generally recall" policies are about 11.5 percentage points more likely to recall shares prior to proxy record dates, relative to funds that do not disclose recall policies. This result highlights the heterogeneity in mutual funds' recall policies and the value they potentially assign to voting rights. Despite this heterogeneity, we find that mutual funds on average increase their propensity of recalling shares during meeting quarters, even for stocks "on special" that command substantial lending fees (no less than 100 basis points).

Next, we examine whether differences in fund characteristics predict mutual funds' recall decisions. Consistent with the theory on free-riding ([Shleifer and Vishny, 1986](#)), we find that ownership stakes in portfolio firms positively predict funds' tendency to recall shares during the meeting quarter, relative to non-meeting quarters. Funds with a longer holding horizon are also more likely to initiate share recalls for voting purposes, consistent with long-term investors exhibiting stronger incentives to monitor ([Chen, Harford, and Li, 2007](#)). These results are also consistent with funds' disclosed narrative that ownership stakes and holding horizon are important considerations when deciding whether to recall shares for voting proxies. However, larger funds, measured by total net assets, are less likely to recall shares for voting purposes, possibly reflecting a higher cost of monitoring a large number of loaned-out positions.

We proceed to relate another dimension of fund heterogeneity, the sustainable tilt, to funds' perceived value of monitoring through voting. There is a debate regarding whether sustainable funds, which focus on environmental, social, and governance (ESG) issues, strive

to influence portfolio firms' ESG policies or engage in greenwashing activities. The evidence is mixed. Some studies, including [Dyck, Lins, Roth, and Wagner \(2019\)](#), [Azar, Duro, Kadach, and Ormazabal \(2021\)](#), and [Lowry, Wang, and Wei \(2022\)](#), show that certain socially responsible investors contribute to real ESG improvements. However, there is a growing concern that ESG funds may deviate from their stated ESG mandates (e.g., [Li, Naaraayanan, and Sachdeva, 2021](#); [Gibson, Glossner, Krueger, Matos, and Steffen, 2022](#)). Directly related to this debate, we find that ESG funds are keen to recall loaned shares for voting proxies. Not only are they more likely to recall shares before record dates relative to non-ESG funds, but they are also 6.9 percentage points more likely to issue recalls for meetings that end up featuring close votes. These findings also shed light on the recent debate about whether securities lending is compatible with fulfilling fiduciary duties and, more broadly, sustainable investing. This debate is partially sparked by the decision of the Government Pension Investment Fund of Japan (GPIF), the world's largest public pension fund, to suspend securities lending for all its equity portfolios starting from December 2019. In its statement, GPIF argued that securities lending is considered "inconsistent with the fulfillment of the stewardship responsibilities of a long-term investor." One of the chief concerns is that stocks are being borrowed to secure votes according to short-term or non-ESG aligned strategies that may contradict ESG investment objectives. Our empirical findings suggest that ESG funds are quite cognizant of this potential conflict and that they are responsive in recalling loaned shares prior to record dates to exercise their voting rights.

We also find that proposal types and stock characteristics predict mutual funds' recall decisions. Across proposal types, more value-relevant proposals, such as M&A-related proposals, and high-stake voting events, such as proxy contests, are associated with the most recalls. This result is intuitive as in these situations, the value of voting is more likely to outweigh the securities lending revenue loss. In addition, companies with low levels of shareholder satisfaction, proxied by Institutional Shareholder Services's (ISS) negative recommendations or low investor support rates for past Say-on-Pay proposals, are more likely

to see their investors recall shares prior to meeting record dates.

Next, we examine how recalled shares are voted and whether they have the potential to influence voting outcomes. Understanding the voting pattern of recalled shares is important for at least two reasons. First, since a mutual fund foregoes securities lending revenue in exchange for voting shares on loan, the direction of these votes is particularly informative about the fund’s corporate governance preference—otherwise the fund would have rather kept the lending revenue. Second, to the extent that recalled shares are voted in a particular way, they collectively may play a pivotal role in shaping the voting outcomes for certain proposals. Therefore, it is important for policymakers and investors to understand the governance ramifications associated with funds’ incentives to engage in securities lending and voting-related recalls.

We find that for uncontested management and shareholder proposals, recalled shares are 2.1 percentage points more likely to be voted against management, with a marginal effect of 16.5%. This finding is consistent with [Aggarwal, Saffi, and Sturgess \(2015\)](#), who find that a decrease in stock-level lendable supply is associated with a modest increase in aggregate votes against management. The effect, however, is much stronger for shareholder proposals, environmental and social (ES) proposals in particular, and proxy contests. Specifically, funds that recall shares for voting purposes are 15.6 and 17.7 percentage points more likely to support ES proposals and dissident slates, respectively, suggesting that funds that recall shares may have a meaningful effect on voting outcomes of these high-stakes voting events.

Importantly, our granular data allow us to examine, for a given proposal, how funds that recall their shares vote as compared to other funds that do not engage in securities lending. We do so by controlling for proposal fixed effects. Once proposal fixed effects are accounted for, our conclusions change in a nuanced way. Although we still find that recalled shares tend to oppose management in uncontested proposals, the effect is an order of magnitude smaller, suggesting that the finding of [Aggarwal, Saffi, and Sturgess \(2015\)](#) is partially driven by a selection effect—securities lenders are more likely to recall their shares in meetings where

the average shareholders are already most galvanized to vote against management.

For proxy contests, however, the effect of recalls on fund votes remains large after controlling for proposal fixed effects (a difference of 10.9 percentage points), suggesting that in these high-stakes corporate battles recalled shares are indeed more likely to support dissident nominees, compared with other shares that are voted at the same meeting. Interestingly, we find that ESG funds are 4.0 percentage points more likely to oppose management when recalling shares, relative to non-ESG funds that engage in recall activities. The effect for proxy contests is large (more than 12 percentage points) for ESG funds, although the estimate is statistically insignificant.

We find that recalled shares have the potential to influence voting outcomes. The fraction of funds that recall shares are positively related to the probability of rejecting a management proposal or passing a shareholder proposal. For proxy contests, a one standard deviation increase in the fraction of recall funds is associated with a 8.2 percentage points increase in the likelihood of a dissident win. This suggests that recalled shares are pivotal as dissidents unconditionally have a roughly 50% chance of prevailing. In addition, our back-of-the-envelope calculations show that 14.5% of the close-call proposals in our sample, where the winning margin is between -5 and +5 percentage points, would be flipped, under the hypothetical scenario that loaned shares were voted in the opposite direction if a lending fund had not recalled the shares. The result is qualitatively similar if we assume instead that recalled shares were voted in the same way as the majority of mutual fund votes.

More broadly, we argue that whether a fund is responsive in recalling loaned shares for voting is indicative of the fund's monitoring intensity and its informedness regarding corporate governance matters. This revealed characteristic should explain the fund's voting behavior even for positions that are not lent out (and hence not recalled) by the fund. For each fund, we estimate a *recall-voting sensitivity* measure that equals the incremental probability that the fund recalls a stock prior to an upcoming meeting versus when there is no meeting. We find that recall-sensitive funds are more likely than insensitive funds

to oppose management, vote for shareholder proposals, and support dissident slates, after controlling for proposal fixed effects.

Does being “responsible” in recalling shares pay off for mutual funds? On the one hand, funds that recall shares forego lending income, which could lead to outflows, although monitoring through voting may create long-term value for portfolio companies. On the other, some fund investors may allocate more capital to recall-sensitive funds if recalled shares are voted in a way that is consistent with the investors’ governance preferences, including ESG ones. Which factor dominates is an empirical question. We find that although a fund’s recall-voting sensitivity is negatively associated with its securities lending income, it is positively associated with fund flows from institutions, suggesting that institutional investors reward mutual funds that are diligent in recalling shares prior to proxy voting.<sup>1</sup> Fund investors seem to value mutual funds exercising their voting-related fiduciary duties.

Our study provides the first large-scale evidence for market participants and policymakers who demand more transparency into how mutual funds’ securities lending affects their proxy voting practices. This information is particularly important to investors who are monitoring the stewardship responsibilities of funds. Following a probe in 2022 that focused on whether ESG funds trade away their right to vote on ESG issues ([Robinson, Voreacos, and Brush, 2022](#)), the U.S. Securities and Exchange Commission (SEC) recently passed new rules that require mutual funds to include loaned securities when calculating the number of shares “entitled to vote on a matter,” providing investors transparency into the quantity of shares that may have been disenfranchised in exchange for lending fees.

Our paper contributes to several strands of literature. First, it contributes to the understanding of securities lending in the corporate governance context.<sup>2</sup> Using data from a large lending agent, [Christoffersen, Geczy, Musto, and Reed \(2007\)](#) find a sizable increase in loan volume on proxy record dates and conclude that the equity loan market “facilitates

---

<sup>1</sup>In unreported analysis, we do not find evidence that recall-sensitive funds generate inferior net returns compared with other funds.

<sup>2</sup>[Kolasinski, Reed, and Ringgenberg \(2013\)](#) and [Porras Prado, Saffi, and Sturgess \(2016\)](#) study the interplay between equity lending activities, institutional ownership, and limits to arbitrage.

the trading of votes” that decouples economic ownership from voting power. Using option prices, [Kalay, Karakaş, and Pant \(2014\)](#) estimate that the market value of voting rights for the average firm is 0.10%–0.25% of the stock price under normal conditions. Our study is also related to [Aggarwal et al. \(2015\)](#), who document a drop in a stock’s aggregate lendable supply on voting record dates. This study, however, differs from [Aggarwal et al. \(2015\)](#) by utilizing fund-level on-loan positions to identify actual share recalls rather than changes in aggregate lendable supply, which enables us to study the heterogeneity across funds in the value of monitoring (i.e., which lenders attach greater values to voting rights). These recall-sensitive lenders incur an opportunity cost when giving up their lending revenue for exercising voting rights. In contrast, restricting lendable shares that are not on loan may not be costly for non-lending institutions, many of whom appear to be sluggish in capitalize in securities lending opportunities ([Dong and Zhu, 2023](#)).

Our study also contributes to a large literature on the governance role of institutional investors, who influence corporate governance through “voice” or “exit” (see [Edmans \(2014\)](#), [Edmans and Holderness \(2017\)](#), and [Dasgupta, Fos, and Sautner \(2021\)](#) for recent surveys on the topic). [McCahery, Sautner, and Starks \(2016\)](#) survey institutions and find that they are willing to engage portfolio firms via the proxy voting process. We add to the literature on shareholder voting by providing novel evidence on whether the decision to recall loaned shares is related to mutual funds’ voting behavior.<sup>3</sup> We uncover a new first-order consideration for mutual funds regarding whether and how to vote proxies—the tradeoff between securities lending revenue and casting value-enhancing votes. In addition, we find generally stronger effects on recall and voting decisions for proxy contests than other proposal types, which highlights the high-stakes nature of proxy contests ([Brav et al., 2024](#)).

---

<sup>3</sup>Notable studies examining incentives that affect mutual fund voting include [Davis and Kim \(2007\)](#), [Matvos and Ostrovsky \(2008\)](#), [Harford, Jenter, and Li \(2011\)](#), [Butler and Gurun \(2012\)](#), [Cvijanovic, Dasgupta, and Zachariadis \(2016\)](#), [Bodnaruk and Rossi \(2016\)](#), and [Brav, Jiang, Li, and Pinnington \(2024\)](#). The literature has also explored other issues associated with mutual fund proxy voting, which includes [Cai, Garner, and Walkling \(2009\)](#), [Cuñat, Gine, and Guadalupe \(2012\)](#), [Iliev and Lowry \(2015\)](#), [Malenko and Shen \(2016\)](#), and [Bolton, Li, Ravina, and Rosenthal \(2020\)](#). For a more comprehensive review of the literature on mutual fund voting, see [Yermack \(2010\)](#) and [Bolton et al. \(2020\)](#).

Lastly, we contribute to a growing literature that examines ESG investing by institutional investors, including ESG funds (see [Matos \(2020\)](#) for a survey). In the proxy voting setting, recent evidence indicates that ES proposals garner less support than governance proposals ([Morgan, Poulsen, Wolf, and Yang, 2011](#); [Dikolli, Frank, Guo, and Lynch, 2022](#)), likely attributed to the fact that many ES proposals are costly to implement ([Gantchev and Giannetti, 2021](#)). More recently, there has been a growing concern among academics and policymakers that ESG funds may deviate from their investment mandates ([Gibson, Glossner, Krueger, Matos, and Steffen, 2022](#); [Li, Naaraayanan, and Sachdeva, 2021](#); [SEC, 2022](#)). We contribute to this debate by showing that relative to non-ESG funds, ESG funds are significantly more likely to recall shares and vote against management, suggesting that ESG funds are responsible investors who attach higher values to exercising governance rights.

## **II. Securities Lending and Recall Policies: Institutional Background**

Securities lending is an established practice by institutional investors, such as mutual funds and pension funds. It entails a fund lending out a portion of its portfolio securities to borrowers, such as broker-dealers or hedge funds, in exchange for a fee that boosts the fund’s return. To protect the fund from the risk of borrower default, the borrower provides the fund collateral (usually cash), the value of which must exceed the value of the loaned security. The collateral is typically invested in safe instruments, such as a money market fund. A lending fund may retain a lending agent, often the fund’s custodian bank, to manage the lending process. Certain institutional clients of a fund may elect to participate in securities lending programs through their own custodial bank.

