

# ES Risks and Shareholder Voice

**Yazhou Ellen He**

University of Manchester, UK

**Bige Kahraman**

University of Oxford, UK and CEPR

**Michelle Lowry**

Drexel University, USA

We examine whether shareholder votes in environmental and social (ES) proposals are informative about firms' ES risks. ES proposals are unique in that they nearly always fail. We examine whether mutual funds' support for these failed proposals contains information about the ES risks that firms face. Higher support in failed ES proposals predicts subsequent ES incidents and the effects of these incidents on shareholder value. Examining the detailed records of fund votes, we find that agency frictions between a group of shareholders contribute to proposal failure. (*JEL* G24, G34, Q51, Q54)

Received September 3, 2020; editorial decision February 12, 2023 by Editor Itay Goldstein. Authors have furnished an Internet Appendix, which is available on the Oxford University Press Web site next to the link to the final published paper online.

Risks stemming from environmental and social (ES) issues are a topic of growing focus within regulatory, academic, and executive circles.<sup>1</sup> Many ES risks represent newly emerging, low probability events. It can be difficult to estimate such low probability events and even harder to estimate the associated monetary impacts given their uncertain nature. Shareholders increasingly

---

We thank Amil Dasgupta, David Chambers, Dragana Cvijanovic, Peter Illiev, Nick Gantchev, Umit Gurun, Oguzhan Karakas, Philipp Krueger, Marc Lipson, Colin Mayer, Vaska Atta-Darkua, Zacharias Sautner, Ruoke Yang, Ferhat Akbas, Raman Uppal, and Jared Stanfield and participants at Annual Philly Five Research Conference, Adams Smith Junior Conference, Bank of England, Climate Risk and Institutional Investors Conference, 2020 European Finance Association, ECGI Spotlight Series, LSE Systemic Risk Centre, Luxembourg Asset Management Summit, Mutual Funds, Hedge Funds and Factor Investing Conference, Sustainable Finance Forum, 2020 Consortium on Asset Management, MFA, Cass Business School, Essex Business School, Saïd Business School of the University of Oxford, and Manchester Business School for their useful comments. This paper was previously circulated under the title "Mutual Fund Voting on Environmental and Social Proposals." [Supplementary](#) data can be found on *The Review of Financial Studies* web site. Send correspondence to Bige Kahraman, [bige.kahraman@sbs.ac.uk](mailto:bige.kahraman@sbs.ac.uk).

<sup>1</sup> For instance, see [Krueger, Sautner, and Starks \(2020\)](#), [Ilhan et al. \(2022\)](#), and [Stroebel and Wurgler \(2021\)](#). [Giglio, Kelly, and Stroebel \(2020\)](#) provide an excellent literature review.

express their concerns about ES risks (Krueger, Sautner, and Starks 2020), and institutional investors in particular are considered to be a catalyst for change in these issues (Stroebel and Wurgler 2021). Increased shareholder participation in corporate decisions has the potential to increase firm value (Harris and Raviv 2010). However, there is still a paucity of evidence on whether shareholders are informed about ES risks. To this end, we study the voting behavior of a large group of shareholders, mutual funds, in ES-related shareholder proposals and evaluate whether their votes are informative about firms' ES risks.

Over the last decade, approximately 25% of all shareholder proposals have related to ES issues. Strikingly, the majority of these proposals are sponsored by asset management companies, who have a fiduciary duty to maximize shareholder value. However, ES proposals are unique in that the shareholder support almost never crosses the 50% threshold. While for some ES proposals there is a broad agreement that the proposal should be rejected, in many cases investors' views are more mixed. These proposals do not cross the 50% threshold, but a large set of mutual funds supports them. We test whether the concerns expressed by these shareholders contain information about firms' ES risks.

If a subset of shareholders has a good understanding of firms' ES risks, then the collective voice of these shareholders is expected to be informative. We refer to this hypothesis as the 'Informative ES votes' hypothesis. ES proposals with higher voting support (but that still do not pass and hence are not implemented) will represent signals about firms' potential ES risks. This generates our main testable prediction: the level of mutual fund support in failed ES proposals predicts future adverse ES incidents.

The alternative hypothesis is that the level of mutual fund support in failed ES proposals is not informative. Since ES proposals almost never pass, fund managers may perceive little benefit to devoting resources to evaluating these issues. Moreover, some funds might be supporting these proposals solely to further their ethical agenda. If such factors better describe funds' voting behavior, then we do not expect to find a relation between support in failed ES proposals and future ES incidents.

We distinguish between these hypotheses by taking advantage of the detailed data (provided by ISS) on shareholder proposals, which allows us to identify ES proposals, the specific focus of each proposal, and the proposal's sponsor. We complement ISS data with data from RepRisk, which is a data science company specializing in ESG risk research. RepRisk screens over 80,000 public sources (including media, regulatory, and commercial documents) in 20 different languages on a daily basis to capture company-specific adverse ESG incidents. A key advantage of using the RepRisk data is that we can directly observe incidents stemming from ES issues and link any negative abnormal returns to these incidents.

Our findings show that, although the overwhelming majority of ES proposals fail, the level of mutual fund support for these failed proposals is informative

regarding firms' future ES risks. As such, the results support the "Informative ES Votes" hypothesis. First, using RepRisk data, we quantify the extent of negative news reports about each firm on specific environmental and social issues, as a proxy for ES-related incidents. Firms with proposals that gleaned higher fund support (but that still didn't pass and thus were not implemented) have more negative ES incidents in the following 1 to 3 years.<sup>2</sup> A one-standard-deviation increase in voting support among failed ES proposals predicts 9%–13% more ES incidents in the next 3 years.

Several points related to these findings are worth highlighting. First, it is the degree of support, rather than the mere existence of an ES proposal, that predicts subsequent ES incidents. This mitigates concerns related to sample selection, ensuring that results are not driven by the greater tendency of certain firms to receive ES proposals. Second, the content of the proposal is linked to the type of subsequent incidents, for example, with support among environmental (social) proposals predicting environmental-related (social-related) incidents, which shows the tightness of the link between the proposal and the nature of incidents. Third, results are robust to a wide array of tests using firm fixed effects as well as alternative definitions of incidents, samples, and time frames. Importantly, we continue to find predictability after controlling for firms' past incidents and ES scores, indicating that information contained in ES votes is over and above the information encapsulated in these variables.

We find that mutual funds' votes are informative not only about ES incidents but also more broadly for overall future firm performance. There is a significant negative relation between fund support in ES proposals and subsequent abnormal returns.<sup>3</sup> In economic terms, firms with higher fund support in their failed ES proposals underperform firms with lower support by 30 basis points per month over the 1 year following the meeting date. These results show that ES votes contain information beyond what the market knows.

Further evidence indicates that ES incidents represent the main channel underlying the negative long-run abnormal returns experienced by firms with highly supported ES proposals. Among these firms, the daily abnormal returns on ES incident days are significantly negative, while those on nonincident days are indistinguishable from zero.

We also conduct difference-in-differences tests, where we compare daily abnormal returns on days with or without ES incidents for firms with high and low support in their failed ES proposals. On days without ES incidents, abnormal returns are on average zero for all firms in the sample. Consistent with the "Informative ES votes" hypothesis, we find that the abnormal returns on ES

<sup>2</sup> Ertimur, Ferri, and Stubben (2010) show that management rarely implements proposals that fail to gain more than the threshold level of support (generally 50%), and we confirm that this is the case in our sample.

<sup>3</sup> We conduct a series of robustness tests to ensure that these relations are not driven by fund disinvestments that occur immediately following the annual meeting, for example, in direct response to the fund vote.

incident days are significantly different between firms with highly supported (but failed and thus nonimplemented) ES proposals versus firms whose ES proposals received lower levels of support. Among the first group, subsequent ES incidents cause significant declines in stock value, whereas among the second group there are no significant valuation effects. In sum, this analysis shows that ES votes predict not only the frequency of ES incidents but also the costliness of these incidents to the firm.

In aggregate, our findings support the ‘ES Informative Votes’ hypothesis. The predictive power of mutual funds’ votes extends beyond the predictive power of past ES incidents and other firm-specific factors, and the long-term negative alphas indicate that it goes beyond what the market already knows. This finding motivates us to examine the source of mutual funds’ information advantage. It is difficult to identify any private information that mutual funds may employ, and Kacperczyk and Seru’s (2007) findings highlight fund managers’ use of public information. Hence, we analyze the extent to which fund votes are associated with publicly available information that plausibly proxies for firms’ ES risks. Controlling for firm fixed effects, we find that information encapsulated in the ES-related experiences of firms in the same industry and firm’s past left-tail alphas both play significant roles in explaining mutual funds’ votes (with ES-related experiences in the same industry being economically more important). The fact that results are obtained after firm fixed effects indicates that fund votes are not solely based on stable firm characteristics.

The strong relations between mutual fund votes and subsequent firm outcomes raise the question of why more mutual funds do not vote for these proposals. Put differently, why do these proposals always fail? In the last portion of the paper, we examine whether agency frictions incentivize certain fund managers to oppose ES shareholder proposals. First, more short-term focused funds will be less supportive if these initiatives have short-run costs along with potential gains that are expected only over the long-run, and the market does not fully incorporate the positive long-run impacts into price (Benabou and Tirole 2010).<sup>4</sup> Second, funds that are friendlier to management will oppose ES proposals as a way to appease managers who oppose these initiatives, particularly if such opposition provides quid pro quo type benefits (Cvijanović, Dasgupta, and Zachariadis 2016; Davis and Kim 2007; Francis and Philbrick 1993).<sup>5</sup> Findings indicate that both of these channels contribute to the failure of ES proposals. Moreover, the informativeness of mutual fund support for future firm ES-related risks is predominantly driven by the degree of

<sup>4</sup> Recent evidence suggests that the market underestimates long-term ES risks (see, e.g., Hong, Li, and Xu 2019; Cuculiza et al. 2022). Arguably, initiatives that aim to address these risks are similarly underappreciated by the market.

<sup>5</sup> The fact that these initiatives are put on the firm’s proxy as a shareholder proposal indicates that management opposed the initiative, and, consistent with this, management recommends against all these proposals.

support coming from shareholders who are less prone to such agency problems. In other words, voting support among less agency-prone investors represents a stronger signal regarding the underlying ES problems at the firm.