When a fund lends a portfolio stock, the voting right is transferred to the borrower until the loan is terminated and the shares are returned. The SEC requires that if fund managers have knowledge of a “material” vote with respect to the loaned stock, they should recall

the loan in time to vote proxies. When a loan is recalled, the fund returns the collateral to the borrower and the borrower returns the borrowed shares to the fund. Upon receipt of a recall notice, a borrower must return the borrowed shares in two business days, the standard settlement cycle for U.S. equities.<sup>4</sup>

We note that securities lending agents generally try not to recall a loan from the borrower, but substitute the loan with another one from fund(s) that do not intend to recall. Therefore, in most cases, recalled shares will not immediately go back out on loan after voting. In addition, any beneficial owners, including mutual funds, must restrict the asset after recalling for voting purposes. It is the beneficial owners' responsibility to remove the restriction, which cannot be automated. Funds are often not prompt in removing the restriction, and even if they are, it is highly unlikely recalled shares will be on loan soon, as explained above.<sup>5</sup>

#### *A. Potential factors that influence recall decisions*

Although the SEC does not define what a material vote is in the context of securities lending, mutual funds sometimes disclose factors that materially affect their recall decisions in Form N-1A, which is the initial or amended registration statement for open-end investment companies. For each fund, the filing features a prospectus and a statement of additional information, the latter of which typically includes proxy voting guidelines and/or a section on securities lending. After reading a large number of N-1A filings, we summarize the following major factors that affect funds' recall decisions.

**Nature of the meeting** A number of funds mention that they will recall shares to cast votes in special meetings, proxy contests, meetings that feature M&As or certain shareholder proposals. Presumably, these are high-stakes circumstances that can significantly

---

<sup>4</sup>In most cases, the borrower of a security has used the security to settle a transaction and therefore must either borrow the security from a third party or purchase it in the open market. This transaction must settle before the loan can be returned. In practice, however, the recall process might take longer to complete. [Aggarwal, Saffi, and Sturgess \(2015\)](#) report that a typical recall cycle takes one to two weeks.

<sup>5</sup>We thank Mark Klein from S&P Global Market Intelligence for sharing these insights.

affect shareholder value. For example, Charles Schwab Investment Management “will use its best efforts to recall a Fund’s securities on loan and vote such securities’ proxies in certain circumstances including if (a) the proxy relates to a special meeting of shareholders of the issuer (as opposed to the issuer’s annual meeting of shareholders).” Federated Investors states that “the Adviser will take all reasonable steps to recall shares prior to the record date when the meeting raises issues that the Adviser believes materially affect shareholder value, including, but not limited to, excessive compensation, mergers and acquisitions, contested elections...”

**Stake size and holding horizon** Another important factor appears to be the size of fund holdings. For instance, Charles Schwab would recall a loan to facilitate voting when a “[f]und owns more than 5% of the outstanding shares of the issuer,” while Manulife Investment Management focuses on “preserving voting rights for issuers where funds hold 2% or more of an issuer as aggregated across funds.” Vanguard Group also considers “individual and/or aggregate equity investment in a company” in making recall decisions. In addition to considering stake size, ALPS Advisors also considers “whether the security is considered a long-term holding” when deciding whether to recall a loaned stock.

**Firm and stock characteristics** Some funds comment that efforts to recall foreign securities may be unsuccessful and involve additional expenses.<sup>6</sup> Recalling foreign stocks likely involves multiple intermediaries and is more time consuming. Lending funds also pay particular attention to firms with weak governance, including those that pay excessive compensation to executives, as Federated Investors outline above.<sup>7</sup> Lastly, lending fees are an important consideration for many lenders as they weigh the benefits of voting a company’s

---

<sup>6</sup>For example, State Street funds state that “A Fund will call loans to vote proxies if a material issue affecting the investment is to be voted upon. Efforts to recall such securities promptly may be unsuccessful, especially for foreign securities or thinly traded securities, and may involve expenses to a Fund.” See <https://www.sec.gov/Archives/edgar/data/1064642/000119312519233764/d768123d485apos.htm>.

<sup>7</sup>For details, see <https://www.sec.gov/Archives/edgar/data/912577/000162363219000503/form.htm>.

shares against the additional revenue generated by lending fees.

It is worth noting that for U.S. stocks, the record date of an annual meeting typically falls before the proxy statement is filed. Therefore, it is not practicable for funds to evaluate a proxy statement (DEF 14A) before recalling any shares on loan prior to the record date. As a result, fund managers need to estimate the benefit of recalling shares, based on the aforementioned factors, before an estimated record date without knowing whether there will be a vote on material matters. In contrast, this challenge is less relevant for merger proxies, other special meetings, and proxy contests (whether they take place at annual or special meetings), as issuers (and dissidents) typically file preliminary proxy statements prior to record dates. In addition, after submitting shareholder proposals, which must be received no less than 120 days before the release of the previous year’s proxy statement, the sponsors regularly launch promotion campaigns to target institutional shareholders and the public (see [Horne \(2023\)](#) for details). Through this process, a stock lender should be aware of the existence of most shareholder proposals before the record date.

### *B. Classification of fund recall policies*

As detailed in Section III, we download the N-1A filings of all U.S. domestic equity funds that engage in securities lending from 2019 through 2022. We extract all paragraphs that mention “securities lending,” “equity lending,” “stock lending,” or “recall,” and carefully read the textual content to determine the nature of each fund’s policy regarding recalling securities on loan for voting purposes. Of the 2,352 funds that engage in securities lending, 1,832 funds discuss their recall policies. We categorize funds’ recall policies into three groups:

- Policy group 1 (“case by case”): When a fund states that it needs to evaluate whether a vote is material before recalling loaned shares and assess whether the benefit of voting a particular proxy outweighs the cost of foregoing securities lending income, we classify it as a fund that recalls on a case-by-case basis.

- Policy group 2 (“generally recall”): When a fund says it generally attempts to recall securities on loan before a meeting’s record date for proxy voting purposes, such as funds managed by MFS Investment Management and Putnam Investments, we classify it as a fund that generally recalls.
- Policy group 3 (“generally no recall”): When a fund states that it does not or rarely recall shares for voting purposes, we classify it as a fund that generally does not recall loans.

Appendix Table A1 shows examples of statements for funds that we classify as Groups 1, 2, and 3, respectively. We classify 1,551 funds as Group 1, 109 funds as Group 2, and 172 funds as Group 3. They account for 65.9%, 4.6%, and 7.3% of funds that engage in securities lending, respectively.

In our regression analyses, by construction, the omitted group of funds are those that do not include any recall-related policy in their N-1A filings. We refer to this group as the “no recall policy” group. While these funds do not discuss their recall policies in regulatory filings, the SEC does stipulate that “if fund management has knowledge of a material vote with respect to the loaned securities, fund directors should recall the loan in time to vote the proxies.”<sup>8</sup> Therefore, it is an empirical question whether the “no recall policy” funds have different tendencies to recall shares before voting relative to other funds, especially the “case by case” group of funds.

In addition to categorizing the stated recall policies disclosed through N-1A filings, we also use mutual funds’ securities lending data to measure how responsive a given fund’s recall action is to a voting occasion. Specifically, for each fund, we construct a variable, *recall-voting sensitivity*, that takes the difference between the probability that a fund recalls a position during a stock’s record-date quarter and the probability that the same fund recalls

---

<sup>8</sup>See <https://www.sec.gov/investment/divisionsinvestmentsecurities-lending-open-closed-end-investment-companieshtm>.

a non-voting position. That is,

$$\begin{aligned} \text{Recall-voting sensitivity}_i = & \frac{\sum_{j,t} D(\text{recall})_{i,j,t} * D(\text{meeting})_{i,j,t}}{\sum_{j,t} D(\text{meeting})_{i,j,t}} \\ & - \frac{\sum_{j,t} D(\text{recall})_{i,j,t} * (1 - D(\text{meeting})_{i,j,t})}{\sum_{j,t} (1 - D(\text{meeting})_{i,j,t})}, \end{aligned} \quad (1)$$

in which  $D(\text{recall})_{i,j,t}$ , equals one if fund  $i$  lends out stock  $j$  at quarter end  $t - 1$  but has no shares on loan at quarter end  $t$  (while still holding the stock), and zero otherwise.  $D(\text{meeting})_{i,j,t}$  equals one if the record date for stock  $j$ 's shareholder meeting is between quarter ends  $t - 1$  and  $t$ . This sensitivity measure ranges from negative one to one. The higher the sensitivity, the higher the probability that a fund would recall its position during a quarter where a voting record date (for an annual or special meeting) of a company takes place, relative to the “baseline probability” that the fund recalls a loaned position in the absence of any meeting.

### III. Data and Sample

#### A. Securities lending data

Mutual funds' securities lending activities are obtained from their quarterly N-PORT filings. Starting from 2019, mutual funds report their portfolio holdings via Form N-PORT. For each position, Form N-PORT includes the question “Is any portion of this investment on loan by the Fund?” If the answer is yes, the filing further provides information on the value of each position that is on loan.

We download all N-PORT filings of U.S. domestic equity funds. We define domestic equity funds as those from the CRSP Mutual Fund database that have a CRSP objective code beginning with “ED”. We link the CRSP Mutual Fund database to the N-PORT filings through the series CIK of each fund. Our sample period starts in 2019Q3, which is the first quarter that mutual funds began to submit N-PORT filings. The sample period ends in

2022Q2.

Because we observe mutual fund securities lending positions only at the quarterly frequency, we infer recalls of loaned-out securities based on the following rule. First, we restrict our observations to stocks that a fund holds at both quarter ends  $t - 1$  and  $t$ . Second, for each fund-stock-quarter observation, we define an indicator variable,  $D(\textit{recall})$ , which equals one if the fund lends the stock out (with any positive amount) at the end of quarter  $t - 1$ , but does not have any shares on loan at the end of quarter  $t$  (while still holding the stock).

Our  $D(\textit{recall})$  variable is a noisy proxy of mutual funds' true recall activities. There are a number of sources for the measurement error. First, we note that loan recalls may take place at any time within a quarter. Therefore,  $D(\textit{recall})$  will not capture cases where a fund recalls shares between quarter end  $t - 1$  and the record date, which falls between quarter ends  $t - 1$  and  $t$ , and re-lend these shares between the record date and quarter end  $t$ . As explained in Section II, however, it is unlikely that recalled shares will be on loan shortly after voting takes place, which alleviates this specific concern. Second, to the extent that the record date falls towards the end of quarter  $t$ ,  $D(\textit{recall})$  might capture cases where a fund recalls its share at the beginning of quarter  $t$  and not necessarily in response to proxy voting. Third, it is possible that the termination of a lending agreement is initiated by the borrower, not the lender. The demand-driven termination of securities lending implies that our measured recall rate would be higher than the rate of actual recalls.

Having acknowledged these limitations, we emphasize that it is the difference in recall rates between meeting quarters and non-meeting quarters that matters for our empirical strategy. We will obtain an unbiased estimate of incremental recall activities driven by proxy voting demand if the noise mentioned above does not vary systematically between meeting quarters and non-meeting quarters.

## *B. Form N-1A filings*

First, we download from EDGAR all N-1A filings that were submitted by our sample funds from 2019Q3 through 2022Q2. These documents typically include proxy voting guidelines and discussions on securities lending. We then extract individual paragraphs from 2,465 filings that include keywords “securities lending,” “equity lending,” “stock lending,” or “recall.” Each filing may contain multiple relevant paragraphs. Of these paragraphs, we consolidate repeated statements, obtain 2,294 unique paragraphs, and read them ourselves.

A typical N-1A filing includes multiple funds (the filing is at the “registrant” level), some of which may be sub-advised funds. When a fund retains no subadvisor, its advisor is responsible for proxy voting. At sub-advised funds, however, proxy voting is generally handled by subadvisors. Therefore, the majority of the N-1A filings include multiple recall policies for different sub-advised funds. We take care to manually locate each sub-advised fund’s subadvisor and then apply the subadvisor’s recall policy to the fund.<sup>9</sup> By fund family, we refer to a fund’s advisor when it is not sub-advised or subadvisor when it is sub-advised.

## *C. Mutual fund voting records and voting outcomes*

Our voting data include mutual funds’ voting records at both uncontested meetings and proxy contests. The source is ISS Voting Analytics, which provides individual mutual funds’ votes on each proposal (For, Against, or Abstain), identity of the fund and fund family, company identity, meeting type (annual, special, or proxy contest), meeting date, proposal description, management and ISS recommendations, and whether the sponsor is management or a shareholder. Aggregate votes for each proposal (i.e., the numbers of For, Against, Abstention votes), the passing threshold, and the vote base are also obtained from ISS Voting Analytics.

Since proxy contests feature both management and dissident slates, we follow [Brav, Jiang,](#)

---

<sup>9</sup>For the few cases where a sub-advised fund’s advisor, rather than its subadvisor, is responsible for proxy voting, we apply the advisor’s recall policy to the fund.

Li, and Pinnington (2019) and Brav et al. (2024) by aggregating ISS recommendations, fund votes, and voting outcomes to the meeting level. We define two key variables. *Vote for dissident* equals one if a fund casts votes using the dissident slate and zero otherwise. *Dissident wins* equals one if a dissident wins at least one board seat, a winning outcome in a proxy contest, and zero otherwise.

#### *D. Mutual fund characteristics and other datasets*

We obtain mutual fund characteristics from the CRSP Mutual Fund database. Matching funds between our voting data and the CRSP database is nontrivial. First, for each voting fund, we use its fund and family names to match to a CRSP fund, using a fuzzy matching algorithm and subsequent manual verification. Second, we perform a manual search in CRSP to identify the corresponding fund for the unmatched funds. Since ISS uses historical fund names while CRSP features the most recent fund name, we rely on N-CSR filings (annual and semiannual stockholder reports) to identify funds that changed names during our sample period. More than 89.5% of our voting funds match with those in CRSP. Since CRSP reports data by share class, we aggregate fund data across all share classes. We then merge the voting dataset with the securities lending and recall policy datasets using each fund’s series CIK.