Our analyses are based on the premise that voting support is driven by investors' assessments of firms' ES-related risks. While control variables and fixed effects control for many sources of correlated omitted variables, to sharpen the identification, we also provide a complimentary test in which we analyze voting in a tight window around a quasi-natural experiment that arguably increased the perceived value of having strong environmental policies. We follow [Liang and Renneboog \(2017\)](#) and [Dyck et al. \(2018\)](#) and focus on the period around the April 2010 BP Deepwater Horizon oil spill. This event was informative regarding the potential costs of environmental disasters and as such highlights the value of robust environmental policies. We compare investors' votes on failed shareholder proposals related to environmental versus other issues, prior to versus following the BP oil spill; we predict that support for environmental proposals should increase by a greater amount. In addition, we predict that the BP event should have a larger impact on the more agency-prone investors, who were more reluctant to support these initiatives. Our triple-difference specification provides support for our predictions. First, compared with other shareholder proposals, we find greater support for the environmental proposals following the BP event. Second, we find that this increased support was pronounced within more agency-prone investors. The variation in support around the time of the BP shock and across different groups of investors mitigates concerns related to correlated omitted variables. This analysis provides evidence that voting support is in fact driven by investors' assessments of firms' ES-related risks, thereby increasing confidence in our conclusions.

Our paper is related to a number of streams of literature. First and foremost, our paper contributes to the literature that aims to understand the extent to which shareholders can evaluate firms' ES-related risks. Thus far, most evidence regarding this has focused on private engagements.<sup>6</sup> Our focus on shareholder proposals is motivated by the fact that these represent an alternative mechanism to influence firm policies. Moreover, different from engagements, proposals enable a broad group of shareholders to voice their opinions.

A closely related paper from the private engagements literature is a contemporaneous study by [Hoepner et al. \(2022\)](#), which relies on proprietary data from a single institutional investor. They show that many of the engagements of this particular investor have been successful, which contrasts with our finding that ES proposals virtually always fail. They also find that *successful* engagements reduce downside risk, whereas we find that support for ES proposals that *fail* (and are thus not implemented) predicts costly ES

<sup>6</sup> See, for instance, [Dimson, Karakas, and Li \(2015, 2018\)](#), [Hoepner et al. \(2022\)](#), and [Barko, Cremers, and Renneboog \(2022\)](#).

incidents in the future. The contrast in findings arguably stems from several factors, which contribute to an increased understanding of the potential for private market solutions to ES issues. It is important to note the fundamental differences between these two forms of shareholder activism. First, shareholder proposals may represent more contentious issues, as evidenced by the fact that asset management companies bring proposals when private discussions fail (Krueger, Sautner, and Starks 2020). Second, unlike engagements, the potential for shareholder proposals to pass the 50% threshold and influence firm policies requires support across a disperse group of shareholders who likely have heterogenous incentives. Unlike Hoepner et al. (2022) setting, which takes into account the interactions between a *single* shareholder and management, our shareholder proposal setting enables us to examine the influence of this heterogeneity. Our finding that this form of activism has thus far been ineffective, despite the informativeness of investors' support for future firm outcomes, highlights the impact of these divergent incentives.<sup>7</sup>

Second, much research that aims to understand the relevance of ES risks has relied on ES ratings as signals of firms' environmental and social policies. However, such ratings have been recently subject to extensive criticism because of data coverage problems and inconsistencies.<sup>8</sup> Ratings are conducted by intermediaries, and, as such, may be subject to differences in methodology and manipulation. Our finding that shareholder votes on failed ES proposals predict subsequent ES incidents highlights the informativeness of views expressed by those (in particular those who are least subject to agency-related biases) with "skin in the game."

## 1. Data and Measures

### 1.1 Data sources

Our main analysis compiles data from CRSP, Compustat, and ISS Voting Analytics. ISS contains information on all shareholder proposals, across nearly all U.S. publicly traded firms. This includes the specific focus of each shareholder proposal as well as the identity of the person, firm, or organization sponsoring the proposal. For each proposal, the data also report ISS's own recommendation and the individual voting records of each mutual fund investor.

The ES proposals in our sample represent shareholder proposals that appear on the final proxy and are voted on by shareholders. The fact that a shareholder proposal is up for vote provides a strong signal that management opposes

<sup>7</sup> A number of papers study institutional ownership in low ES firms. Brandon et al. (2022) and Bolton and Kacperczyk (2020) provide evidence of divestment mostly in Europe, consistent with Dyck et al. (2018) and Liang and Renneboog (2017). Related to our paper, Starks, Venkat, and Zhu (2023) show that investors with longer horizons prefer high ESG firms. Different from this paper, our focus is on "voice," and we examine the informativeness of "voice" for future ES incidents.

<sup>8</sup> See, for instance, Brandon, Krueger, and Schmidt (2021) and Berg, Koelbel, and Rigobon (2022).

the initiative. As discussed by [McCahery, Sautner, and Starks \(2016\)](#) and [Krueger, Sautner, and Starks \(2020\)](#), proposal sponsors (in particular, asset management companies) generally discuss issues with management prior to bringing a proposal, and the appearance of a proposal on the final proxy generally indicates that they have been unable to reach an agreement and the proposal contains somewhat contentious issues.

ISS categorizes proposals based on the issue. Our main analyses focus on the subset of proposals related to ES issues, which ISS identifies by the resolution type “SRI.” During our sample period, there are a total of 52 SRI categories with shareholder proposals. We refine this set in two ways. First, we review the more detailed proposal descriptions in ISS Voting Analytics (*Item Desc*) to check for potential inconsistencies and data errors. We identify a subset, a total of 10 categories, which either don’t have clear association with ES issues (e.g., a proposal titled “Report on Outsourcing”) or appear to be a data error (e.g., a proposal titled “Report on Pay Disparity” turns out to be about executive compensation as opposed to the gender pay gap).<sup>9</sup> Second, we review proposals for which the ISS classification is missing.<sup>10</sup> We read through the ISS Voting Analytics brief (*AgendaGeneralDesc*) and detailed descriptions (*ItemDesc*), and we select the ones that have the same keywords as our refined set of ES proposals (e.g., “Climate Change,” “Gender Pay Gap”) or infer from reported information (e.g., “Glass Ceiling”). For the few with generic proposal titles (e.g., “Company Specific-Governance Related”), we make use of the detailed information in *ItemDesc*. In this way, we identify 13 additional categories. More detailed information on proposal classification, as well as the complete list of all ES-related categories, is available in [Internet Appendix Table A1](#). The most common ES proposals in our sample include “Social Proposal” (164), “Improve Human Rights Standards or Policies” (150), “Report on Sustainability” (146), “GHG Emissions” (122), and “Climate Change” (101). Our final sample has 1,658 ES proposals in 55 categories.

We also rely on the ISS Voting Analytics database to obtain the votes of mutual funds. ISS provides detail on whether each fund voted for, voted against, or abstained on each proposal in each firm-meeting. Throughout our main analyses, mutual fund support is defined as voting for the proposal, and all other actions (voting against and abstaining) are categorized together as being opposed.<sup>11</sup>

For each proposal, ISS reports the name of the person or entity sponsoring the proposal. Based on name and extensive Google searches, we hand collect information about sponsor type and classify sponsors into three groups: asset management companies, religious groups, and other, where other includes

<sup>9</sup> ISS classifies all other executive-compensation-related items as governance proposals.

<sup>10</sup> In ISS, the resolution type information is missing nearly 40% of the time.

<sup>11</sup> About 20% of mutual fund votes are “Abstain.” We find no significant differences between voting against and abstaining. We also find no meaningful differences in results if we exclude index funds from our sample.



unions, NGOs, and individuals. [Internet Appendix Table A2](#) lists the five most-frequent sponsors within each sponsor type.

We complement our main data sources with data from RepRisk. RepRisk is an environmental, social, and corporate governance data science company, specializing in ESG and business-conduct risk research.<sup>12</sup> Beginning in 2007, RepRisk began screening over 80,000 public sources (including media, regulatory, and commercial documents) in 20 different languages on a daily basis for adverse ESG incidents. Across these sources, they search for 28 mutually exclusive ESG issues that were defined in accordance with key international standards as set by, for example, the World Bank and OECD, plus three other categories, which are more loosely named “other environmental,” “other social,” and “other governance.” These issues are then classified into subcategories of environmental (e.g., climate change), social (e.g., poor employment conditions), and governance (e.g., executive compensation). We use data on the environmental and social subcategories. Examples of “S” issues classified by RepRisk include “poor employment conditions,” “occupational health and safety issues,” “human rights abuses and corporate complicity,” “discrimination in employment,” and “child labor.” Examples of “E” issues are “climate change,” “GHG emissions and global pollution,” “overuse and wasting of resources,” and “impacts on landscapes ecosystems and biodiversity.”<sup>13</sup>

Two points related to RepRisk data are worth noting. First, for any event that is covered by multiple news outlets, RepRisk eliminates these duplicates. Second, for any event that relates to multiple issues, for example, “impacts on landscapes ecosystems and biodiversity” and “occupational health and safety issues” as in the case of BP Deepwater Horizon oil spill, RepRisk records both of these underlying factors. To obtain a more comprehensive measure of ES-related incidents, we take advantage of this level of detail in the data. For each firm-month, we use RepRisk data on the total number of issues, as reported in the media, that relate to negative environmental and social incidents.<sup>14</sup> For conciseness and ease of exposition, we refer to these issues as ES incidents. For further analyses, we also use the RepRisk’s finer categories on solely E issues and solely S issues.

RepRisk data covers 2,153 unique firms beginning in 2007, a total of 17,536 firm-years. Within this sample, RepRisk reports 28% of firm-years and 63% of unique firms as having one or more negative ES incidents. The most common issues include environmental-related factors, such as “Impacts on landscapes,

<sup>12</sup> Highlighting the quality of RepRisk data, a wide array of entities, including banks, insurance companies, asset managers, and hedge funds, utilize RepRisk for their business decisions. Recent academic papers by [Graham et al. \(2022\)](#), [Li and Wu \(2020\)](#), and [Gantchev, Giannetti, and Li \(Forthcoming\)](#) also rely on RepRisk.