Lending fees and the aggregate number of shares borrowed are from Markit. Financial accounting and stock return information is from Compustat and CRSP, respectively. Our final sample includes 8,611 firms involving 2,352 lending funds for the sample period from 2019Q3 through 2022Q2.

##### **D.1. Identifying ES proposals and ESG funds**

We read the description for each shareholder proposal and identify ES proposals as those that are either environment-related, which include climate-change issues and general environmental proposals, or social-related, which mainly include political, diversity, and other social proposals (e.g., human and animal rights and consumer issues).

To identify ESG funds, we rely on fund names and search for keywords, such as ESG, CSR, SRI, environment, and social, among others.<sup>10</sup> Several existing papers, including [Curtis, Fisch, and Robertson \(2021\)](#) and [Li, Naaraayanan, and Sachdeva \(2021\)](#), use this search-based classification approach to classify ESG funds. Through this process, we identify 182 unique ESG funds.

Our conservative approach likely misses ESG funds that do not feature these keywords in their names. We supplement the list with funds offered by the following reputable sustainable fund families: Calvert, Pax World, Trillium, Praxis, Boston Trust, and Green Century. For each mutual fund managed by these fund families, we hand-collect and search its prospectus to ensure that the fund manager(s) indeed incorporate an ESG theme. This step identifies an additional 23 ESG funds, bringing the total to 205.

### *E. Descriptive statistics*

We begin by presenting fund-stock-quarter level characteristics for mutual funds that engage in stock lending, which correspond to our main analyses. As shown in [Table I](#), Panel A, the average (median) firm has a market capitalization of \$7.0 (\$1.7) billion, while the average (median) annualized lending fee equals 129 (31) basis points. The average fund’s assets under management equal \$26.5 billion, the average fund family owns 1.5% of a stock’s outstanding shares, and the average fund’s holding horizon is 2.5 years. The ownership level suggests that although the average fund family is unlikely to be pivotal in most proxy matters, it could cast the deciding vote in close-call proposals.

[Insert [Table I](#) here.]

Of all the quarterly holdings, 2.8% are attributed to ESG funds. About 82% of our sample funds state that they recall loaned shares case by case, while 2.1% and 3.8% generally recall

---

<sup>10</sup>Our list also includes responsible, climate, equality, ethic, green, clean, sustain, renew, diversity, women, impact, low carbon, progressive energy, fossil fuel free, alternative energy, energy solution, eco leader, and ecological strategy.

and do not recall shares, respectively. The remaining 11.8% of funds do not disclose any recall policy. Of the fund families in our sample, all but one apply the same recall policy to their constituent funds.<sup>11</sup> However, this does not necessarily mean that a fund would recall shares in concert with other funds from the same family. In fact, of the 188 fund families in our sample, we find only three small families where funds from the same family exhibited the same recall pattern.

Not surprisingly, roughly 25% of the quarters fall in the proxy season, during which shareholder meetings are held. Only 1.6% of fund-quarters contain meetings featuring proposals sponsored by shareholders, while management proposals, such as director elections and Say-on-Pay votes, representing the vast majority of proposals.

At the fund-month level, recall-voting sensitivity, a normalized variable that proxies for funds' propensity to recall shares during our sample period, exhibits consideration variation. Panel B reports that about 38% of our sample funds have engaged in stock lending and 22% of them are index funds. For the average fund, institutional shares are the majority. The other fund-level characteristics are largely similar to those reported at the fund-stock-quarter level (for funds that engage in stock lending).<sup>12</sup>

Panel C reports that recalled shares are 2.4 percentage points more likely to be voted against management in uncontested proposals, relative to non-recalled shares. The difference, however, is much larger for shareholder proposals (7.2 percentage points), especially ES proposals (11.5 percentage points), than management proposals such as director elections and Say-on-Pay votes. Similarly, the "opposition gap" for proxy contests is more than 11 percentage points. These patterns suggest that in high-stakes voting events, such as proxy contests and ES proposals, funds that incur the cost of recalling shares are eager to have their "voice" heard and influence voting outcomes.

---

<sup>11</sup>AllianceBernstein L.P. is an exception. Most of AllianceBernstein-advised funds generally do not recall loaned shares. "For the SRI labeled Thematic funds," however, AllianceBernstein recalls securities on loan to vote proxies.

<sup>12</sup>Fund TNA figures reported in Panel A are generally larger than those from Panel B. This is because Panel A reports statistics at the position level while Panel B does at the fund level. Funds with larger TNAs typically have more positions, hence their over-representation in Panel A, which features position-level data.

## IV. Empirical Findings

### A. *Recalls of loaned securities before proxy voting*

We begin by examining mutual funds’ propensity to recall their loaned shares before shareholder meetings and how this recall pattern is affected by fund policies and fund and stock characteristics. To this end, we estimate a linear probability model for the full set of fund–stock–quarters, where fund  $i$  holds stock  $j$  at the end of both quarters  $t - 1$  and  $t$  and lends out shares as of quarter end  $t - 1$ .

$$D(\text{recall})_{i,j,t} = \alpha + \beta D(\text{meeting})_{j,t} + \theta D(\text{meeting})_{j,t} * \text{Policy}_i + \gamma X_{i,t} + \eta Z_{j,t} + \delta_t + \delta_i + \delta_j + \epsilon_{i,t}, \quad (2)$$

in which the outcome variable,  $D(\text{recall})_{i,j,t}$ , equals one if fund  $i$  lends out stock  $j$  at quarter end  $t - 1$  but has no shares on loan at quarter end  $t$  (while still holding it), and zero otherwise.  $D(\text{meeting})_{j,t}$  equals one if the record date for stock  $j$ ’s shareholder meeting is between quarter ends  $t - 1$  and  $t$ .  $\text{Policy}_i$  are indicators for whether fund  $i$  belongs to Policy group 1 (recalls case by case), Policy group 2 (generally recall), or Policy group 3 (generally no recall), with the omitted group being funds that do not disclose any recall-related policy.  $X_{i,t}$  is a vector of fund characteristics and  $Z_{j,t}$  is a set of stock characteristics. We include year–quarter fixed effects ( $\delta_t$ ), fund fixed effects ( $\delta_i$ ), and stock fixed effects ( $\delta_j$ ) in all regressions. Standard errors are clustered at the fund level.<sup>13</sup>

Table II displays our regression results. If the estimated  $\beta$  is positive, it indicates that mutual funds generally have a higher propensity to recall their loaned shares when the record date of a stock’s shareholder meeting is approaching. Column (1) of Table II shows that, conditional on fund and stock characteristics and controlling for fund, stock, and time fixed effects, the average mutual fund in our sample is 0.7 percentage points more likely to recall

---

<sup>13</sup>We do not conduct our analysis at the fund family level because although nearly all fund families apply the same recall policy to their constituent funds, funds typically do not recall shares in concert with other funds from the same family, as reported in Section III.E.

loaned shares during a meeting quarter. The magnitude of this incremental recall probability might appear small but it is consistent with the aggregate evidence documented by [Aggarwal et al. \(2015\)](#). They find that lending supply drops by a modest 2 percentage points before proxy voting and that only a small fraction of these lendable shares are actually loaned out.

[Insert Table II here.]

We further separate our sample mutual funds into groups based on our classification of their recall policies. As detailed in Section II, funds that engage in securities lending are classified into four groups based on their recall policies disclosed through Form N-1As. Policy group 1 adopt a “case by case” policy that stresses weighing the benefit of voting a particular proxy and the cost of foregoing securities lending income. Policy group 2 have an “generally recall” policy that stipulates recalling all securities on loan before a meeting’s record date. Policy group 3 adopt a “generally no recall” policy and believe that the benefit of exercising voting rights generally does not exceed the gain from additional lending revenue. The omitted group is the set of funds that engage in securities lending but have no disclosure regarding recall policies.

Column (2) of Table II reports results from a regression in which we interact the meeting dummy with the three indicators for recall policy groups 1, 2, and 3, respectively. The group indicators themselves are absorbed by fund fixed effects. We find a stark effect for the “generally recall” group of funds, who exhibit a 11.7 percentage points difference in their propensity to recall loaned-out shares before meeting record dates, relative to the benchmark funds with no recall policy. This result suggests that “generally recall” funds follow through on their stated recall policy and exercise their governance rights to monitor management by recalling and voting loaned shares. Relative to the benchmark funds, however, funds that recall case-by-case are no more likely to recall their loaned shares before shareholder meetings, suggesting that the SEC’s materiality requirement is relevant for funds not disclosing any recall policy. Similarly, the “generally no recall” group of funds have a similar propensity to recall shares compared to the benchmark funds.

Importantly, we find that certain fund characteristics also predict funds' recall probability during the meeting quarter. Column (3) of Table II reports a positive coefficient on the interaction term of the meeting dummy and fund family ownership, indicating that funds with larger ownership stakes are more likely to recall shares during the proxy season, relative to periods outside of the season. This is consistent with the theory on free-riding as sizable stakes can influence voting outcomes (Shleifer and Vishny, 1986). Similarly, funds that have held a stock for a longer period are significantly more likely to initiate share recalls during the meeting quarter than non-meeting quarters, suggesting that long-term investors have stronger incentives to monitor (Chen et al., 2007). These results are also consistent with funds' disclosed narrative that ownership stakes and holding horizon are important considerations when they decide whether to recall shares ahead of shareholder meetings (see Section II for details). However, larger funds, measured by total net assets, are less likely to recall shares for voting purposes, possibly reflecting a higher cost of monitoring a large number of loaned-out positions.

Next, we examine whether stock characteristics affect mutual funds' decision to recall loaned shares. Column (3) shows that during the meeting quarter funds are significantly less likely to recall shares of company that is incorporated outside of the U.S. This is consistent with the discussion in mutual funds' N-1A filings that recalling foreign shares involves additional intermediation and a longer processing time such that shareholders may not be able to recall them in time for proxy voting. Unsurprisingly, lending fees negatively predict the likelihood of recalling shares. After all, the primary motive for mutual funds to engage in securities lending is to generate additional income. However, the positive coefficient on the interaction term of the meeting dummy and the level of lending fees suggests that while high lending fees generally discourage funds from recalling shares, this effect weakens significantly during the proxy season when the need to exercise shareholder rights potentially outweighs lending revenue.

To alleviate the concern that our  $D(\text{recall})$  variable is a noisy proxy of funds' true recall

activities, we repeat the analysis in column (1) of Table II by focusing on stocks “on special,” for which lending fees are no less than 100 basis points Aggarwal et al. (2015). The premise is that for these high-fee stocks, funds would recall shares only when the benefit of voting a particular proxy is substantial as the opportunity cost of giving up the lending revenue is high. The recall likelihood is 23.7% for stocks on special. As shown in column (4), the average fund is 1.5% percentage points more likely to recall loaned shares during a meeting quarter, more than double the estimate reported in column (1).

### A.1. Nature of the meeting and recall decisions

As discussed in Section II, some funds mentioned in securities filings that they often recall shares to cast votes in high-stakes meetings, such as proxy contests and M&A proxies. In this subsection, we formally test whether the average mutual fund’s recall decisions depend on the type of proposals that are being voted at the meeting. To this end, we replace the meeting dummy with separate indicators for meetings that feature shareholder proposals, environmental- and social-related shareholder proposals (ES proposals), merger proposals, proxy contests where management and a dissident propose competing slates of director nominees, and ex post close votes where the winning margin for a proposal is between -5 and +5 percentage points. We note that these indicators are not mutually exclusive as a given shareholder meeting can feature multiple types of proposals.

Table III shows that merger proxies and proxy contests are the two types of meetings that trigger more recall actions from mutual funds, relative to other quarters. For example, our sample mutual funds are 2.5 percentage points more likely to recall loaned shares if the upcoming shareholder meeting involves M&A proposals. Given that M&A proposals have important consequences on shareholder value, mutual funds’ pronounced recall responses are consistent with them exercising their fiduciary duties. Equally importantly, mutual funds are 5.5 percentage points more likely to recall loaned shares prior to proxy contests. This is consistent with proxy contests being pivotal, high-stakes voting events, during which the

voting decisions made by institutional shareholders are crucial in determining the outcomes (Brav, Jiang, Li, and Pinnington, 2019, 2024; Fos, 2017).

[Insert Table III here.]

Interestingly, lending funds do not appear to increase recall activities for voting proxies on shareholder or ES proposals, which suggests that these funds do not believe that the average shareholder/ES proposal has a material impact on shareholder value. This may be attributable to the fact that most of shareholder/ES proposals are costly to implement and receive low support (Gantchev and Giannetti, 2021).

We note that at the time of deciding whether to recall loaned shares, which must be prior to the record date of a meeting, it might be difficult to predict whether the votes would end up being close. Therefore, it is perhaps not surprising that ex post close votes do not affect mutual funds' propensity to recall shares.

On the other hand, proxy contests and merger-related votes are highly anticipated events and typically known before the record date of a shareholder meeting. For proxy contests and mergers, firms (and dissidents) are required to file preliminary proxy statements at least 10 calendar days before the date definitive proxy statements are filed.<sup>14</sup> This enables funds to determine whether a vote has any material impact on them and to recall any shares on loan in advance of the record date.

## A.2. ESG funds and recall decisions

In this subsection, we take advantage of our fund-level recall data to examine whether ESG funds are more responsive in recalling their shares for voting purposes, relative to other mutual funds.<sup>15</sup> The recall behavior of ESG funds is particularly interesting because on the

---

<sup>14</sup>Regulation 14A of the Securities Exchange Act of 1934 (Rule 14a-6) requires that preliminary copies of a proxy statement be filed with the SEC at least 10 calendar days prior to the date definitive copies of such material are first sent to shareholders. In addition, a preliminary merger proxy statement (PREM 14A) is subject to the SEC's review. If the SEC has comments to the preliminary proxy statement, the company may need to amend its merger proxy statement before filing its definitive proxy statement.

<sup>15</sup>We use the terms "responsible," "sustainable," "sustainability," and "ESG" interchangeably.

one hand, public interest in responsible investing has underlined the role asset managers, especially ESG funds, play in addressing corporate sustainability issues (Chen, Dong, and Lin, 2020; Gantchev, Giannetti, and Li, 2022). On the other hand, there is a growing concern among academics and regulators that ESG funds may deviate from their stated ESG mandates, potentially hampering improvements in corporate sustainability (Gibson, Glossner, Krueger, Matos, and Steffen, 2022; Li, Naaraayanan, and Sachdeva, 2021; SEC, 2022). In 2022, the SEC launched a probe that focused on whether ESG funds trade away their right to vote on ESG issues, including how they lend out their shares and whether they recall them before corporate elections (Robinson et al., 2022). Therefore, whether ESG funds engage in “responsible” securities lending practice is an important piece of evidence that contributes to this debate.

Table IV reports results on whether ESG funds exhibit differential tendencies to recall shares on loan prior to a meeting’s record date, relative to non-ESG funds. Indeed, column (1) shows that ESG funds are 6.5 percentage points more likely to recall shares during a meeting quarter than a non-meeting quarter, relative to other funds. Across meetings that features different types of proposals, we find that ESG funds stand out in recalling shares prior to contentious proxy proposals for which the votes end up being close. This suggests that ESG funds are diligent monitors, who anticipate and vote on close-call proposals, where these funds are more likely to be pivotal. It is worth noting that relative to non-ESG funds, ESG funds do not increase recall activities for voting proxies on ES (and shareholder) proposals, likely due to the low quality of most ES proposals, hence a lack of materiality (Gantchev and Giannetti, 2021). This evidence is consistent with our findings in the previous section.

[Insert Table IV here.]

### A.3. Governance quality and recall decisions

Funds from several fund families, including Federated Investors and MFS Investment Management, disclosed in N1-A filings that governance issues, such as excessive compensation to the CEO, materially affect shareholder value, which may prompt these funds to recall loaned shares prior to the meeting date. We thus proceed to test whether this pattern exists for the full sample of mutual funds that engage in securities lending.

As explained earlier, the record date of a shareholder meeting typically falls before the definitive proxy statement is released. Therefore, it is not practicable for investors to evaluate the proxy statements for upcoming meetings (except those for proxy contests or mergers) before deciding whether to recall any shares on loan. In addition, proxy advisors, such as ISS, issue their recommendations several weeks after proxy statements are released. Therefore, their recommendations are not available for funds to make recall decisions. Thus, fund managers are likely to rely on past information on corporate governance, including proxy recommendations and shareholder votes on Say-on-Pay (SOP) and director elections, to inform their recall decisions prior to an estimated record date.

In this subsection, we study whether ISS recommendations and aggregate votes on last year's SOP and director elections affect a fund's likelihood to recall shares before a meeting. We focus on these two types of proposals as they comprise about 89% of all proposals and nearly every firm sponsors them each year.<sup>16</sup> In our analysis, we restrict our sample to meeting quarters only. Because shareholder meetings typically take place once a year the meeting quarter and all non-meeting quarters during a proxy year have the same past governance-related information. Including non-meeting quarters in our analysis would effectively test for the effect of a meeting on recall decisions rather than test for the effect of governance quality on recalls.

As shown in column (1) of Table V, when ISS recommended against a SOP proposal

---

<sup>16</sup>We do not use classic corporate governance indexes, such as the G-index (Gompers, Ishii, and Metrick, 2003) and the E-index (Bebchuk, Cohen, and Ferrell, 2009), because the construction of these indexes relies on data from the Investor Responsibility Research Center (IRRC), which cover only S&P 1500 firms.

last year the probability of a recall increases about 2 percentage points, controlling for stock and time fixed effects. This result is consistent with ISS recommending against SOP proposals at firms with excessive CEO pay (Ertimur, Ferri, and Oesch, 2013; Fisch, Palia, and Solomon, 2018), a “material” governance issue that is likely to result in increased stock recalls. However, ISS’s negative recommendation for one or more director nominees has little effect on the recall likelihood. Consistent with our full-sample results, “generally recall” funds are 17.2 percentage points more likely to recall loaned shares, relative to funds that do not disclose any recall policy.

[Insert Table V here.]

Because investors do not necessarily follow ISS recommendations (Bolton et al., 2020), we further examine whether low support rates for SOP proposals and director nominees have any effect on funds’ recall decisions. ISS states that when a SOP proposal receives less than 70% support of votes cast (for and against), it will conduct a qualitative review of the compensation committee’s responsiveness to shareholder opposition at the next annual meeting. Therefore, it is reasonable to believe that stock lenders may be particularly concerned about firms that received such low support for SOP proposals. Consistent with this intuition, column (2) shows that when last year’s SOP proposal received a support rate below 70%, the likelihood of a recall is 2.6 percentage points higher. As shown in columns (3) and (4), we find qualitatively similar results when adding fund fixed effects.

### *B. Recall Decisions and Proxy Voting*

In this section, we study how recalled shares are voted. Mutual funds that recall loaned shares have made an active choice of foregoing lending revenue to cast their votes. By revealed preference, they place a relatively higher value on voting rights, compared with the average fund. Therefore, to the extent that recalled shares are voted in a particular direction, the voting pattern is informative about the governance preferences of funds that engage in

recall activities.

We conduct regression analyses at the fund-proposal level. Our key explanatory variable is  $D(\textit{Recall})$ , which indicates that a voting fund recalls a loaned stock during the quarter prior to the record date. As reported in column (1) of Table VI, Panel A, recalled shares are 2.1 percentage points more likely to be voted against management in uncontested management and shareholder proposals excluding routine ones, controlling for fund and stock characteristics and fund-time fixed effects.<sup>17</sup> Although such a difference is unlikely to change the voting outcome in general, the economic magnitude appears to be meaningful given that the average uncontested proposal garners an opposition rate of 12.7% from mutual funds. Indeed, Cai et al. (2009) and Aggarwal, Dahiya, and Prabhala (2019) find evidence that votes recorded against proposals have negative governance consequences even if they do not alter voting outcomes. We find similar effects for SOP and uncontested director elections, as shown in columns (2) and (3). For merger proxies, however, the estimated coefficient on  $D(\textit{Recall})$  is virtually zero, likely reflecting the near-unanimous nature of merger votes (the average opposition rate is only 3.1%).

[Insert Table VI here.]

The effect, however, is much stronger for shareholder proposals, especially ES proposals, and proxy contests. Specifically, funds that recall shares for voting purposes are 15.6 and 17.7 percentage points more likely to vote for ES proposals and the dissident slate, respectively, compared with funds that do not recall or lend shares. These results suggest that mutual funds that choose to retain voting rights likely have a meaningful effect on voting outcomes, given that ES proposals and dissident director slates on average receive support rates of 37.8% and 33.6% from mutual funds, respectively. The pattern is consistent with proxy fights and ES proposals being highly contested voting events, the latter of which have received increasing attention from (sustainability-minded) investors in recent years.

---

<sup>17</sup>Routine proposals are those that do not change the structure, bylaws, or operations of a corporation to the detriment of its shareholders. Routine proposals include the ratification of auditors, company name change, stock splits, and an increase in the number of common shares.

To remove confounding variations, such as proposal quality and firm characteristics (e.g., past performance and governance practice), we further control for proposal fixed effects. The results are reported in Table VI, Panel B. Columns (2)-(6) show that the documented negative relation between recall decisions and support for management is generally weaker for individual proposal types. This suggests a selection effect—in meetings where shareholders are more galvanized to vote against management, securities lenders are also more likely to recall their shares for voting purposes. For proxy contests, however, the effect of recalls on fund votes remains large (a difference of 10.9 percentage points), indicating that the selection effect is not a dominant factor for these high-stakes corporate battles.

Our granular fund-level recall data afford us an opportunity to explore the cross-sectional variations in the relation between recall and voting decisions. Analogous to our earlier analysis on ESG funds’ recall behavior, we now study ESG funds’ voting behavior. If ESG funds attached high values to exercising governance rights as implied in their prospectuses, those that recall shares are more likely to fulfill their monitoring role by voting against management, compared to non-ESG funds recalling shares. The results presented in Table VI, Panel C provide supporting evidence. As shown in column (1), ESG funds are 4.0 percentage points more likely to oppose management when recalling shares, relative to non-ESG funds that engage in recall activity. Adding proposal fixed effects slightly lowers the magnitude. The effect for proxy contests is much larger (ranging from 12.6 to 21.1 percentage points), although the estimates are not statistically significant, likely as a result of a small sample.

### **B.1. Fund recalls and voting outcomes**

Having shown that recalled shares are more likely to be voted against management by individual funds, it is natural to ask whether there is any effect at the proposal level. That is, does recall funds’ tougher stance with management relate to more votes cast against management proposals and/or more votes cast for shareholder proposals? To answer this

question, we conduct both full-sample and subsample analyses.

### *Regression analysis*

For the full-sample analysis, we calculate the fraction of funds that recall loaned shares and test whether this variable is associated with the probability of passing or rejecting a proposal, controlling for firm-level characteristics and time fixed effects.

As shown in column (1) of Table VII, a management proposal is more likely to fail when more funds that recall shares cast their votes. A one standard deviation increase in the fraction of recall funds is associated with a 0.8 percentage points increase in the likelihood of rejecting a management proposal. Given that the unconditional rejection probability is 1.9%, the marginal effect is substantial. We find consistent results for shareholder proposals. As reported in column (3), a one standard deviation increase in the fraction of funds that recall is related to a 4.3 percentage points increase in the probability of passing a shareholder proposal. In addition, aggregate support for shareholder proposals increases when more recall funds participate in the meetings.

[Insert Table VII here.]

Next, we examine the relationship between fund recalls and voting outcomes for proxy contests. Our main dependent variable, *Dissident win*, is an indicator coded as one if a dissident wins at least one board seat, a winning outcome in a proxy contest (Brav et al., 2019). Column (5) reports that a one standard deviation increase in the fraction of recall funds is associated with a 8.2 percentage points increase in the likelihood of a dissident win. Given that proxy contests are highly contested and dissidents virtually have a 50% chance of winning, funds that recall shares appear to be pivotal. As shown in columns (6) and (7), we find consistent results at the nominee level. A one standard deviation increase in the fraction of recall funds is associated with a 7.8 percentage points increase (1.7 percentage points decrease) in the fraction of votes against a management (dissident) nominee. This pattern suggests that management faces strong headwinds when recalled shares are actively

voted.

### *Back-of-the-envelope analysis*

We do not claim causality for the regression analysis discussed above as firm-level characteristics, such as governance quality, can affect both voting participation of lending funds and voting outcomes. Rather, the regression analysis provides an opportunity to gauge whether recalled shares are economically meaningful in deciding voting outcomes. In this subsection, we provide a simple counterfactual analysis using a subsample of close votes where the winning margin for a proposal is between -5 and +5 percentage points.

We assume that if a lending fund did not recall loaned shares, these shares would have been voted in the opposite direction. This assumption is motivated by our finding that recalled shares are more likely to be voted against management, relative to non-recalled shares.<sup>18</sup> For each proposal, we compute the change in aggregate votes cast by lending funds and recalculate the total number of For votes. We then compute the percentage of For votes, compare it with the vote requirement, and determine whether the proposal passes in this hypothetical scenario.

We find that 60 failed proposals, or 11.9% of the 505 close-call proposals in our sample, would have passed if the recalled shares are voted the opposite direction, while 13 passed proposals (or 2.6% of the total) would have failed. In other words, recalled shares are able to flip 14.5% of the close votes. Perhaps not surprisingly, most of the changes are concentrated on management proposals, which are more likely to be opposed by funds recalling shares. Of the 359 close-call management proposals, 17.6% of the voting outcomes would have been flipped (15.6% would have passed) if lending funds vote the opposite direction. For close-call shareholder proposals, however, only 6.9% of the outcomes would have been flipped.

Taken together, the evidence presented in this section suggests that mutual funds that choose to recall loaned shares have a meaningful effect on voting outcomes.

---

<sup>18</sup>Alternatively, we can assume that recalled shares would be voted the way the majority of mutual funds vote, which yields qualitatively similar results.

## B.2. Voting behavior of recall-sensitive funds

As defined in Section II, recall-sensitive funds are those that are significantly more likely to recall loaned shares during the proxy seasons in our sample period, relative to off-season quarters. In this subsection, we examine the voting behavior of funds with the highest degree of recall-voting sensitivity. We argue that recall-sensitive funds place high value on corporate governance issues and are likely informed in their voting. Therefore, even for the positions that they do not engage in securities lending, they may still vote in a distinct manner.

To empirically evaluate this hypothesis, we sort mutual funds based on their recall-voting sensitivities and define recall-sensitive funds as those whose sensitivity scores are in the top tercile, with the remaining funds being recall-insensitive funds. We then regress the fund-proposal level voting patterns on the indicator for recall-sensitive funds, controlling for proposal fixed effects.

As shown in column (1) of Table VIII, recall-sensitive funds are 1.4 percentage points less likely to support management in uncontested proposals, controlling for proposal fixed effects. Adding fund and fund-stock controls does not alter our results. Perhaps unsurprisingly, the differential voting behavior between recall-sensitive and -insensitive funds is larger in proxy contests, suggesting that recall-sensitive funds are likely to influence the outcomes of these ex ante pivotal voting events (Brav et al., 2024).

[Insert Table VIII here.]