<sup>13</sup> A full list of the 28 RepRisk issues, as well as more detail on RepRisk, can be found online (<https://www.reprisk.com/content/static/reprisk-methodology-overview.pdf>).

<sup>14</sup> Later, we will show the robustness of results when we use alternative measures (such as the number of events as opposed to the number of issues) constructed based on RepRisk.



ecosystems, and biodiversity” and “Local pollution,” as well as social-related factors, such as “Poor employment conditions” and “Occupational health and safety issues.”

For descriptive purposes and robustness tests, we also obtain MSCI KLD data (available through 2014), which represents a score for each firm-year that summarizes the firm’s ES profile. For each category, KLD summarizes a firm’s strengths and concerns. Our firm-year score represents the average of strengths minus concerns, across five main categories that are consistent with the definition of our ES proposals: product, community, employee relations, environment, and human rights.

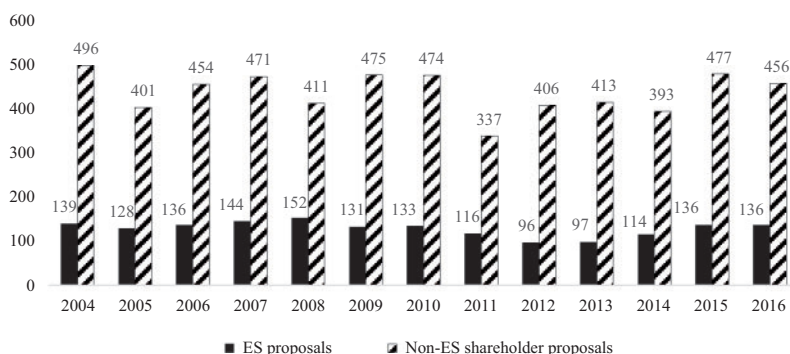
Our main sample of ES proposals and subsequent firm returns runs from 2004 to 2019. The beginning of our sample is dictated by the fact that mutual funds have only been required to report their votes to the SEC since 2003, and 2004 represents the first year with high quality data. We evaluate firm outcomes up to 3 years following the respective shareholder proposals, meaning we include shareholder proposals through 2016, and CRSP and Compustat data through 2019. Merging ISS votes data with CRSP and Compustat, we obtain a firm-year panel of 35,945 observations. This includes 1,196 firm-years with ES proposals (400 unique firms), 34,749 firm-years with no ES proposals (4,875 unique firms), and 2,733 firm-years with no ES proposals but with shareholder proposals on non-ES issues (1,010 unique firms). Analyses that require RepRisk data are restricted to 2007 and later.

## 1.2 Descriptive statistics

Figure 1 shows the number of shareholder proposals per year, categorized by whether they relate to ES issues (solid bars) or other issues (dashed bars). In the average year, there are 128 (median = 133) ES proposals, with 23% of all shareholder proposals relating to ES issues. While the number of ES proposals varies over time, we do not observe a strong time trend. This is consistent with Grewal, Serafeim, and Yoon (2016), who show that there was an upward trend in ES proposals between 1997 and 2002, though it is relatively flat throughout the remainder of our sample period.

A distinctive feature of ES proposals is that they hardly ever pass. Across our sample period, 15 ES proposals passed and 1,643 failed.<sup>15</sup> In comparison, 1,376 non-ES proposals passed and 4,288 failed. Panel A of Figure 2 shows the level of support over time for ES proposals. In panel A of Figure 2, we plot both ISS support and average mutual fund support. During the sample period, ISS support has increased dramatically; for instance, they recommended for less than 20% of ES proposals in 2004, compared to over 60% in 2016. Average

<sup>15</sup> Relative to Flammer (2015), we find a slightly lower number of passed ES proposals. The difference stems from a difference in sample, for example, with her analysis focusing on a somewhat broader category of “SRI proposals,” which appears to include some proposals that ISS does not identify as being related to either E or S issues. We have manually reviewed all shareholder proposals within our data to avoid misclassification. Further information on proposal classification is available in Internet Appendix Table A1.



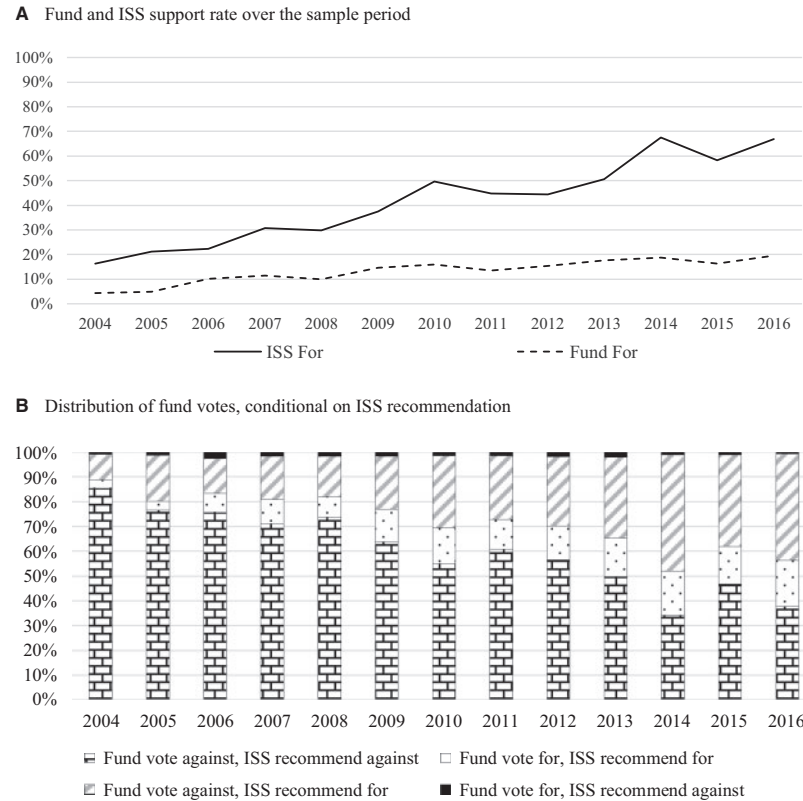
**Figure 1**  
Number of ES and non-ES proposals over time

The sample includes all firms with one or more shareholder proposals voted over the 2004–2016 period. For each year, we tabulate the total number of ES versus non-ES proposals.

support among mutual funds has also increased, from less than 5% in 2004 to approximately 20% since 2013; however, the levels of support remain low. Panel B of Figure 2 highlights this divergence. We categorize all fund-votes across all ES proposals in our sample into four bins: both ISS and the fund supports (solid bars), both ISS and the fund are against (bricked bars), only ISS supports (polka-dot bars), and only the fund supports (diagonal-lined bars). There are very few cases in which only the fund supports (less than 3% of proposals each year). The category with the greatest growth is cases in which only ISS supports, and this coincides with a dramatic decrease in the percentage of proposals that both ISS and the fund opposes.

Figure 3 depicts the frequency of each sponsor type. As shown in panel A, 53% of the ES proposals are sponsored by asset management companies, compared to 21% by religious groups and 26% by all other entities. The finding that more than half of all ES proposals are sponsored by asset management companies is striking, as these firm owners have a fiduciary duty to maximize shareholder value. Panel B of Figure 3 shows that asset management companies sponsor a total of around 3,000 proposals over our sample period, with ES proposals representing 23% of this set. Religious group sponsors, on the other hand, initiate far fewer proposals (less than 500) and ES issues are a greater 61% of all sponsored proposals. The remaining “other” group sponsors a considerable number of proposals (2,514 in total); however, only 13% of their proposals focus on ES issues.

Internet Appendix Figure A1 provides further details about the types of issues on which ES proposals are focused. We categorize ES proposals into three groups: “action” includes proposals that are focused on the firm making specific changes (e.g., changes in investment policies); “disclosure” includes proposals that request the firm to provide more disclosure on their environmental and social policies; and, “other” includes proposals related to all

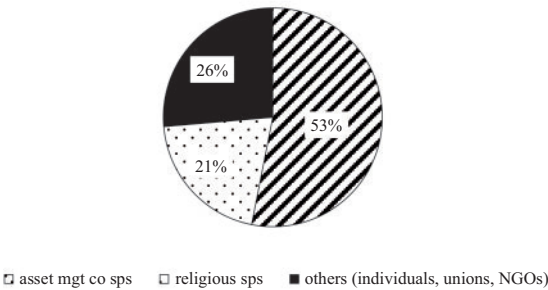


**Figure 2**  
**Distribution of fund votes and ISS recommendations on ES proposals over time**  
The sample includes all firms with one or more ES shareholder proposals, over the 2004–2016 period. In panel A, for each year, the solid line represents the percentage of proposals on which ISS recommends support for the proposal. The dashed line represents the average percentage of mutual funds that vote in favor of each proposal. panel B categorizes all mutual fund votes on ES proposals each year into one of four categories: both ISS and the fund supports, both ISS and the fund are against, only ISS supports, and only the fund supports, as described in the legend. Each year, we tabulate the percentage of votes that fall into each category.

relatively rare issues, such as board oversight (e.g., to establish a committee) and proposals aimed at influencing suppliers (e.g., suppliers to adopt). Details on this classification are included in captions, as well as in Table A1 in the appendix. Disclosure proposals are the most common (866), and this is closely followed by action proposals (621). Both asset management companies and religious groups sponsor large numbers of both types of proposals.