Taken together, our results presented in this section suggest that mutual funds that recall shares to exercise voting rights are active monitors, who are likely to influence voting outcomes in proxy contests and shareholder proposals, including ES proposals. We note that the results reported in Section IV.B are based on observations where mutual funds cast proxy votes. A lending fund, however, may refrain from recalling shares for voting if it determines that the benefit of securities lending outweighs the benefit of voting a particular proxy, which we term “no-show.” Analyzing these no-show cases would shed further light

on lending funds’ participation decisions. We report the results in Appendix A.

### C. Recall Decisions, Fund Flows, and Lending Income

In this section, we begin by examining whether a fund’s sensitivity in recalling voting shares is associated with its investor flows. On the one hand, funds that recall shares lose lending income, which could lead to outflows, although monitoring through voting may create long-term value for portfolio investments. On the other hand, some fund investors may allocate more capital to recall-sensitive funds if recalled shares are voted in a way that is consistent with the investors’ governance preferences, including ES ones. Which factor dominates is an empirical question. To answer this question, we regress fund  $i$ ’s flow in month  $t$  on *Recall-voting sensitivity*, a fund-level measure, defined in Section II, that proxies for how often a fund recalls its loaned shares during meeting quarters relative to non-meeting quarters. We control for fund characteristics, including past performance, in the regression.

$$\text{Fund flow}_{i,t} = \alpha + \beta \text{Recall-voting sensitivity}_i + \gamma X_{i,t-1} + \delta_t + \delta_s + \epsilon_{i,t}, \quad (3)$$

where  $X_{i,t-1}$  is a set of lagged fund characteristics. We also include year-month fixed effects ( $\delta_t$ ) and fund investment style fixed effects ( $\delta_s$ ). Standard errors are double-clustered at the fund and year-month levels.

Table IX shows the regression results. In columns (1) to (3), we include only funds that engage in securities lending during our sample period. In column (3), we control for piecewise linear performance ranks that are used in Huang, Wei, and Yan (2007).<sup>19</sup> Across all three specifications, a fund’s sensitivity of recalls to proxy voting is positively and significantly associated with fund flows. A one standard deviation increase in recall-voting sensitivity is associated with a 0.90% increase in annual fund flows ( $0.313 * 0.240 * 12$ ). This marginal

---

<sup>19</sup>Specifically, for each month we rank mutual funds by their 12-month 3-factor alphas and generate a ranking score (*Rank*) that ranges from 0 (the lowest) to 1 (the highest). We then construct three control variables:  $Low_{i,t-1} = \text{Min}(\text{Rank}_{i,t-1}, 0.2)$ ,  $Mid_{i,t-1} = \text{Min}(0.6, \text{Rank}_{i,t-1} - Low_{i,t-1})$ , and  $High_{i,t-1} = \text{Rank}_{i,t-1} - Low_{i,t-1} - Mid_{i,t-1}$ .

effect is economically meaningful given that the average annual fund flow is 1.1%. This result suggests that investors on average reward mutual funds that exercise their voting rights. Some investors may derive non-pecuniary utility from holding funds that exhibit certain governance preferences in proxy voting, while others may hold the belief that exercising voting rights is beneficial for long-term value creation.

[Insert Table IX here.]

Furthermore, we divide funds engaged in securities lending into two groups based on the fraction of fund AUM contributed by institutional share classes. Column (4) of Table IX reports regression results for mutual funds where more than 50% of their assets are owned by institutional investors (high inst. share) and column (5) shows results for the remaining funds, which are retail-oriented (low inst. share). Evidently, the positive association between funds' recall-voting sensitivity and fund flows is entirely driven by institutional share classes. This is consistent with the argument that institutional investors are more sophisticated in monitoring the stewardship activities of their funds, and they are likely to value voting rights more than retail investors. In contrast, flows to retail-oriented funds do not respond to funds' recall-voting sensitivities.

In the last column of Table IX, we repeat our analysis for the full sample of equity funds, regardless of whether a fund engages in securities lending. We set *Recall-voting sensitivity* to zero for non-lending funds and control for whether a fund has engaged in lending or not. A separate indicator,  $D(\textit{Lending fund})$ , absorbs the flow difference between funds engaged in securities lending and funds with no securities lending activities. The estimated coefficient on *Recall-voting sensitivity* is similar to that from the subsample of lending funds.

Finally, we show that funds that are more responsive in recalling their shares for proxy voting indeed sacrifice some of their securities lending income. To this end, we collect each fund's annual securities lending income from Form N-CEN. For each fund-year, we define *Lending income (%)* as the percentage of fund TNA that is attributable to securities lending

revenue. For funds that engage in securities lending, the average annual lending income is 0.05% of fund TNA.

We regress fund  $i$ 's lending income in year  $t$  on *Recall-voting sensitivity*, controlling for the fraction of fund assets on loan, lagged fund characteristics  $X_{i,t-1}$ , and year fixed effects  $\delta_t$ .

$$Lending\ Income_{i,t} = \alpha + \beta Recall\text{-}voting\ sensitivity_i + \rho\text{Frac. of assets on loan}_{i,t} + \gamma X_{i,t-1} + \delta_t + \epsilon_{i,t}. \quad (4)$$

Table X shows that a fund's *Recall-voting sensitivity* is negatively associated with the amount of income it collects from securities lending. This is consistent with our argument that mutual funds trade off exercising their shareholder voting rights for securities lending income. When *Recall-voting sensitivity* increases from zero (completely unresponsive) to one (fully responsive), lending income relative to fund TNA drops by 1.1 to 1.5 basis points. Comparing with mutual funds' average lending income of five basis points, this reduction in lending income is modest but nevertheless meaningful.

[Insert Table X here.]

Overall, our findings in this section suggest that mutual funds that are diligent in recalling their shares for proxy voting purposes attract more investor capital while foregoing a modest amount of lending revenue. Funds' institutional investors appear to reward fund managers for fulfilling their fiduciary duty associated with shareholder voting.

## V. Conclusions

In this paper, we use a unique dataset on individual mutual funds' loaned stocks and recall decisions to study whether and how funds' lending activities affect their voting practices. We find that, on average, mutual funds are more likely to recall their loaned shares when a voting record date approaches, with the effect being strongest for ESG funds and funds that issue

“generally recall” policies. These results suggest that funds with differing mandates assign different values to voting rights. Funds with higher ownership stakes and longer holding horizons are also more likely to recall shares, consistent with large and long-term investors exhibiting stronger incentives to monitor. Across proposal types, high-stakes voting events, such as merger-related proposals and proxy contests, are associated with the most recalls.

Recalled shares are more likely to be voted against management proposals and in favor of shareholder proposals and dissident slates in proxy fights, with the effect being stronger for ESG funds. Furthermore, recalled shares appear to influence proposals’ voting outcomes. Our back-of-the-envelope calculations also show that the voting outcomes of 14.5% of the close-call proposals would have been flipped under plausible assumptions.

Lastly, we find that recall-sensitive funds attract higher fund flows from institutional investors while foregoing a modest amount of lending revenue. Our study provides the first large-scale evidence for market participants and policymakers who demand transparency into how mutual funds’ securities lending affects their proxy voting practices. This information is particularly important to investors who are monitoring the stewardship responsibilities of funds.

## References

- Aggarwal, Reena, Sandeep Dahiya, and Nagpurnanand R Prabhala, 2019, The power of shareholder votes: Evidence from uncontested director elections, *Journal of Financial Economics* 133, 134–153.
- Aggarwal, Reena, Pedro AC Saffi, and Jason Sturgess, 2015, The role of institutional investors in voting: Evidence from the securities lending market, *Journal of Finance* 70, 2309–2346.
- Azar, José, Miguel Duro, Igor Kadach, and Gaizka Ormazabal, 2021, The big three and corporate carbon emissions around the world, *Journal of Financial Economics* 142, 674–696.
- Bebchuk, Lucian, Alma Cohen, and Allen Ferrell, 2009, What matters in corporate governance?, *Review of Financial Studies* 22, 783–827.
- Bodnaruk, Andriy, and Marco Rossi, 2016, Dual ownership, returns, and voting in mergers, *Journal of Financial Economics* 120, 58–80.
- Bolton, Patrick, Tao Li, Enrichetta Ravina, and Howard Rosenthal, 2020, Investor ideology, *Journal of Financial Economics* 137, 320–352.
- Brav, Alon, Wei Jiang, Tao Li, and James Pinnington, 2019, Picking friends before picking (proxy) fights: How mutual fund voting shapes proxy contests., *ECGI Finance Working Paper* .
- Brav, Alon, Wei Jiang, Tao Li, and James Pinnington, 2024, Shareholder monitoring through voting: New evidence from proxy contests, *Review of Financial Studies* 37, 591–638.
- Butler, Alexander W., and Umit G. Gurun, 2012, Educational networks, mutual fund voting patterns, and ceo compensation, *Review of Financial Studies* 25, 2533–2562.
- Cai, Jie, Jacqueline L. Garner, and Ralph A. Walkling, 2009, Electing directors, *Journal of Finance* 64, 2389–2421.
- Chen, Tao, Hui Dong, and Chen Lin, 2020, Institutional shareholders and corporate social responsibility, *Journal of Financial Economics* 135, 483–504.

- Chen, Xia, Jarrad Harford, and Kai Li, 2007, Monitoring: Which institutions matter?, *Journal of Financial Economics* 86, 279–305.
- Christoffersen, Susan EK, Christopher C Geczy, David K Musto, and Adam V Reed, 2007, Vote trading and information aggregation, *Journal of Finance* 62, 2897–2929.
- Cuñat, Vicente, Mireia Gine, and Maria Guadalupe, 2012, The vote is cast: The effect of corporate governance on shareholder value, *Journal of Finance* 67, 1943–1977.
- Curtis, Quinn, Jill Fisch, and Adriana Z Robertson, 2021, Do ESG mutual funds deliver on their promises?, *Michigan Law Review* 120, 393.
- Cvijanovic, Dragana, Amil Dasgupta, and Konstantinos E. Zachariadis, 2016, Ties that bind: How business connections affect mutual fund activism, *Journal of Finance* 71, 2933–2966.
- Dasgupta, Amil, Vyacheslav Fos, and Zacharias Sautner, 2021, Institutional investors and corporate governance, *Foundations and Trends® in Finance* 12, 276–394.
- Davis, Gerard F., and E. Han Kim, 2007, Business ties and proxy voting by mutual funds, *Journal of Financial Economics* 85, 552–570.
- Dikolli, Shane S, Mary Margaret Frank, Zhe Michael Guo, and Luann J Lynch, 2022, Walk the talk: ESG mutual fund voting on shareholder proposals, *Review of Accounting Studies* 27, 864–896.
- Dong, Xi, and Qifei Zhu, 2023, Equity lender base and limits to arbitrage: Position-level evidence from mutual funds, *Available at SSRN 4291572* .
- Dyck, Alexander, Karl V Lins, Lukas Roth, and Hannes F Wagner, 2019, Do institutional investors drive corporate social responsibility? International evidence, *Journal of Financial Economics* 131, 693–714.
- Edmans, Alex, 2014, Blockholders and corporate governance, *Annual Review of Financial Economics* 6, 23–50.
- Edmans, Alex, and Clifford G Holderness, 2017, Blockholders: A survey of theory and evidence, *The handbook of the economics of corporate governance* 1, 541–636.
- Ertimur, Yonca, Fabrizio Ferri, and David Oesch, 2013, Shareholder votes and proxy advi-

- sors: Evidence from say on pay, *Journal of Accounting Research* 51, 951–996.
- Fisch, Jill, Darius Palia, and Steven Davidoff Solomon, 2018, Is say on pay all about pay: The impact of firm performance, *Harvard Business Law Review* 8, 101.
- Fos, Vyacheslav, 2017, The disciplinary effects of proxy contests, *Management Science* 63, 655–671.
- Gantchev, Nickolay, and Mariassunta Giannetti, 2021, The costs and benefits of shareholder democracy: Gadflies and low-cost activism, *Review of Financial Studies* 34, 5629–5675.
- Gantchev, Nickolay, Mariassunta Giannetti, and Rachel Li, 2022, Does money talk? divestitures and corporate environmental and social policies, *Review of Finance* 26, 1469–1508.
- Gibson, Rajna, Simon Glossner, Philipp Krueger, Pedro Matos, and Tom Steffen, 2022, Do responsible investors invest responsibly?, *Review of Finance* 26, 1389–1432.
- Gompers, Paul, Joy Ishii, and Andrew Metrick, 2003, Corporate governance and equity prices, *The Quarterly Journal of Economics* 118, 107–156.
- Grossman, Sanford J, and Oliver D Hart, 1980, Takeover bids, the free-rider problem, and the theory of the corporation, *The Bell Journal of Economics* 42–64.
- Hamlin, Jessica, 2021, Stewardship is becoming fundamental to investing – and managers need to keep up, *Institutional Investor* .
- Harford, Jarrad, Dirk Jenter, and Kai Li, 2011, Institutional cross-holdings and their effect on acquisition decisions, *Journal of Financial Economics* 99, 27–39.
- Horne, Chloe, 2023, You’ve filed a shareholder proposal – what now?, *United Nations PRI Academic Blog* .
- Huang, Jennifer, Kelsey D Wei, and Hong Yan, 2007, Participation costs and the sensitivity of fund flows to past performance, *Journal of Finance* 62, 1273–1311.
- Iliev, Peter, and Michelle Lowry, 2015, Are mutual funds active voters?, *Review of Financial Studies* 28, 446–485.
- Kalay, Avner, Oğuzhan Karakaş, and Shagun Pant, 2014, The market value of corporate votes: Theory and evidence from option prices, *Journal of Finance* 69, 1235–1271.