Our analyses are based on the premise that management do not voluntarily implement failed shareholder proposals. This presumption is backed by both the prior literature and in-depth examination of our sample. As noted by Krueger, Sautner, and Starks (2020), the fact that the concern is being raised in the form of a shareholder proposal generally indicates that management has not

A Distribution of ES proposals, by sponsor type



B Distribution of ES and other shareholder proposals, by sponsor type

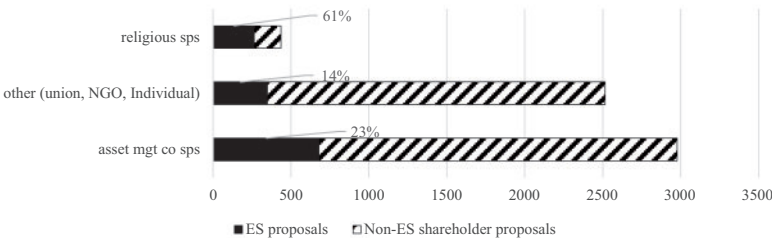


Figure 3  
Proposals by sponsor types

The sample in panel A includes all firms with one or more ES shareholder proposals, over the 2004–2016 period, and the panel shows the percentage sponsored by an asset management company (dashed portion), by a religious sponsor (white dotted portion), and by others (black solid portion, which includes individual, unions, and NGOs). Panel B includes both ES (solid bars) and non-ES (dashed bars) proposals over this period, and it shows the number of each proposal type that are sponsored by asset management companies, by religious sponsors, and by others. Finally, it tabulates the percent of all shareholder proposals (by each sponsor type) that relate to ES issues.

voluntarily agreed to the initiative. Consistent with such opposition, [Ertimur, Ferri, and Stubben \(2010\)](#) find an implementation rate of only 3.2% across a set of failed proposals. An in-depth examination of our sample yields similar conclusions. We manually examine all proposals with a support rate higher than 40%. Following [Gantchev and Giannetti \(2021\)](#), we review the proxy filing announcing the annual meeting at which the proposal is to be voted, the next meeting’s proxy filing, and all 8-K reports between the two meetings. A close inspection reveals that only one proposal within our set has been implemented. As a supplementary test, we examine the changes in firms’ ES scores in the year of voting and the year that follows. Had management implemented the proposal, one may expect to see a change in the firms’ ES scores; however, we confirm that this is not the case ([Internet Appendix Table A3](#)).

**Table 1**  
**Descriptive statistics**

	All ES firms-years #unique firms = 400 # firm-yr = 1,196	All non-ES firms-years #unique firms = 4,875 # firm-yr = 34,749		Non-ES firms-years with 1+ SH props #unique firms = 1,010 # firm-yr = 2,733	
	Average	Average	Avg. diff	Average	Avg. diff
<i>#Proposals</i>	13.42	7.53	5.89***	11.13	2.28***
<i>#Shr proposals</i>	2.63	0.12	2.51***	1.53	1.11***
<i>#ES proposals</i>	1.39	0.00	1.39***	0.00	1.39***
<i>MV (millions)</i>	46,374.34	4,468.47	41,905.87***	22,378.52	23,995.83***
<i>M/B</i>	3.02	2.80	0.22*	2.80	0.22
<i>ROA</i>	0.16	0.09	0.06***	0.12	0.03***
<i>Dividend yield</i>	0.02	0.01	0.01***	0.02	0.00
<i>Cash</i>	0.11	0.18	-0.07***	0.12	-0.01*
<i>Sales growth</i>	0.06	0.14	-0.08***	0.08	-0.02*
<i>Past firm return</i>	0.13	0.13	-0.00	0.14	-0.01
<i>Amihud illiquidity</i>	0.02	0.10	-0.08***	0.03	-0.01***
<i>Inst ownership</i>	0.71	0.66	0.05***	0.72	-0.01*
<i>IVOL</i>	0.02	0.02	-0.01***	0.02	-0.00***
<i>ES score</i>	-0.70	-0.11	-0.59***	0.02	-0.68***

The table shows the descriptive statistics for our sample, presenting statistics at the firm-year level. The first column includes 1,196 firm-years with one or more ES proposals. Column 2 includes 34,749 firm-years without ES proposals, and column 3 shows the difference between column 1 and column 2. Column 4 includes the subset of 2,733 firm-years from column 2 with one or more shareholder proposals (none of which pertain to ES issues), and column 5 shows differences between columns 1 and 3. Asterisks are used to represent the significance levels. Variables related to the number of proposals represent the total number of each proposal type at the annual shareholder meeting. Table A1 in the appendix defines all variables. Past return and Amihud illiquidity are calculated in the 12 months preceding the meeting date. Institutional ownership is as the quarter-end before the meeting date. All other variables are measured as of the last fiscal year-end before the meeting date. *ES score* is based on the more limited 2004–2014 sample period, because of the availability of data. \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

Table 1 describes the characteristics of the firms receiving these failed ES proposals. We compare the 1,196 firm-years (400 unique firms) with ES proposals to two alternative samples: a broad sample of 34,749 firm-years (4,875 unique firms) with no ES proposals, and a subsample of 2,733 firm-years (1,010 unique firms) with at least one shareholder proposal but no ES proposals.<sup>16</sup> Compared to all firm-years with no ES-proposals, we find that firm-years with ES-proposals tend to have a greater total number of proposals (13.4 vs. 7.5, on average), including more shareholder proposals (2.6 vs. 0.1, on average). The firms are also significantly larger (average market capitalization of \$46.4 billion, vs. \$4.5 billion) and have higher ROA (0.16 vs. 0.09). They have higher market-book (3.02 vs. 2.80) but lower sales growth (0.06 vs. 0.14). Finally, they have significantly lower ES scores: -0.7, vs. -0.1 across all firms with no ES proposals. Similar conclusions hold when we compare to the subsample of firms with one or more shareholder proposals (but no ES proposals). In sum, there are some differences between firms with and without ES proposals. In the following sections, we address potential concerns arising from this in a number of ways: using control variables alongside a range of

<sup>16</sup> The proposals are widely dispersed across firms. During our sample period, most firms have either 1 (38% of firms) or 2 (21% of firms) ES proposals. Only 4% of firms have a proposal in 10 or more years across our entire sample period.

fixed effects, estimating effects on the extensive versus intensive margin (i.e., whether the results are driven by the presence of an ES proposal or by the level of support within these proposals), and testing the tightness between the proposal content and type of incidents (i.e., support among environmental (social) proposals predicting environmental-related (social-related) incidents). Table A1 in the appendix defines the variables.

## 2. Investor Support for Failed ES Proposals and Subsequent Firm Outcomes

In this section, we conduct empirical tests examining the informativeness of shareholder votes across a broad group of investors, on ES-related issues. As discussed earlier, in stark contrast with non-ES proposals, the overwhelming majority of ES proposals do not pass.

As outlined in the introduction, we posit two competing hypotheses regarding the informativeness of shareholder votes in failed ES proposals. The “Informative ES Votes” hypothesis states that mutual fund votes are informative regarding firms’ ES risks. The testable prediction of this hypothesis is that ES proposals with higher fund support (but that still do not pass and hence are not implemented) predicts future adverse ES incidents. The alternative hypothesis is that mutual fund votes are not informative regarding firms’ ES risks; therefore, we would not expect to find a relation between the support levels and future ES incidents.

Valero Energy provides an illustrative example. On the proxy statement preceding the company’s April 2011 meeting, there was an ES shareholder proposal to provide a “Report on Accident Risk Reduction Efforts” (*ItemDesc*). ISS recommended voting for the proposal, and the proposal received a support rate of 43%. Consistent with the fact that the proposal did not exceed the 50% threshold level, we find no evidence of Valero generating such a report. Moreover, consistent with the presence of safety-related risks that were not being adequately addressed, in December 2012, the media reported that a subcontractor was killed, and two others were severely burned following chemical exposure at Valero’s Memphis refinery. The incident then became the subject of a costly wrongful death and injury lawsuit. The mutual fund votes in the Valero Energy case were informative regarding the firm’s future risks.

### 2.1 Investor support for failed ES proposals and future ES incidents

Our overarching objective is to test the informativeness of mutual funds’ votes in failed ES proposals. As such, we first focus on examining the relation between the level of vote support and subsequent ES incidents, as captured by RepRisk.

In our baseline regression specifications, the beginning of the measurement window is the beginning of the first full month after the annual meeting. Thus, for an annual meeting during April, the window begins on May 1st. Across various tests, we analyze predictive windows of varying durations, for example,

ranging from 1 year to 2 years, following this start date. For conciseness and ease of exposition, we simply refer to these windows as 1 year or 3 years following the annual meeting. We use the full sample of firm-years with CRSP, Compustat, and ISS Voting Analytics data over our sample period. Table 2 reports the results.

Independent variables of interest capture both the *presence* of an ES shareholder proposal and the *level of support* (conditional on the presence of a proposal). First, we include a dummy variable, *Failed ES Proposal*, which equals one if there was a failed ES proposal in the year. Second, we interact this variable with the support rate, *Failed ES proposal*  $\times$  *Support for ES*. In the case of multiple proposals for a single firm-year, we use the average support. We employ two measures of support: mutual fund support in columns 1–3 of Table 2, and ISS support in columns 4–6.

The dependent variable is a proxy for ES incidents, that is, ES negative news as captured by RepRisk. The comprehensiveness of the RepRisk data suggests that this is a good proxy for ES incidents at the firm. Specifically, we use the natural logarithm of one plus the total number of negative ES issues of the firm, as reported by RepRisk. Columns 1 and 4 focus on ES issues over the 1 year following the annual meeting where the shareholder vote occurs. In columns 2 and 5 (3 and 6), the dependent variable is measured as the number of issues over 2- (3-) year periods.

We use ordinary least squares (OLS) regressions, with standard errors clustered at the firm level. Firm characteristics presented in Table 1 are used as control variables, and regressions include firm and year fixed effects.<sup>17</sup> The final sample used in regressions includes 15,529 observations, for the period starting in 2007, when RepRisk data are available.

Panel A of Table 2 presents the results. Consistent with the “Informative ES votes” hypothesis, we find significantly positive coefficients for *Failed ES proposal*  $\times$  *Support for ES*. Using either mutual fund support or ISS support, and looking across the 1-, 2- and 3-year horizons, within firm-years with failed ES proposals, higher levels of support for ES proposals that failed and thus are not implemented predicts a higher rate of negative ES incidents in the future. Estimates in column 1 imply that a one-standard-deviation increase in mutual fund support predicts 13% more ES incidents over the 1 year after the annual meeting. Over 2- and 3-year horizons, a one-standard-deviation increase in mutual fund support predicts 9% more ES incidents. With regards to results with ISS support (columns 4–6), we find similar effects.

In panel B, we examine whether this result is driven by the high or low parts of the voting distribution. We substitute our continuous measure of voting support with one of two interaction terms: *Failed ES proposal*  $\times$  *High ES support* and *Failed ES proposal*  $\times$  *Low ES support*. *High (Low) ES support* is

<sup>17</sup> Because *Support for ES* is defined only for observations with at least one failed ES proposal, regressions include *Failed ES proposal*  $\times$  *Support for ES*, but not *Support for ES* by itself.



a dummy variable that equals one if voting support falls into the upper (lower) quartile, across all ES proposals within our sample. Findings indicate that our results come from the upper portion of the voting distribution. The coefficient for *Failed ES proposal* × *High ES support* is significantly positive, indicating

**Table 2**  
**Does support for ES proposals predict subsequent negative ES incidents?**

*A. All firm-years*

Support measure:	Mutual fund votes for			ISS recommendation for		
	Dep't var = <i>ES incidents</i>					
	1 year (1)	2 years (2)	3 years (3)	1 year (4)	2 years (5)	3 years (6)
<i>Failed ES proposal</i> × <i>Support for ES proposal</i>	0.730*** [3.483]	0.545** [2.558]	0.505*** [2.773]	0.249*** [3.661]	0.141** [2.135]	0.111* [1.933]
<i>Failed ES proposal</i>	-0.077 [-1.534]	-0.061 [-1.222]	-0.024 [-0.530]	-0.074 [-1.512]	-0.037 [-0.771]	0.008 [0.182]
<i>Cash</i>	0.105 [1.559]	0.158* [1.876]	0.103 [1.122]	0.101 [1.496]	0.156* [1.850]	0.102 [1.105]
<i>Sales growth</i>	-0.004 [-0.292]	-0.020 [-1.089]	-0.007 [-0.367]	-0.004 [-0.288]	-0.020 [-1.083]	-0.007 [-0.360]
<i>MB</i>	0.001 [0.611]	0.002 [0.873]	0.002 [0.778]	0.001 [0.630]	0.002 [0.896]	0.002 [0.803]
<i>ROA</i>	-0.082 [-1.145]	-0.058 [-0.712]	-0.053 [-0.588]	-0.082 [-1.147]	-0.059 [-0.725]	-0.055 [-0.603]
<i>Dividend yield</i>	0.688** [2.462]	0.969*** [2.927]	0.789** [2.220]	0.692** [2.477]	0.968*** [2.926]	0.787** [2.213]
<i>log MV</i>	0.093*** [6.214]	0.122*** [6.533]	0.143*** [7.132]	0.094*** [6.221]	0.122*** [6.539]	0.143*** [7.139]
<i>Amihud illiquidity</i>	0.271*** [3.607]	0.166* [1.660]	0.236** [2.103]	0.271*** [3.604]	0.165* [1.651]	0.235** [2.094]
<i>Inst. ownership</i>	-0.091** [-2.300]	-0.105** [-2.135]	-0.063 [-1.167]	-0.091** [-2.302]	-0.105** [-2.145]	-0.064 [-1.178]
<i>IVOL</i>	3.293*** [3.909]	3.167*** [3.009]	2.365** [2.061]	3.297*** [3.917]	3.183*** [3.027]	2.386** [2.080]
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15,529	15,529	15,529	15,529	15,529	15,529
R-squared	.755	.816	.850	.755	.816	.850

*B. Influence of low versus high part of voting distribution*

Support measure:	Mutual fund votes for			ISS recommendation for		
	Dep't var = <i>ES incidents</i>					
	1 year (1)	2 years (2)	3 years (3)	1 year (1)	2 years (2)	3 years (3)
<i>Failed ES proposal</i> × <i>High ES support</i>	0.178** [2.314]	0.139* [1.845]	0.144** [2.240]			
<i>Failed ES proposal</i> × <i>Low ES support</i>				−0.081 [−1.115]	−0.072 [−1.039]	−0.045 [−0.722]
<i>Failed ES proposal</i>	0.002 [0.040]	−0.004 [−0.098]	0.025 [0.658]	0.068* [1.698]	0.051 [1.217]	0.073* [1.905]
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15,529	15,529	15,529	15,529	15,529	15,529
R-squared	.755	.816	.850	.755	.816	.850

(Continued)

Table 2  
Continued

C. Firm-years with at least one shareholder proposal within the past year

Support measure:	Dep't var = ES incidents					
	Mutual fund votes for			ISS recommendation for		
	1 year (1)	2 years (2)	3 years (3)	1 year (4)	2 years (5)	3 years (6)
<i>Failed ES proposal</i> × <i>Support for ES proposal</i>	0.622** [2.578]	0.457** [1.980]	0.362* [1.803]	0.168** [2.254]	0.089 [1.292]	0.060 [1.004]
<i>Failed ES proposal</i>	-0.007 [-0.123]	-0.008 [-0.143]	0.028 [0.540]	0.013 [0.245]	0.022 [0.408]	0.056 [1.147]
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,406	2,406	2,406	2,406	2,406	2,406
R-squared	.848	.905	.926	.847	.905	.926

This table shows the relation between voting support for failed ES shareholder proposals and subsequent negative ES incidents. The sample includes firm-years from 2007 to 2016 (the incident data from Reprisk database is available from 2007), with sufficient data to calculate all variables. The dependent variable is *ES incidents*, which equals the natural logarithm of one plus the total number of negative environmental and social issues (as reported in the media), for the firm during the 1, 2, and 3 years after the meeting month. Independent variables include *Failed ES proposal*, a dummy variable that equals one if the firm has at least one failed ES proposal in the past year, and *Support for ES proposal*, which equals the average support rate in firm's failed ES proposals in the past year. While columns 1–3 use average mutual fund shareholder support, columns 4–6 use average ISS support. The samples in panels A and B include all firm-years, and panel C includes firm-years with at least one shareholder proposal within the past year. Across the whole sample, there are only 15 ES shareholder proposals that passed, and these are coded as *Failed ES proposal* = 0. In panel B, dependent variables of interest are *High ES support* and *Low ES support*, which are defined as indicator variables equal to one if voting support for an ES proposal falls into the upper quartile (lower quartile), across all ES proposals within our sample, respectively. The unit of observation is firm x fiscal year. Table A1 in the appendix defines all variables. OLS regressions with standard errors are clustered at the firm level. Regressions include firm and year fixed effects. Control variables included in the panel A regressions are also included in panels B and C, but they are not tabulated to conserve space. *t*-statistics are shown in parentheses. \**p* < .1; \*\**p* < .05; \*\*\**p* < .01.

that proposals with the highest levels of support significantly predict future ES incidents. In contrast, the coefficient for *Failed ES proposal* × *Low ES support* is not significant at conventional levels. This finding further strengthens our conclusions. Proposals with the highest levels of mutual fund support represent the strongest signals of firm ES-related risks, as evidenced by the greater subsequent ES incidents within these firms.

Panel C limits the sample to firm-years with one or more shareholder proposals in the past year. This sample addresses any concerns related to the possibility that firm-years with shareholder proposals are different from other firm-years, in ways that our control variables do not capture. Under this specification, the benchmark category is firm years with one or more shareholder proposals on an issue other than ES.<sup>18</sup> Results regarding the informativeness of mutual fund support levels in failed ES proposals are similar: higher support levels in ES proposals that fail and are thus not implemented predict a higher rate of ES incidents in the future. Estimates of *Failed ES proposal* × *Support for ES* are both qualitatively and quantitatively

<sup>18</sup> For the 15 firm-years with passed ES proposals, *Failed ES proposal* is set to zero.

similar to ones we obtain from full sample estimation reported in panel A.<sup>19</sup> Results for ISS support are also similar, but statistically weaker.

Across all these specifications, we find no evidence that the presence of an ES proposal itself explains ES incidents, as reflected by the fact that the coefficient for the *Failed ES proposal* dummy is never significant in the direction of our findings (and in a few cases it even has the opposite sign). Results are obtained from proposals with higher levels of support, as indicated by the significant coefficient for *Failed ES proposal x Support for ES*. The fact that the presence of an ES proposal itself is not related to incidents mitigates concerns related to sample selection, ensuring that results are not driven by the greater tendency of certain firms to receive ES proposals and also experience negative events. It is useful to note that these regressions also include firm fixed effects, which control for potentially omitted time-invariant firm characteristics (for instance, correlated with firms' tendency to receive an ES proposal). This provides added assurance for our interpretations.

**Internet Appendix Table A4** presents several alternative specifications, which demonstrate the robustness of these findings. Our first set of robustness tests employs alternative definitions of ES incidents. Our main measure is based on the number of ES issues as reported in Reprisk, where (as described in Section 1), one ES-related event within a firm may pertain to multiple issues, for example, both "Impacts on landscapes, ecosystems, and biodiversity" and "Local pollution." In **Table A4**, we instead define ES incidents as the number of unique firm events each year. We also use incident measures that take advantage of RepRisk's severity and reach classifications, which capture the nature of the incident (e.g., caused by negligence or intent, number of people affected, and consequences of incident) and the readership of the outlet in which the story was published, respectively. To isolate more salient events, we use the number of incidents with medium or high severity, and also the number of incidents with medium or high reach. Results are qualitatively similar with alternative definitions for the dependent variable.

In our second set of robustness tests, we add additional controls, such as lagged firm ES negative incidents or the lagged firm ES score. Firms receiving ES proposals (in particular proposals with relatively high support) might have had many incidents over the past year, and one might be concerned that this represents a correlated omitted variable that drives results. Results confirm that this is not the case. Finally, we control for the company's KLD ES score to ensure that the predictability that we document is over and above the information encapsulated in this score.

In our last set of robustness tests, we modify our classification of failed ES proposals. Our alternative hypothesis, that mutual funds are not informative, is motivated by the fact that these proposals nearly always fail, and therefore

<sup>19</sup> Results are similar if we further limit the sample to firm-years with one or more failed shareholder proposals.