- Kolasinski, Adam C, Adam V Reed, and Matthew C Ringgenberg, 2013, A multiple lender approach to understanding supply and search in the equity lending market, *Journal of Finance* 68, 559–595.
- Li, Tao, S Lakshmi Naaraayanan, and Kunal Sachdeva, 2021, Conflicting objectives of esg funds: Evidence from proxy voting, *Available at SSRN 3760753* .
- Lowry, Michelle, Pingle Wang, and Kelsey D Wei, 2022, Are all esg funds created equal? Only some funds are committed, *Available at SSRN 4417912* .
- Malenko, Nadya, and Yao Shen, 2016, The role of proxy advisory firms: Evidence from a regression-discontinuity design, *Review of Financial Studies* 29, 3394–3427.
- Matos, Pedro, 2020, ESG and responsible institutional investing around the world: A critical review .
- Matvos, Gregor, and Michael Ostrovsky, 2008, Cross-ownership, returns, and voting in mergers, *Journal of Financial Economics* 89, 391–403.
- McCahery, Joseph A, Zacharias Sautner, and Laura T Starks, 2016, Behind the scenes: The corporate governance preferences of institutional investors, *Journal of Finance* 71, 2905–2932.
- Morgan, Angela, Annette Poulsen, Jack Wolf, and Tina Yang, 2011, Mutual funds as monitors: Evidence from mutual fund voting, *Journal of Corporate Finance* 17, 914–928.
- Porras Prado, Melissa, Pedro AC Saffi, and Jason Sturgess, 2016, Ownership structure, limits to arbitrage, and stock returns: Evidence from equity lending markets, *Review of Financial Studies* 29, 3211–3244.
- Robinson, Matthew, David Voreacos, and Silla Brush, 2022, ESG funds face SEC probe over ceding votes on social issues, *Bloomberg* .
- SEC, 2022, SEC proposes to enhance disclosures by certain investment advisers and investment companies about ESG investment practices.
- Shleifer, Andrei, and Robert W Vishny, 1986, Large shareholders and corporate control, *Journal of Political Economy* 94, 461–488.

Yermack, David, 2010, Shareholder voting and corporate governance, *Annual Review of Financial Economics* 2, 103–125.

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

Table I: Descriptive Statistics

This table provides summary statistics for the main dependent and explanatory variables used in this paper. In Panel A, *Market cap* represents market capitalization in billions of dollars. *Past 12-month stock alpha* is the Fama-French 3-factor alpha based on a stock's past 12-month returns. *D(Foreign stock)* equals 1 for a listed firm that is incorporated in a country other than the U.S. and 0 otherwise. *Lending fee* is the annualized borrowing fee. *Fund TNA* represents fund total net assets in billions of dollars. *Expense ratio* is fund expense ratio in percent. *Fund turnover ratio* is funds' reported annual turnover ratio in percent. *Past 12-month fund alpha* is the Fama-French 3-factor alpha based on a fund's past 12-month returns. *Fund family ownership* is the percentage ownership of a given stock and *Holding horizon* is the number of years a fund has held a firm's shares, starting from the position initiation quarter. All of the above variables are measured at the quarter end immediately before the record-date quarter. *D(ESG fund)* equals 1 for an ESG fund and zero otherwise (see Section III.D.1 for the definition of an ESG fund). *D(Recall policy 1)*, *D(Recall policy 2)*, and *D(Recall policy 3)* are indicators equal to 1 for funds that recall loaned shares case by case, that generally recall shares, and that generally do not recall shares, respectively. *D(Recall)* equals 1 if a fund recalls shares before the record date and 0 otherwise. *D(Meeting quarter)* equals 1 for the meeting record-date quarter and 0 otherwise. *D(Shareholder proposal)*, *D(ES proposal)*, *D(M&A proposal)*, *D(Proxy contest)*, and *D(Close vote)* equal 1 for meetings that feature shareholder proposals, environmental or social proposals, merger proxies, proxy contests, and close-call votes that are within -5% and +5% of the winning margin, respectively. In Panel B, *Recall-voting sensitivity* equals a fund's probability of recalling loaned securities during record-date quarters minus its probability of recalling loaned securities during non-record-date quarters. *D(Lending fund)* equals 1 for funds that engage in securities lending and 0 otherwise. *Monthly fund flow* equals a fund's monthly investor flow divided by its lagged TNA. *Past 12-month 3-factor alpha* is a fund's Fama-French 3-factor alpha during the past 12 months and *Past 12-month style-adj. return* is a fund's past 12-month return in excess of the average 12-month return for funds within the same investment objective category. *Fund age* is the number of years since its inception in the CRSP database. *Institutional share* is the ratio of a fund's TNA associated with institutional shares to its total TNA, and *D(Index fund)* equals 1 for index funds and 0 otherwise. In Panel C, uncontested proposals exclude routine ones, namely the ratification of auditors, company name change, stock splits, and an increase in the number of common shares.

Panel A: Fund-stock-quarter-level characteristics

	Mean (1)	25th percentile (2)	Median (3)	75th percentile (4)	Std. Dev. (5)	Obs. (6)
Market cap (\$billion)	6.959	0.531	1.653	4.591	35.151	441231
Past 12-month stock alpha (%)	0.113	-3.620	-0.288	2.856	9.602	409039
D(Foreign stock)	0.019	0	0	0	0.138	442010
Lending fee	0.013	0.003	0.003	0.008	0.022	438121
Fund TNA (\$billion)	26.500	0.519	1.670	13.000	129.000	442010
Expense ratio (%)	0.465	0.120	0.350	0.887	0.391	442010
Fund turnover ratio (%)	38.020	14.000	26.000	58.023	39.631	442010
Past 12-month fund alpha (%)	-0.172	-0.408	-0.127	0.026	0.535	384730
Fund family ownership (%)	1.535	0.038	0.314	1.717	3.011	442010
Holding horizon (#years)	2.513	1.085	2.753	3.668	1.482	440892
D(ESG fund)	0.028	0	0	0	0.165	442010
D(Recall policy 1)	0.823	1	1	1	0.382	442010
D(Recall policy 2)	0.021	0	0	0	0.143	442010
D(Recall policy 3)	0.038	0	0	0	0.192	442010
D(Recall)	0.369	0	0	1	0.483	442010
D(Meeting quarter)	0.265	0	0	1	0.441	442010
D(Shareholder proposal)	0.016	0	0	0	0.127	442010
D(ES proposal)	0.006	0	0	0	0.075	442010
D(M&A proposal)	0.006	0	0	0	0.080	442010
D(Proxy contest)	0.001	0	0	0	0.034	442010
D(Close vote)	0.009	0	0	0	0.092	442010

Table I: **Descriptive Statistics (continued)**

**Panel B: Fund-month-level characteristics**

	Mean (1)	25th percentile (2)	Median (3)	75th percentile (4)	Std. Dev. (5)	Obs. (6)
Recall-voting sensitivity	0.01	-0.14	0.00	0.16	0.31	87072
D(Lending fund)	0.38	0.00	0.00	1.00	0.49	228545
Monthly fund flow (%)	0.09	-1.30	-0.42	0.74	5.84	226019
Past 12-month 3-factor alpha (%)	-0.10	-0.30	-0.08	0.11	0.50	162655
Past 12-month style-adj. return (%)	0.00	-4.91	0.27	5.23	10.68	162655
Fund TNA (\$billion)	2.66	0.06	0.30	1.20	20.73	228545
Fund age	15.71	6.00	14.00	22.00	11.90	228542
Fund turnover ratio (%)	41.75	0.00	16.00	47.00	161.74	228545
Expense ratio (%)	0.45	0.00	0.27	0.86	0.52	228545
Institutional share (%)	51.54	0.00	58.16	100.00	44.30	228545
D(Index fund)	0.22	0.00	0.00	0.00	0.42	228545

**Panel C: Vote against management by proposal type**

	Full sample		Funds that recall shares		Diff. with non-recall funds	
	Mean (1)	Obs. (2)	Mean (3)	Obs. (4)	Mean diff. (5)	<i>t</i> -stat. (6)
Uncontested proposals	0.128	13,033,987	0.152	224,755	0.024	34.22
Say-on-Pay (SOP)	0.124	1,250,720	0.156	23,944	0.033	15.18
Director elections	0.075	10,398,462	0.125	178,068	0.051	81.75
M&A proposals	0.031	28,639	0.019	872	-0.012	-2.00
Shareholder proposals	0.402	585,398	0.474	3,813	0.072	9.00
ES proposals	0.378	302,389	0.493	1,628	0.115	9.57
Proxy contests	0.337	4,734	0.444	144	0.111	2.54

Table II: Recall of Loaned Securities Before Proxy Voting

This table reports results for the determinants of funds' recall of loaned securities during the quarter immediately before the proxy record date. Our sample period runs from 2019Q3 through 2022Q2. In columns (1)-(3), we use the full sample while in column (4), we focus on stocks "on special," for which lending fees are no less than 100 basis points. All variables are as defined in Table I. Standard errors, reported in parentheses, are clustered at the fund level. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: $D(\text{Recall})$			
	(1)	Fall sample (2)	(3)	On special (4)
$D(\text{Meeting quarter})$	0.007*** (0.002)	0.004 (0.008)	0.119*** (0.026)	0.015*** (0.004)
$D(\text{Meeting quarter}) * D(\text{Recall policy 1})$		0.001 (0.009)	0.007 (0.009)	
$D(\text{Meeting quarter}) * D(\text{Recall policy 2})$		0.117*** (0.025)	0.115*** (0.023)	
$D(\text{Meeting quarter}) * D(\text{Recall policy 3})$		-0.015 (0.015)	-0.013 (0.014)	
$\text{Ln}(\text{Market cap})$	0.018*** (0.003)	0.018*** (0.003)	0.018*** (0.003)	-0.013*** (0.004)
Past 12-month stock alpha	0.001 (0.010)	0.001 (0.010)	0.002 (0.010)	-0.038*** (0.013)
Lending fee	-0.486*** (0.148)	-0.487*** (0.148)	-0.611*** (0.157)	-0.058 (0.131)
$\text{Ln}(\text{Fund TNA})$	-0.061*** (0.010)	-0.061*** (0.010)	-0.059*** (0.010)	-0.046*** (0.013)
Expense ratio	5.117** (2.430)	5.102** (2.426)	5.100** (2.436)	1.611 (2.062)
Fund turnover ratio	0.013 (0.015)	0.013 (0.015)	0.014 (0.015)	-0.008 (0.026)
Past 12-month fund alpha	0.959*** (0.369)	0.943** (0.369)	0.946** (0.369)	1.221* (0.690)
Fund family ownership	0.346*** (0.102)	0.346*** (0.102)	0.303*** (0.105)	0.170* (0.090)
$\text{Ln}(\text{Holding horizon})$	0.002 (0.002)	0.002 (0.002)	0.000 (0.002)	0.001 (0.003)
$D(\text{Meeting quarter}) * \text{Ln}(\text{Fund TNA})$			-0.006*** (0.001)	
$D(\text{Meeting quarter}) * \text{Fund family ownership}$			0.168** (0.075)	
$D(\text{Meeting quarter}) * \text{Ln}(\text{Holding horizon})$			0.005** (0.002)	
$D(\text{Meeting quarter}) * D(\text{Foreign stock})$			-0.038** (0.016)	
$D(\text{Meeting quarter}) * \text{Lending fee}$			0.410*** (0.084)	
Stock FEs	Y	Y	Y	Y
Fund FEs	Y	Y	Y	Y
Year-quarter FEs	Y	Y	Y	Y
Observations	350,382	350,382	350,382	70,460
R-squared	0.243	0.244	0.244	0.234

Table III: Recall Decisions by Proposal Type

This table reports results for the determinants of funds' recall of loaned securities immediately before the proxy record date for major proposal types. Column (1) replicates that in Table II. Our sample period runs from 2019Q3 through 2022Q2. All variables are as defined in Table I. Standard errors, reported in parentheses, are clustered at the fund level. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: $D(\text{Recall})$					
	(1)	(2)	(3)	(4)	(5)	(6)
$D(\text{Meeting quarter})$	0.007*** (0.002)					
<i>Indicator for meetings that feature</i>						
$D(\text{Shareholder proposal})$		0.009 (0.006)				
$D(\text{ES proposal})$			0.014 (0.010)			
$D(\text{M\&A proposal})$				0.025** (0.012)		
$D(\text{Proxy contest})$					0.055** (0.024)	
$D(\text{Close vote})$						0.009 (0.007)
$\text{Ln}(\text{Market cap})$	0.018*** (0.003)	0.018*** (0.003)	0.018*** (0.003)	0.018*** (0.003)	0.019*** (0.003)	0.018*** (0.003)
Past 12-month stock alpha	0.001 (0.010)	0.000 (0.010)	0.000 (0.010)	0.000 (0.010)	0.000 (0.010)	0.000 (0.010)
Lending fee	-0.486*** (0.148)	-0.480*** (0.148)	-0.480*** (0.148)	-0.483*** (0.148)	-0.485*** (0.148)	-0.482*** (0.148)
$\text{Ln}(\text{Fund TNA})$	-0.061*** (0.010)	-0.061*** (0.010)	-0.061*** (0.010)	-0.061*** (0.010)	-0.061*** (0.010)	-0.061*** (0.010)
Expense ratio	5.117** (2.430)	5.126** (2.431)	5.122** (2.432)	5.120** (2.433)	5.121** (2.431)	5.126** (2.431)
Fund turnover ratio	0.013 (0.015)	0.013 (0.015)	0.013 (0.015)	0.013 (0.015)	0.013 (0.015)	0.013 (0.015)
Past 12-month fund alpha	0.959*** (0.369)	0.962*** (0.369)	0.963*** (0.369)	0.961*** (0.369)	0.963*** (0.369)	0.962*** (0.369)
Fund family ownership	0.346*** (0.102)	0.346*** (0.102)	0.346*** (0.102)	0.345*** (0.102)	0.346*** (0.102)	0.346*** (0.102)
$\text{Ln}(\text{Holding horizon})$	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)
Stock FEs	Y	Y	Y	Y	Y	Y
Fund FEs	Y	Y	Y	Y	Y	Y
Year-quarter FEs	Y	Y	Y	Y	Y	Y
Observations	350,382	350,382	350,382	350,382	350,382	350,382
R-squared	0.243	0.243	0.243	0.243	0.243	0.243