**Table 3**  
**Relation between specific proposal type and specific incident type**

*A. All-firm years*

	Dep't var = <i>Environmental incidents</i>			Dep't var = <i>Social incidents</i>		
	1 year (1)	2 years (2)	3 years (3)	1 year (4)	2 years (5)	3 years (6)
<i>Failed E proposal</i> × <i>Support for E proposal</i>	0.694*** [2.895]	0.434* [1.904]	0.348 [1.602]			
<i>Failed S Proposal</i> × <i>Support for S proposal</i>				0.663*** [3.492]	0.789*** [3.962]	0.659*** [3.494]
<i>Failed E proposal</i>	−0.076 [−1.259]	−0.025 [−0.461]	−0.008 [−0.173]			
<i>Failed S proposal</i>				−0.135*** [−2.695]	−0.113** [−2.232]	−0.074 [−1.517]
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15,529	15,529	15,529	15,529	15,529	15,529
R-squared	.729	.811	.853	.741	.809	.846

*B. Firm-years with at least one shareholder proposal within the past year*

	Dep't var = <i>Environmental incidents</i>			Dep't var = <i>Social incidents</i>		
	1 year (1)	2 years (2)	3 years (3)	1 year (4)	2 years (5)	3 years (6)
<i>Failed E proposal</i> × <i>Support for E proposal</i>	0.706** [2.544]	0.469* [1.737]	0.341 [1.405]			
<i>Failed S proposal</i> × <i>Support for S proposal</i>				0.526** [2.149]	0.557** [2.491]	0.409* [1.905]
<i>Failed E proposal</i>	−0.104 [−1.634]	−0.032 [−0.512]	−0.015 [−0.289]			
<i>Failed S proposal</i>				−0.047 [−0.849]	−0.037 [−0.687]	−0.014 [−0.269]
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,406	2,406	2,406	2,406	2,406	2,406
R-squared	.805	.877	.909	.831	.896	.921

This table examines the relation between mutual fund support for failed environmental (social) proposals and subsequent negative environmental (social) incidents. Regression specifications are similar to those in panel A of Table 2, with the exception that the dependent variable is *Environmental* (“E”) incidents in columns 1–3 and *Social* (“S”) incidents in columns 4–6. Analogously, independent variables of interest represent *Failed E proposal* × *Support for E* in columns 1–3, and *Failed S proposal* × *Support for S* in columns 4–6. Regressions include all control variables previously used in Table 2, plus firm and year fixed effects. The samples in panels A and B, respectively, include all firm-years and firm-years with at least one shareholder proposal within the past year. OLS regressions with standard errors are clustered at the firm level. The unit of observation is firm × fiscal year. See Table A1 in the appendix for variable definitions *t*-statistics are shown in parentheses. \**p* < .1; \*\**p* < .05; \*\*\**p* < .01.

mutual fund managers may devote little resources to evaluating these issues. To test this hypothesis more robustly, we focus on proposals that fail by a wide margin, that is, at least by 10%, to capture the proposals that were more likely to be expected to fail ex ante. Internet Appendix A5 lists the tabulated results. Results are qualitatively similar.

Table 3 provides evidence on the tightness of the link between mutual fund support on the ES proposals and the subsequent firm risks. We have interpreted results to this point as indicating that ES issues voiced by a subset of investors

contain information about subsequent company risks. The implication is that the nature of the proposal should relate to the nature of subsequent ES incidents. To examine this conjecture directly, we separately categorize both proposals and the subsequent incidents as reported in RepRisk as either “E” or “S,” as discussed in Section 1. Table 3 shows regressions similar to those previously reported in Table 2, with the exception that the dependent variable equals either the natural logarithm of 1 + number of “E” incidents (columns 1–3) or the natural logarithm of 1 + number of “S” incidents (columns 4–6). Analogously, the independent variable of focus is either *Failed E proposal*  $\times$  *Support for E*, or *Failed S proposal*  $\times$  *Support for S*. Panel A regressions include all firm-years, and panel B is limited to the subset of firm-years with at least one shareholder proposal. Results in Table 3 provide strong evidence that concerns expressed by a group of minority shareholders are informative about the specific E and S risks that firms face.<sup>20</sup>

## 2.2 Investor support for failed ES proposals and future abnormal returns

### 2.2.1 Daily abnormal returns on incident versus nonincident days.

Section 2.1 shows that failed ES proposals that garnered higher support predict more ES incidents in subsequent years. In this section, we test whether these ES incidents, and in particular ES incidents that received high mutual fund support, are associated with negative abnormal returns.

We begin in panel A of Table 4 by presenting the average daily abnormal returns following failed ES proposals, among the subsample of firms-years in which there were one or more ES proposals that received above-median support. In row 1, we focus on the days over the 12 months following the annual meeting. Rows 2 and 3 broaden the sample to the 24 and 36 months, respectively, following the annual meeting. For each, we tabulate average abnormal returns on the days with news regarding ES incidents and on the days without such news. Abnormal returns represent daily alphas, computed using a four-factor model with the three Fama-French factors (Fama and French 1993) and the momentum factor (Carhart 1997). Factor loadings are estimated using the firm’s previous 12-month returns.

Looking first at row 1, across the 425 firm $\times$ years in RepRisk with ES proposals that received above-median support, there are a total of 4,466 firm $\times$ days with negative ES news over the 1 year following the vote outcome, and 102,742 firm $\times$ days without such news. Average abnormal returns on incident days equal  $-0.079\%$ , significantly different from zero at the 5% level. In contrast, average abnormal returns on non-news days are close to zero and

<sup>20</sup> In columns 4–6 of panel A, the *Failed S proposal* dummy is significantly negative, raising a potential concern that part of the effect stems from the type of firm that receives these proposals as opposed to the level of mutual fund support for them. The fact that this dummy is insignificant at conventional levels in panel B, but the coefficient for the interaction term remains significantly positive, mitigates these concerns.

**Table 4**  
**Daily abnormal returns on negative ES incidents days**

*A. Average daily alpha of firms with a highly supported failed ES proposal within the past year*

	Mean daily alpha on days with ES incident	Mean daily alpha on days without ES incident	Difference	<i>t</i> -statistic
	(1)	(2)	(3)	(4)
Over future 12 months	−0.079** ( <i>N</i> =4,466)	−0.008 ( <i>N</i> = 102,742)	−0.071	−1.79*
Over future 24 months	−0.089*** ( <i>N</i> =9,283)	−0.003 ( <i>N</i> =202,508)	−0.086	−2.54**
Over future 36 months	−0.061** ( <i>N</i> =14,438)	−0.001 ( <i>N</i> =299,084)	−0.060	−2.28**

*B. Daily alpha on ES incident days and mutual fund support*

	Dep't var = <i>Daily alpha over future</i>		
	1 year (1)	2 years (2)	3 years (3)
<i>ES proposal receives support</i> × <i>ES incident day</i>	−0.0010* [−1.886]	−0.0009** [−2.364]	−0.0006** [−2.010]
<i>ES incident day</i>	0.0002 [0.770]	0.0000 [0.221]	−0.0000 [−0.073]
<i>High ES support</i>	0.0000 [0.052]	−0.0000 [−0.409]	0.0000 [0.908]
Observations	209,454	414,950	616,122
<i>R</i> -squared	.0000	.0000	.0000

This table shows market return reactions to negative ES incidents from 2007 to 2019 (the incident data from Reprisk database is available from 2007). Panel A uses the sample of firms with at least one failed ES proposal within the past one year that garnered above-median mutual fund support. Column 1 reports the average daily alpha on days with a negative ES incident and column 2 on the days without. The unit of observation is firm  $\times$  (trading) day. Numbers in parentheses in columns 1 and 2 represent the number of firm-day observations for each subsample. Columns 3 and 4 reports the mean differences and the  $t$ -statistics (calculated using firm-level clustered standard errors). The alpha (reported in percentages) for each day is computed using a four-factor model with the three Fama-French factors plus momentum. Factor loadings are estimated using the firm's previous 12-month returns. Rows 1–3, respectively, report the daily alphas for the 12, 24, and 36 months, measured starting one full month after the meeting month. The sample in panel B includes all firm-day observations of firms that had at least one failed ES proposal within the past year. The dependent variable is *daily alpha*, same as in panel A. *Negative ES incident day* is a dummy variable that equals one if the firm has a negative ES incident on that day, and zero otherwise. *ES proposal receives high support* is a dummy variable that equals one if the firm has an ES proposal in the past year with above-median mutual fund support. The interaction term, *High ES support* × *ES incident day*, captures the differences in daily alphas on days with a negative ES incident (reported in RepRisk) between firms with above-median mutual fund support on an ES proposal and those below. Columns 1, 2, and 3, respectively, report *daily alpha* over the 12, 24, and 36 months starting one full month after the meeting month. OLS regressions with standard errors are clustered at the firm level.  $t$ -statistics are shown in parentheses. \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

insignificant at conventional levels. Rows two and three show similar results over longer horizons, for example, 2 or 3 years following the vote outcome. In each case, average abnormal returns on ES news days are significantly negative, whereas abnormal returns on other days are not. Moreover, as shown in column 4, the difference between the two is significantly different at every horizon.

Further examination reveals that 43% of the negative ES incident days represent days with high or medium severity news. The daily abnormal returns on days with severe ES incidents are over four times as large as those on low severity new days, −0.14% versus −0.03% over the 1-year horizon (see

[Internet Appendix Table A6](#)). Across the 1,929 firm  $\times$  days with severe negative ES news, 20% have daily alphas less than 1%, and 5% have daily alphas that are  $-3\%$  or lower. In sum, the significant negative abnormal returns on the days corresponding to negative ES news, and the contrast versus days without such news, are consistent with the “Informative ES votes” hypothesis.

Panel B of Table 4 shows a series of differences-in-differences regressions, where we compare abnormal returns along two dimensions: across days with versus without negative ES incidents, and across cases in which the failed ES proposal received above-median versus below-median support. We extend the sample to include all firm-years with one or more failed ES proposals (as opposed to just those with above-median support, as in panel A) and test whether the market reactions to ES incident news are larger (in absolute terms) for observations with failed ES proposals that garnered above-median support. In column 1, for each firm we include the daily trading days over the 1 year subsequent to the vote outcome. Columns 2 and 3 are similar, but extend the window to durations of 2 and 3 years, respectively.

The dependent variable equals the daily alpha, computed as in panel A. Independent variables include an indicator variable if the day included news of an ES incident (*ES incident day*), a dummy if the ES proposal had above median support (*ES proposal receives high support*), and the interaction between the two.

Results are illustrative. The first thing to note is that *ES proposal receives high support*  $\times$  *ES incident day* is significantly negative at every horizon. Consistent with the “Informative ES votes” hypothesis, among firm  $\times$  days that follow highly supported (but failed and thus nonimplemented) ES proposals, subsequent ES incidents cause larger declines in stock value. In contrast, among firms whose ES proposals received lower levels of support, the subsequent ES incidents that do occur do not have any significant valuation effects, as reflected by the insignificant coefficient for *ES incident day*. This shows that ES votes predict not only the frequency but also the costliness of these incidents to the firm. Finally, as in panel A, outside the ES news days, firms with high support have daily alphas that on average are not different from zero.