Table IV: ESG Funds and Recall Decisions

This table reports results for the determinants of funds' recall of loaned securities immediately before the proxy record date for ESG funds, relative to non-ESG funds. Our sample period runs from 2019Q3 through 2022Q2. All variables are as defined in Table I. Standard errors, reported in parentheses, are clustered at the fund level. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: $D(\text{Recall})$					
	(1)	(2)	(3)	(4)	(5)	(6)
$D(\text{Meeting quarter})$	0.005** (0.002)					
$D(\text{Meeting quarter}) * D(\text{ESG fund})$	0.065*** (0.014)					
$D(\text{Shareholder proposal})$		0.008 (0.006)				
$D(\text{Shareholder proposal}) * D(\text{ESG fund})$		0.015 (0.023)				
$D(\text{ES proposal})$			0.014 (0.011)			
$D(\text{ES proposal}) * D(\text{ESG fund})$			-0.002 (0.043)			
$D(\text{M\&A proposal})$				0.023* (0.013)		
$D(\text{M\&A proposal}) * D(\text{ESG fund})$				0.056 (0.036)		
$D(\text{Proxy contest})$					0.054** (0.024)	
$D(\text{Proxy contest}) * D(\text{ESG fund})$					0.026 (0.126)	
$D(\text{Close vote})$						0.007 (0.008)
$D(\text{Close vote}) * D(\text{ESG fund})$						0.069** (0.027)
$\ln(\text{Market cap})$	0.018*** (0.003)	0.018*** (0.003)	0.018*** (0.003)	0.018*** (0.003)	0.019*** (0.003)	0.018*** (0.003)
Past 12-month stock alpha	0.001 (0.010)	0.000 (0.010)	0.000 (0.010)	0.000 (0.010)	0.000 (0.010)	0.000 (0.010)
Lending fee	-0.487*** (0.148)	-0.480*** (0.148)	-0.480*** (0.148)	-0.483*** (0.148)	-0.485*** (0.148)	-0.482*** (0.148)
$\ln(\text{Fund TNA})$	-0.061*** (0.010)	-0.061*** (0.010)	-0.061*** (0.010)	-0.061*** (0.010)	-0.061*** (0.010)	-0.061*** (0.010)
Expense ratio	5.071** (2.407)	5.126** (2.431)	5.122** (2.432)	5.121** (2.433)	5.121** (2.431)	5.124** (2.429)
Fund turnover ratio	0.013 (0.015)	0.013 (0.015)	0.013 (0.015)	0.013 (0.015)	0.013 (0.015)	0.013 (0.015)
Past 12-month fund alpha	0.963*** (0.369)	0.963*** (0.369)	0.963*** (0.369)	0.961*** (0.369)	0.963*** (0.369)	0.963*** (0.369)
Fund family ownership	0.346*** (0.103)	0.346*** (0.102)	0.346*** (0.102)	0.345*** (0.102)	0.346*** (0.102)	0.346*** (0.102)
$\ln(\text{Holding horizon})$	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)
Stock FEs	Y	Y	Y	Y	Y	Y
Fund FEs	Y	Y	Y	Y	Y	Y
Year-quarter FEs	Y	Y	Y	Y	Y	Y
Observations	350,382	350,382	350,382	350,382	350,382	350,382
R-squared	0.244	0.243	0.243	0.243	0.243	0.243

Table V: **Governance Quality and Recall Decisions**

This table reports results for how a firm’s governance quality affects funds’ recall of loaned securities immediately before the firm’s proxy record dates. Our sample period runs from 2019Q3 through 2022Q2 and the sample includes only meeting quarters. *ISS against SOP last year (ISS against directors last year)* equals 1 if ISS recommended against the Say-on-Pay proposal (at least one director nominee) during the firm’s last proxy season and 0 otherwise. *Low support rate for SOP last year (Low support rate for directors last year)* equals 1 if the aggregate support rate for the Say-on-Pay proposal (at least one director nominee) is below 70% (50%) during the firm’s last proxy season and 0 otherwise. All other variables are as defined in Table I. Standard errors, reported in parentheses, are clustered at the fund level. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: $D(\text{Recall})$			
	(1)	(2)	(3)	(4)
ISS against SOP last year	0.018** (0.007)		0.014** (0.007)	
ISS against directors last year	0.005 (0.007)		0.007 (0.007)	
Low support rate for SOP last year		0.026*** (0.009)		0.020** (0.008)
Low support rate for directors last year		0.013 (0.016)		0.016 (0.015)
$D(\text{Recall policy 1})$	0.021 (0.019)	0.021 (0.019)		
$D(\text{Recall policy 2})$	0.172*** (0.060)	0.172*** (0.060)		
$D(\text{Recall policy 3})$	-0.003 (0.031)	-0.003 (0.031)		
Ln(Market cap)	-0.001 (0.006)	-0.001 (0.006)	0.010* (0.005)	0.010* (0.005)
Past 12-month stock alpha	-0.001 (0.018)	-0.001 (0.018)	0.006 (0.018)	0.006 (0.018)
Lending fee	0.152 (0.175)	0.150 (0.176)	-0.333* (0.188)	-0.334* (0.188)
Ln(Fund TNA)	-0.029*** (0.005)	-0.029*** (0.005)	-0.060*** (0.012)	-0.060*** (0.012)
Expense ratio	1.648 (1.695)	1.649 (1.695)	4.743 (3.357)	4.740 (3.358)
Fund turnover ratio	0.007 (0.013)	0.007 (0.013)	0.006 (0.023)	0.006 (0.023)
Past 12-month fund alpha	1.890*** (0.574)	1.884*** (0.574)	1.563** (0.719)	1.558** (0.718)
Fund family ownership	-0.412 (0.258)	-0.413 (0.258)	0.541*** (0.125)	0.540*** (0.125)
Ln(Holding horizon)	0.011** (0.005)	0.011** (0.005)	0.003 (0.002)	0.003 (0.002)
Stock FEs	Y	Y	Y	Y
Fund FEs	N	N	Y	Y
Year-quarter FEs	Y	Y	Y	Y
Observations	103,066	103,066	102,846	102,846
R-squared	0.209	0.209	0.291	0.291

Table VI: Recall Decisions and Proxy Voting

This table reports results for how recalled shares are voted at shareholder meetings. *Vote against management* equals 1 if a fund votes against a management proposal or for a shareholder proposal and 0 otherwise. *Vote for dissident* equals 1 if a fund votes for the dissident slate in a proxy contest and 0 otherwise. Our sample period runs from 2019Q3 through 2022Q2. All other variables are as defined in Table I. Uncontested proposals exclude routine ones, namely the ratification of auditors, company name change, stock splits, and an increase in the number of common shares. Standard errors, reported in parentheses, are clustered at the fund level. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

**Panel A: Without proposal fixed effects**

Dependent variable:	Vote against management						Vote for dissident
	Uncontested proposals (1)	SOP (2)	Director elections (3)	M&As (4)	Shareholder proposals (5)	ES proposals (6)	Proxy contests (7)
<i>D</i> (Recall)	0.021*** (0.002)	0.026*** (0.003)	0.021*** (0.002)	-0.006 (0.006)	0.087*** (0.010)	0.156*** (0.017)	0.177*** (0.061)
Ln(Market cap)	0.021*** (0.001)	0.002*** (0.001)	-0.011*** (0.001)	-0.001 (0.001)	-0.026*** (0.001)	-0.018*** (0.001)	-0.015* (0.008)
Past 12-month stock alpha	-0.098*** (0.006)	-0.140*** (0.009)	0.002 (0.006)	0.135*** (0.017)	0.125*** (0.023)	0.363*** (0.031)	0.865*** (0.290)
Lending fee	2.257*** (0.091)	1.489*** (0.086)	1.275*** (0.089)	-0.696*** (0.102)	-0.144 (0.918)	6.137* (3.363)	1.383** (0.651)
Fund family ownership	-0.646*** (0.050)	-0.564*** (0.043)	-0.619*** (0.044)	-0.345*** (0.066)	-0.544*** (0.153)	-0.333* (0.178)	4.190*** (1.060)
Ln(Holding horizon)	-0.013*** (0.001)	-0.014*** (0.001)	-0.020*** (0.001)	0.002 (0.002)	-0.019*** (0.002)	-0.023*** (0.002)	0.013 (0.021)
Proposal/meeting FEs	N	N	N	N	N	N	N
Fund-quarter FEs	Y	Y	Y	Y	Y	Y	Y
Observations	12,021,450	1,157,623	9,572,673	21,863	548,384	283,890	2,773
R-squared	0.115	0.177	0.199	0.336	0.262	0.275	0.470
%(Dependent variable = 1)	12.7%	12.4%	7.2%	3.1%	40.2%	37.8%	33.6%

**Panel B: With proposal fixed effects**

Dependent variable:	Vote against management						Vote for dissident
	Uncontested proposals (1)	SOP (2)	Director elections (3)	M&As (4)	Shareholder proposals (5)	ES proposals (6)	Proxy contests (7)
<i>D</i> (Recall)	0.002** (0.001)	0.003* (0.002)	0.002* (0.001)	0.002 (0.003)	0.008 (0.006)	0.029*** (0.011)	0.109*** (0.037)
Fund family ownership	0.113** (0.047)	0.077** (0.037)	0.149*** (0.053)	0.037 (0.033)	-0.698*** (0.131)	-0.809*** (0.153)	2.984*** (0.736)
Ln(Holding horizon)	-0.001* (0.000)	-0.001* (0.000)	-0.001* (0.000)	0.001 (0.001)	-0.000 (0.001)	0.001 (0.002)	0.004 (0.015)
Proposal/meeting FEs	Y	Y	Y	Y	Y	Y	Y
Fund-quarter FEs	Y	Y	Y	Y	Y	Y	Y
Observations	12,020,705	1,157,581	9,572,144	21,836	548,381	283,890	2,773
R-squared	0.671	0.568	0.480	0.772	0.525	0.535	0.711
%(Dependent variable = 1)	12.7%	12.4%	7.2%	3.1%	40.2%	37.8%	33.6%

Table VI: Recall Decisions and Proxy Voting (continued)

**Panel C: ESG funds vs. non-ESG funds**

Dependent variable:	Vote against management		Vote for dissident	
	Uncontested proposals (1)	(2)	Proxy contests (3)	(4)
$D(\text{Recall})$	0.020*** (0.002)	0.001 (0.001)	0.163** (0.065)	0.101** (0.039)
$D(\text{Recall}) * D(\text{ESG fund})$	0.040*** (0.013)	0.025*** (0.009)	0.211 (0.140)	0.126 (0.086)
$\text{Ln}(\text{Market cap})$	0.021*** (0.001)		-0.015* (0.008)	
Past 12-month stock alpha	-0.098*** (0.006)		0.856*** (0.291)	
Lending fee	2.258*** (0.091)		1.403** (0.651)	
Fund family ownership	-0.646*** (0.050)	0.113** (0.047)	4.198*** (1.059)	2.986*** (0.734)
$\text{Ln}(\text{Holding horizon})$	-0.013*** (0.001)	-0.001* (0.000)	0.013 (0.021)	0.004 (0.015)
Proposal/meeting FEs	N	Y	N	Y
Fund-quarter FEs	Y	Y	Y	Y
Observations	12,021,450	12,020,705	2,773	2,773
R-squared	0.115	0.671	0.471	0.711
%(Dependent variable = 1)	12.7%	12.7%	33.6%	33.6%

Table VII: Fund Recalls and Voting Outcomes

This table reports results for the relation between the fraction of mutual funds that recall shares prior to the voting record date and the outcome of a proposal.  $D(\text{Reject proposal})$  equals 1 if a proposal fails to pass and 0 otherwise.  $\text{Frac. Against votes}$  is the ratio of the number of “Against” votes to the number of all votes cast.  $D(\text{Pass proposal})$  equals 1 if a proposal passes and 0 otherwise.  $\text{Frac. For votes}$  is the ratio of the number of “For” votes to the number of all votes cast.  $D(\text{Dissident wins})$  equals 1 if a dissident wins at least one board seat and 0 otherwise.  $\text{Frac. Against mgmt nominee}$  ( $\text{Frac. Against dissident nominee}$ ) is the ratio of the number of “Against” votes to the number of all votes cast for a management (dissident) nominee. Our sample period runs from 2019Q3 through 2022Q2. All other variables are as defined in Table I. Uncontested proposals exclude routine ones, namely the ratification of auditors, company name change, stock splits, and an increase in the number of common shares. Standard errors, reported in parentheses, are clustered at the year-quarter level. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Dependent variable:	Uncontested proposals							Proxy contests			
	Management sponsored		Shareholder sponsored		Meeting level		Nominee level		Frac. Against dissident nominee	Frac. Against mgmt nominee	Frac. Against dissident nominee
	D(Reject proposal)	Frac. Against votes	D(Pass proposal)	Frac. For votes	D(Dissident wins)	Frac. Against mgmt nominee	Frac. Against dissident nominee				
(1)	(2)	(3)	(4)	(5)	(6)	(7)					
Fraction of funds recalling shares	0.113*** (0.030)	0.015 (0.011)	0.537*** (0.123)	0.344*** (0.088)	0.527*** (0.179)	0.473*** (0.172)	-0.090*** (0.029)				
Ln(Market cap)	-0.004*** (0.001)	-0.007*** (0.000)	-0.042*** (0.007)	-0.053*** (0.005)	-0.037 (0.041)	-0.003 (0.002)	0.022*** (0.010)				
Past 12-month stock alpha	-0.016 (0.013)	-0.023 (0.014)	-0.186 (0.127)	-0.673* (0.316)	0.498 (1.531)	0.044 (0.137)	0.127 (0.284)				
Year-quarter FEs	Y	Y	Y	Y	Y	Y	Y				
Observations	76,497	75,272	1,790	1,650	42	258	147				
R-squared	0.013	0.037	0.088	0.245	0.053	0.035	0.058				
Mean(Dependent variable)	1.9%	6.5%	21.4%	40.9%	50.0%	6.2%	14.7%				