In sum, Tables 2 and 3 show that, compared to firms with ES proposals that did not garner high support, firms with highly supported (but failed) ES proposals have significantly more ES incidents in subsequent years. Moreover, Table 4 shows that these firms have significantly negative abnormal returns on incident days, while outside these days abnormal returns are on average not significantly different from zero.

**2.2.2 Future monthly abnormal returns.** Previous sections have shown that higher voting support for failed ES proposals predicts more ES incidents, and on average the market negatively reacts to these incidents. Building upon these findings, in this section, we examine whether mutual funds’ votes



**Table 5**  
**Calendar time portfolio analysis**

*A. Monthly return over a 1-year horizon*

	$\alpha$	$\beta_{MKT}$	$\beta_{SML}$	$\beta_{HML}$	$\beta_{MOM}$	$R^2$	N
<i>Low ES support portfolio</i>	0.177* [1.945]	1.000*** [28.724]	0.048 [0.746]	0.149*** [2.846]	-0.129** [-2.050]	.92	156
<i>High ES support portfolio</i>	-0.129 [-0.850]	1.065*** [30.637]	0.229*** [3.876]	0.164* [1.917]	-0.143*** [-2.927]	.88	156
<i>Long-short portfolio</i>	0.306** [2.120]	-0.0651 [-1.298]	-0.181** [-2.024]	-0.0147 [-0.158]	0.0139 [0.291]	.07	156

*B. Monthly return (skipping 3 months after the meeting) over a 1-year horizon*

	$\alpha$	$\beta_{MKT}$	$\beta_{SML}$	$\beta_{HML}$	$\beta_{MOM}$	$R^2$	N
<i>Low ES support portfolio</i>	0.104 [0.963]	0.998*** [25.070]	0.0982* [1.903]	0.146*** [3.078]	-0.165*** [-3.049]	.92	156
<i>High ES support portfolio</i>	-0.190 [-1.286]	1.062*** [30.336]	0.191*** [3.265]	0.183* [1.902]	-0.149*** [-3.524]	.88	156
<i>Long-short portfolio</i>	0.294** [2.047]	-0.0647 [-1.400]	-0.0924 [-1.173]	-0.0377 [-0.369]	-0.0162 [-0.448]	.03	156

*C. Long-short portfolios over 3-year horizons*

	$\alpha$	$\beta_{MKT}$	$\beta_{SML}$	$\beta_{HML}$	$\beta_{MOM}$	$R^2$	N
Long-short portfolio, starting 1 mth after meeting	0.126 [0.967]	-0.0298 [-0.763]	-0.187*** [-2.785]	-0.0748 [-0.946]	-0.0648* [-1.712]	.10	180
Long-short portfolio, starting 3 mth after meeting	0.143 [1.072]	-0.0346 [-0.814]	-0.170** [-2.401]	-0.0557 [-0.693]	-0.0694** [-1.999]	.09	180

This table shows the relation between mutual fund support for failed ES proposals and subsequent stock returns using a calendar-time portfolio approach. We compare the returns between two portfolios, both of which include firms with a failed ES proposal in the past year, but one with above-median mutual fund support on the ES proposals (*High ES support portfolio*) and the other with equal to or below-median support (*Low ES support portfolio*). Following Jiang, Li, and Mei (2018), the portfolio is constructed on a monthly basis. Specifically, at the beginning of each month, for each firm having a shareholder meeting with at least one failed ES proposal in the past year, if the average mutual funds' support for these ES proposals is above (equal to or below) the median, we assign the stock to the *High (Low) ES support portfolio*. We require each portfolio in each month to have a minimum of 30 observations and we compute the portfolio return by taking the equal-weighted average. To obtain abnormal returns,  $\alpha$ , we run time-series regressions using the three Fama-French factors plus momentum.  $\alpha$  is reported in percentages.  $\beta_{MKT}$ ,  $\beta_{SML}$ ,  $\beta_{HML}$ , and  $\beta_{MOM}$  correspond to the coefficient estimates for the market, size, value, and momentum factors. Row 1 (2) shows the results for the *Low (high) ES support portfolio*. Row 3 reports the results of the long-short portfolio where we long the *Low ES support portfolio* and short the *High ES support portfolio*. In panel A, portfolio construction begins after the meeting month, and we keep each entry firm in the portfolio for a period of 12 months. In panel B, we leave a 3-month gap between the meeting month and the month of portfolio construction, and again keep each entry firms in the portfolio for a period of 12 months. To study the long-term returns, in panel C, we keep each portfolio entry for 36 months. In row 1 of panel C, we start constructing portfolios in the month after the meeting month, and in row 2, we skip 3 months. The Newey-West (1987) standard errors with seven lags are in the parentheses. \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

are informative regarding overall firm performance. More generally, we ask whether high mutual fund support for ES proposals that fail and are thus not implemented represents a negative signal regarding future shareholder value.

Table 5 shows calendar-time portfolio regressions. Among firms with failed ES proposals, we split firms into two portfolios according to the median level of mutual fund support for the proposal: *High ES support portfolio* and *Low ES support portfolio*. Following Jiang, Li, and Mei (2019), the portfolios are constructed on a monthly basis. The sample consists of firms that had a shareholder meeting with at least one failed ES proposal in the past year. At

the beginning of each month, we assign each of these firms to a portfolio and hold it for 12 months. If the mutual funds' support on the firm's ES proposal (or the average fund support if the firm had more than one ES proposal) is above median, we assign the stock to the *High ES support portfolio*. Analogously, if it is below median we assign it to the *Low ES support portfolio*. We require each portfolio in each month to have a minimum of 30 observations, and we compute the portfolio return by taking the equal-weighted average. Finally, we also create a long-short portfolio, which goes long in the stocks contained in the *Low ES support portfolio* and short those in the *High ES support portfolio*. We regress the returns on each of these portfolios on the three Fama-French factors (Fama and French 1993) and the momentum factor (Carhart 1997). The alpha represents our measure of abnormal stock performance.

Looking first at panel A, row 2, shows that the alpha for the *High ES support portfolio* is negative as predicted, albeit not significant at conventional levels. Row 3 provides stronger evidence: the significantly positive coefficient for the long-short portfolio indicates that the *High ES support portfolio* significantly underperforms the *low ES support portfolio* by 30 basis points in each month. It is worthwhile to note that these factor regressions use the time-series of portfolio returns, therefore the number of observations is relatively lower ( $N = 156$ ) compared with panel data regressions, and this reduces the statistical power of the tests.

In panel B, we exclude the first 3 months after the annual meeting. This ensures that mutual fund divestments that are triggered by the vote outcome do not drive the results in panel A. If mutual funds who vote for an ES proposal are concerned that the failure of the proposal (and the associated lack of proposal implementation) will lead to falls in shareholder value, these funds have incentives to divest holdings following the vote outcome.<sup>21</sup> Internet Appendix Table A7 provides support for this prediction. We document a significant negative relation between a mutual fund's support for a firm's ES proposals and the fund's change in portfolio weight in the stock within the quarter of the annual meeting. While this finding provides corroborating evidence for the overall economic mechanism indicated by the rest of our findings, it can also potentially confound the interpretation of the effects reported in panel A of Table 5. The exclusion of the first 3 months after the annual meeting addresses this concern (as shown in Internet Appendix Table A7, divestments occur only within the quarter of the annual meeting).<sup>22</sup> Reassuringly, results in panel B

<sup>21</sup> Parrino, Sias, and Starks (2003), Admati and Pfleiderer (2009), and Edmans and Manso (2011) show that shareholders employ exit as a form of governance.

<sup>22</sup> Divestments triggered by the vote outcome should not be an important concern for the Table 4 analysis examining daily abnormal returns, as this analysis is conditioned on negative events related to ES incidents. Nonetheless, to remain prudent, we also conduct a robustness check for this analysis skipping 3 months after the annual meeting. As expected, our results are unchanged.

are both qualitatively and quantitatively similar to those in panel A. The long-short portfolio has an alpha of 29 basis points, statistically significant at the 5% level.

In panel C, we estimate alphas over longer holding periods, such as 3 years. The coefficient for the long-short portfolio continues to be positive, but both the magnitude and the statistical significance are weaker (about 12–14 basis points per month, not significant at conventional levels).<sup>23</sup>

Among firms with a shareholder proposal related to ES issues, results in Table 5 suggest that there are some mutual funds that have superior information to other market participants and their information is incorporated into prices rather slowly. This is consistent with the recent evidence that the market tends to underestimate risks stemming from ES issues (Hong, Li, and Xu 2019; Cuculiza et al. 2022; Stroebe and Wurgler 2021).

Our findings provide an informative contrast when viewed relative to prior literature. Thus far, most studies on ES-related shareholder activism focus on private engagements (see, e.g., Dimson, Karakaş, and Li 2015, 2018; Hoepner et al. 2022; Barko, Cremers, and Renneboog 2022). While these studies highlight the efforts of a few large investors to achieve change, our findings show that votes are informative regarding the ES risks but shareholder proposals have been ineffective as a form of shareholder activism. One potential contributing factor is that shareholder proposals can represent more contentious issues, as evidenced by the fact that asset management companies bring proposals when private discussions fail (Krueger, Sautner, and Starks 2020). A second potential contributing factor is that, unlike private engagements, the potential for shareholder proposals to pass the 50% threshold and influence firm policies requires support across a disperse group of shareholders, who likely have heterogeneous incentives. In Section 4, we examine whether distorted incentives due to agency issues contribute to the opposition of these initiatives by certain types of shareholders.

### 3. Information that Influences Mutual Funds' Votes

In Section 2, we established that mutual funds' votes in failed ES proposals are informative regarding firms' future ES-related risks. In this section, we analyze the extent to which these votes are based on information that plausibly proxies for firms' future ES risks. While it is difficult to identify any private information that fund managers may have, prior literature has suggested that public information sources likely play an important role. Kacperczyk and Seru (2007) find that many fund managers rely on publicly available information, and institutional investors may be better than other investors in incorporating publicly available information (see, e.g., Field and Lowry 2009).