Table VIII: Voting Patterns of Recall-Voting Sensitive Funds

This table reports voting patterns of mutual funds with the highest recall-voting sensitivities, relative to other funds. Our sample period runs from 2019Q3 through 2022Q2. *Vote against management* equals 1 if a fund votes against a management proposal or for a shareholder proposal and 0 otherwise. *Vote for dissident* equals 1 if a fund votes for the dissident slate in a proxy contest and 0 otherwise. *D(Top tercile of recall-voting sensitivity)* equals 1 if a fund's recall-voting sensitivity falls in the top tercile among all funds and 0 otherwise. All other variables are as defined in Table I. Uncontested proposals exclude routine ones, namely the ratification of auditors, company name change, stock splits, and an increase in the number of common shares. Standard errors, reported in parentheses, are clustered at the fund level. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Dependent variable:	Vote against management		Vote for dissident	
	Uncontested proposals (1)	(2)	Proxy contests (3)	(4)
<i>D(Top tercile of recall-voting sensitivity)</i>	0.014*** (0.005)	0.010** (0.004)	0.067*** (0.021)	0.045** (0.021)
Ln(Fund TNA)		-0.003*** (0.001)		-0.005 (0.005)
Expense ratio		1.359*** (0.389)		16.633*** (2.666)
Fund turnover ratio		-0.009*** (0.002)		0.006 (0.014)
Past 12-month fund alpha		0.099 (0.142)		1.595* (0.866)
Fund family ownership		-0.272*** (0.043)		0.340 (0.309)
Ln(Holding horizon)		0.001 (0.001)		-0.009 (0.011)
Proposal FEs	Y	Y	N	N
Meeting FEs	N	N	Y	Y
Observations	9,848,899	9,209,686	3,826	3,676
R-squared	0.615	0.621	0.421	0.442
%(Dependent variable = 1)	11.8%	11.5%	33.8%	33.6%

Table IX: Recall-Voting Sensitivity and Fund Flows

This table reports results for the relation between the recall-voting sensitivity of a mutual fund and its fund flows. Our sample period runs from 2019Q3 through 2022Q2. *High inst. share* refers to mutual funds for which more than 50% of their assets are owned by institutional investors. *Low inst. share* refers to funds for which no more than 50% of their assets are owned by institutional investors. For each month, we rank mutual funds by their 12-month 3-factor alphas and generate a ranking score (*Rank*) that ranges from 0 (the lowest) to 1 (the highest). We then construct three performance-rank variables.  $Low_{i,t-1} = \text{Min}(\text{Rank}_{i,t-1}, 0.2)$ ,  $Mid_{i,t-1} = \text{Min}(0.6, \text{Rank}_{i,t-1} - Low_{i,t-1})$ , and  $High_{i,t-1} = \text{Rank}_{i,t-1} - Low_{i,t-1} - Mid_{i,t-1}$ . All other variables are as defined in Table I. Standard errors, reported in parentheses, are double-clustered at the fund and year-month levels. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: Monthly fund flow (%)					
	Only lending funds					All funds
	(1)	(2)	(3)	High inst. share (4)	Low inst. share (5)	(6)
Recall-voting sensitivity	0.2397** (0.107)	0.2464** (0.105)	0.2208** (0.105)	0.3763** (0.179)	0.0161 (0.118)	0.2111* (0.107)
<i>D</i> (Lending fund)						0.0061 (0.062)
Past 12-month 3-factor alpha	0.7883*** (0.144)					
Past 12-month style-adj. return		0.0450*** (0.006)				
Low performance rank			2.6931* (1.374)	2.3314 (1.586)	1.8196 (1.878)	3.4757*** (0.991)
Mid performance rank			1.3115*** (0.209)	2.0853*** (0.315)	0.4449** (0.218)	0.8993*** (0.123)
High performance rank			4.5356** (1.696)	6.6077*** (2.206)	1.2916 (1.989)	6.2667*** (1.189)
Ln(Fund TNA)	-0.0048 (0.027)	0.0025 (0.028)	-0.0133 (0.027)	-0.0083 (0.038)	-0.0170 (0.046)	-0.0323* (0.019)
Expense ratio	-0.0483 (0.104)	-0.0820 (0.102)	-0.0610 (0.106)	-0.3302 (0.196)	-0.0473 (0.131)	0.0154 (0.058)
Fund turnover ratio	0.0005 (0.001)	0.0005 (0.001)	0.0006 (0.001)	-0.0012 (0.001)	0.0020* (0.001)	-0.0002 (0.000)
Ln(Fund age)	-0.7493*** (0.092)	-0.7452*** (0.091)	-0.7311*** (0.091)	-0.7736*** (0.124)	-0.6110*** (0.119)	-0.8207*** (0.061)
Institutional share	-0.0015 (0.001)	-0.0015 (0.001)	-0.0016 (0.001)	-0.0004 (0.004)	-0.0033 (0.003)	0.0007 (0.001)
<i>D</i> (Index fund)	0.6688*** (0.160)	0.5963*** (0.162)	0.6788*** (0.159)	0.7538*** (0.197)	0.3654* (0.201)	0.5782*** (0.120)
Investment style FEs	Y	Y	Y	Y	Y	Y
Year-month FEs	Y	Y	Y	Y	Y	Y
Observations	64,900	63,037	64,900	37,111	27,789	166,234
R-squared	0.036	0.038	0.038	0.047	0.029	0.037

Table X: Recall-Voting Sensitivity and Funds' Lending Income

This table reports results for the relationship between the recall-voting sensitivity of a mutual fund and its lending income. Our annual panel runs from 2019 through 2022. *Lending income (%)* is the percentage of fund TNA that is attributable to securities lending revenue. *Fraction of assets on loan* is the market value of loaned shares divided by a fund's portfolio value. All variables are as defined in Table I. Standard errors, reported in parentheses, are clustered at the fund level. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Dependent variable:	Lending income (%)	
	(1)	(2)
Recall-voting sensitivity	-0.0149** (0.007)	-0.0110* (0.006)
Fraction of assets on loan	0.0119*** (0.004)	0.0107*** (0.004)
Ln(Fund TNA)		-0.0113 (0.007)
Expense ratio		0.8335 (0.784)
Fund turnover ratio		0.0060 (0.010)
Ln(Fund age)		-0.0006 (0.006)
Institutional share		-0.0120 (0.024)
<i>D</i> (Index fund)		0.0381** (0.018)
Year FEs	Y	Y
Observations	7,043	7,038
R-squared	0.011	0.015

## Appendix A. Securities on Loan and No-Show Occurrences

As mentioned in Section IV.B, a lending fund may refrain from recalling shares for voting if it determines that the benefit of securities lending outweighs the benefit of voting a particular proxy. In this section, we examine the relationship between a mutual fund’s securities on loan and nonparticipation in voting, which we term “no-show.” In our sample, 6.5% of the positions are on loan.

We are able to approximate funds’ no-show occurrences based on quarter-end holdings data, the construction of which follows the procedure outlined in [Brav et al. \(2024\)](#). “No-shows” are fund-event observations that satisfy the following criteria: (i) A fund has cast at least one recorded vote during our sample period. (ii) The fund has held shares in a stock from quarter-end  $Q - 2$  to quarter-end  $Q$ , where  $Q$  is the quarter of the record date. We set the requirement for holdings status to  $Q - 2$  to rule out frequent inter-quartile portfolio changes undertaken by some funds; the results are similar if we drop the  $Q - 2$  filter. (iii) There are no disclosed votes by the fund in the stock during the shareholder meeting. With these criteria, 15.1% of funds on average exercise a no-show in a given meeting. This turnout rate is consistent with rates reported in prior studies that estimate the overall rate of investor participation at about 75 percent ([Zachariadis, Cvijanovic, and Gronen-Xu, 2020](#)).

Column (1) of Table [A2](#) shows that funds that lend out shares of a portfolio firm are 7.2 percentage points less likely to participate in voting at the company’s shareholder meeting, controlling for fund-level characteristics and meeting fixed effects. This effect is substantial given that the unconditional probability of no-shows is 15.1%. We then study whether the relationship between no-shows and securities on loan differs between ESG funds and non-ESG funds. Indeed, as column (2) reports, ESG funds are 6.8 percentage points more likely than non-ESG funds to vote their shares that are on loan. Unconditionally, ESG funds are also 9.0 percentage points more likely to participate in voting, else being equal. These results suggest that ESG funds are more responsible voters, who appear to attach a higher value to governance via voice.

Not surprisingly, when funds recall their shares, they are more likely to vote their shares. A

“no-show” is more likely when a fund’s past performance is weaker or its family’s stake is smaller, both of which would raise the cost of recalling shares for voting proxies, relative to the benefits. Interestingly, funds that have a low turnover ratio, many of which are passively managed funds, are more likely to skip voting. This is likely due to the fact that passive funds rely more on securities lending income, which makes share recalls more costly on average.<sup>20</sup> Columns (3) and (4) further report that our results are qualitatively similar when we control for fund-quarter fixed effects, which capture time-varying fund characteristics.

---

<sup>20</sup>[Brav et al. \(2024\)](#) find that passively managed funds, which are significantly more likely to lend out their shares, are no more likely than active funds to skip voting in proxy contests. Our results are not inconsistent with theirs as the vast majority of our sample meetings are uncontested, while proxy contests are high-stakes voting events where the marginal value of a vote is significantly higher even for (passive) funds that rely more heavily on lending income.

Table A1: Mutual Fund Recall Policies

Recall policy group	Classification	Number (%) of funds	Example
1	“Case by case”	1,551 (65.9%)	Invesco’s funds may occasionally participate in a securities lending program. In circumstances where shares are on loan, the voting rights of those shares are transferred to the borrower. If the security in question is on loan as part of a securities lending program, Invesco may determine that the benefit to the client of voting a particular proxy outweighs the benefits of securities lending. In those instances, Invesco may determine to recall securities that are on loan prior to the meeting record date, so that we will be entitled to vote those shares. There may be instances where Invesco may be unable to recall shares or may choose not to recall shares. The relevant portfolio manager will make these determinations.
2	“Generally recall”	109 (4.6%)	From time to time, certain MFS Funds may participate in a securities lending program. In the event MFS or its agent receives timely notice of a shareholder meeting for a U.S. security, MFS and its agent will attempt to recall any securities on loan before the meeting’s record date so that MFS will be entitled to vote these shares.
3	“Generally no recall”	172 (7.3%)	It is McKee’s practice to generally not recall securities unless there is a specific issue that we feel warrants forfeiting the securities lending income. It is generally believed that in most cases the certainty of the securities lending income outweighs the potential, but unknown benefit, of the proxy vote.
0 (omitted group)	No mention of recall policy	520 (22.1%)	
Total		2,352	

Table A2: Mutual Funds' Securities on Loan and No-Show Occurrences

This table reports results for the relation between a mutual fund's securities on loan and its participation in proxy voting. Our sample period runs from 2019Q3 through 2022Q2. *No-show* is coded as 1 if a fund holds a firm's shares at quarter ends  $Q - 2$  through  $Q$ , where  $Q$  is the quarter in which the record date falls and there is no disclosed vote by the fund. The variable is coded as 0 if a fund votes at the shareholder meeting.  $D(\text{Stock on loan})$  equals 1 if a fund lends out shares in quarter end  $Q - 1$  and 0 otherwise. All other variables are as defined in Table I. Standard errors, reported in parentheses, are clustered at the fund level. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: No-show			
	(1)	(2)	(3)	(4)
D(Stock on loan)	0.072*** (0.018)	0.121*** (0.021)	0.026*** (0.004)	0.051*** (0.007)
D(ESG fund)		-0.090*** (0.023)		
D(Stock on loan)*D(ESG fund)		-0.068*** (0.025)		-0.036*** (0.008)
D(Recall)	-0.013 (0.011)	-0.017* (0.010)	-0.018*** (0.004)	-0.019*** (0.004)
Ln(Fund TNA)	0.003 (0.004)	-0.000 (0.004)		
Expense ratio	9.973*** (2.186)	3.760 (2.860)		
Fund turnover ratio	-0.045*** (0.014)	-0.040*** (0.013)		
Past 12-month fund alpha	-1.227 (0.775)	-1.305* (0.767)		
Fund family ownership	-0.571* (0.341)	-0.574* (0.342)	0.004 (0.026)	0.002 (0.025)
Ln(Holding horizon)	0.010* (0.006)	0.017*** (0.005)	-0.001** (0.000)	-0.001* (0.000)
Meeting FEs	Y	Y	Y	Y
Fund-quarter FEs	N	N	Y	Y
Observations	1,453,914	1,453,914	1,452,597	1,452,597
R-squared	0.070	0.082	0.905	0.906
% (Dependent variable = 1)	15.1%	15.1%	15.1%	15.1%