<sup>23</sup> Internet Appendix Table A8 shows that these conclusions are also robust to limiting the sample period to the years covered in the RepRisk analyses, which began in 2007.

We consider the role of publicly available information sources that can help managers to evaluate firms' risks and hence influence their votes on ES proposals. First we conjecture that mutual funds might utilize the information encapsulated in the ES-related experiences of firms in the same industry. Many environmental risks are common to firms within the same industry. If there has been a greater incidence of ES-related incidents among firms within the same industry, a fund manager could plausibly conclude that the firm's ES risks were higher than previously recognized.

Second, we consider the role of firm's past left-tail alpha experiences. On the one hand, the extent of past extreme negative events plausibly proxies for material weaknesses at the firm, which shareholder proposals may aim to address. On the other hand, these past negative events may be driven by many alternative factors, including matters that do not relate to ES issues and hence would not be addressed by ES shareholder proposals.

We estimate regressions in which the sample represents a panel of firm  $\times$  annual meeting observations, across shareholder proposals related to ES issues. The dependent variable is *Support for ES proposals*, which equals the average support rate on all failed ES proposals in the firm's annual meeting. The first independent variable of interest is *Past industry ES incidents*, defined as the natural log of one plus the average number of ES-related incidents per firm, across all firms within the same two-digit SIC code, over the 12 months leading up to the month of the annual meeting. Second, *Left-tail Negative Alpha* equals the firm's past 12-month four-factor alpha if this alpha is below 25th percentile, and it equals zero otherwise.

We include year and firm fixed effects, as well as various time-variant firm characteristics (introduced in Tables 1 and 2), which are measured at the last fiscal year-end before meeting, to control for the other determinants of voting. Finally, we control for role of the recommendations of proxy advisory service companies, such as ISS. Because ISS's recommendation is based on firm performance in ways that are similarly related to mutual funds' votes, we follow Cai, Garner, and Walkling (2009) and include the unexplained portion of ISS's recommendation, that is, the residual from a regression of ISS's recommendation on firm characteristics.<sup>24</sup> This variable captures both the direct influence of ISS's recommendation on mutual funds' votes and any unobserved factors that influence both ISS's recommendation and mutual funds' votes.

Table 6 shows the results. Looking first at column 1, consistent with our prediction, the coefficient for *Past industry ES incidents* is significantly positive. Mutual fund managers are more likely to support ES proposals among firms belonging to industries with more ES incidents. Column 2 indicates that fund managers are also significantly more likely to support ES proposals

<sup>24</sup> Specifically, we use the residual from a regression of ISS's recommendation on all of the other independent variables employed in the regressions in Table 6.

**Table 6**  
**Role of information on ES risks, in ES proposal votes**

	(1)	(2)	(3)
Dependent variable =	<i>Support for ES proposals</i>		
<i>Past industry ES incidents</i>	0.035*** [5.554]		0.034*** [5.576]
<i>Past left-tail alpha</i>		−0.048*** [−2.675]	−0.046** [−2.592]
<i>Residual of ISS ES support</i>	0.267*** [28.615]	0.267*** [29.144]	0.267*** [29.370]
<i>Cash</i>	0.125*** [3.282]	0.118*** [3.266]	0.128*** [3.612]
<i>Sales growth</i>	0.022 [0.996]	0.017 [0.761]	0.015 [0.661]
<i>MB</i>	0.001 [0.961]	0.001 [1.412]	0.001 [1.010]
<i>ROA</i>	−0.032 [−0.465]	−0.045 [−0.679]	−0.039 [−0.586]
<i>Dividend yield</i>	−0.096 [−0.529]	0.027 [0.130]	−0.107 [−0.558]
<i>log MV</i>	0.015 [1.421]	0.024** [2.194]	0.017 [1.593]
<i>Amihud illiquidity</i>	0.424 [0.811]	0.596 [1.202]	0.482 [0.952]
<i>Inst. ownership</i>	−0.048* [−1.921]	−0.047* [−1.740]	−0.049** [−2.024]
<i>IVOL</i>	−0.511 [−0.519]	−0.500 [−0.492]	−0.581 [−0.593]
Observations	666	666	666
R-squared	.910	.908	.911
Year FE	Y	Y	Y
Firm FE	Y	Y	Y

The sample includes firm-years with ES proposals from 2008 to 2016, with sufficient data to calculate all variables. The sample starts in 2008, as the RepRisk data are available from 2007. The dependent variable is *Support for ES proposals* which equals the average support rate of all mutual funds on all failed ES proposals for a given firm in its annual meeting. Independent variables include *Past industry ES events*, defined as the natural logarithm of one plus the average number of ES-related incidents across all firms within the same two-digit SIC code over the 12 months period up to the month of the annual meeting; *Past left-tail alpha*, which equals past 12-month four-factor alpha if it is below the 25th percentile or zero otherwise; *Residual of ISS ES support*, defined as the residual of the OLS regression of average ISS support for all ES proposals (in the same annual meeting) on the set of control variables in the table; and timevariant firm characteristics (defined in Table 2) as well as firm and year fixed effects. Time-variant firm characteristics are the same as in previous tables (defined in Table A1 in the appendix), and they are measured using the most recent data available at the fiscal year-end before the annual meeting. The unit of observation is firm×year. OLS regressions with standard errors are clustered at the firm level. *t*-statistics are shown in parentheses. \**p* < .1; \*\**p* < .05; \*\*\**p* < .01.

among firms with more negative past left-tail alphas. Finally, in column 3 we include both of these independent variables together in one regression and find that both of them continue to be significant, indicating that these variables capture distinct channels. In economic terms, a one-standard-deviation increase in *Past industry ES incidents* is associated with a 17.0% increase in mutual fund support, and a one-standard-increase in *Past left-tail alpha* is associated with a 4.3% increase in mutual fund support.

Consistent with prior literature, we find that ISS’s recommendation has a significant positive effect. The coefficient for firm cash holdings is significantly positive, in line with fund managers being more likely to pressure firms to adopt ES initiatives if the firms have more financial flexibility, and the coefficient for

institutional ownership is significantly negative which might be capturing that firms with less institutional ownership have more ES issues.

In aggregate, findings in Tables 2–6 indicate that funds have nontrivial information about firms' ES risks. The nature of their superior information can be understood in several senses. First, the level of funds' voting support is informative regarding both the extent of subsequent ES incidents and the costliness of these incidents, as shown in Tables 2–4. Second, mutual funds' information, as represented by their votes, extends beyond the predictive power of past ES events at the firm, as shown in Table A4. Third, funds' information extends beyond what the market already knows, as evidenced by the long-term positive alphas shown in Table 5. Finally, evidence in Table 6 provides insight into the ways that funds use public information to make inferences about firms' ES risks.

#### 4. Influence of Agency-Related Frictions on Fund Votes and Votes' Informativeness

Tables 2–5 show that virtually none of the ES proposals passes, but the mutual fund support rate in failed ES proposals predicts negative ES incidents and negative alphas. In this section, we examine whether agency-related frictions between certain shareholders contribute to the failure of these initiatives, and whether the informativeness of votes varies with fund investors' agency issues.

##### 4.1 Agency-related frictions and fund votes on ES proposals

We begin by examining the influence of agency-related frictions on investors' ES votes. First, we consider investor myopia. ES initiatives are likely to entail up-front costs, with potential benefits that are only realized over the long run.<sup>25</sup> If the market does not fully and promptly incorporate these potential long-run impacts into price, short-term investors will be less supportive of these initiatives.<sup>26</sup> The second agency-related friction on which we focus is funds' friendliness toward management. As shown by Davis and Kim (2007) and Cvijanović, Dasgupta, and Zachariadis (2016), fund managers that support management may be more likely to win business from companies (e.g., the management of company pension plans) and maintain open communication channels (e.g., to obtain higher-quality information on the firm). We predict that mutual funds that are more short-term oriented and that are friendlier toward management will be more likely to oppose ES initiatives.

Table 7 examines the influence of both these factors on voting in ES shareholder proposals. The sample consists of mutual funds' votes on

<sup>25</sup> Up-front costs can arise because of costly new investments or heightened disclosure, both of which can hurt the firm's competitive edge and lead to adverse market reactions.

<sup>26</sup> Hong, Li, and Xu (2019) provide related evidence that markets underreact to firms' long-term ES risks. In a recent survey study conducted by Stroebel and Wurgler (2021), the overwhelming majority of respondents (including professionals, policymakers and academics) report to share this view.

**Table 7**  
**Role of funds' horizon and friendliness toward management, in ES proposal votes**

	Dependent variable: <i>Vote for</i>				
	<i>Fund short-termism proxy =</i>		<i>Mgmt short-termism proxy =</i>		
	Flow-perf. sensitivity	Fund turnover		NI near 0 in past 1 year	NI near 0 in past 5 years
	(1)	(2)	(3)	(4)	(5)
<i>Fund short-termism</i>	-0.128*** [-2.912]	-0.008* [-1.693]			
<i>Fund mgmt friendliness</i>			-0.310*** [-15.416]	-0.265*** [-14.761]	-0.266*** [-14.727]
<i>Fund mgmt. friendliness</i> <i>× mgmt short-termism</i>				-0.669*** [-4.333]	-0.618** [-2.240]
<i>Mgmt short-termism</i>				-0.063*** [-4.207]	-0.076*** [-2.915]
<i>ES fund</i>	0.330*** [2.877]	0.321*** [2.815]	0.302** [2.324]	0.361*** [2.964]	0.361*** [2.964]
<i>Residual of ISS support</i>	0.269*** [26.030]	0.270*** [25.351]	0.254*** [20.661]	0.253*** [19.460]	0.253*** [19.441]
<i>Fund alpha</i>	0.808** [2.453]	0.594** [1.999]	1.113** [2.512]	0.874** [2.289]	0.872** [2.283]
<i>log TNA</i>	-0.026*** [-14.810]	-0.025*** [-12.900]	-0.028*** [-12.625]	-0.022*** [-11.678]	-0.022*** [-11.667]
<i>Cash</i>	0.028** [2.438]	0.021* [1.894]	0.039** [2.511]	0.086*** [4.895]	0.085*** [4.804]
<i>Sales growth</i>	0.002 [0.409]	-0.000 [-0.070]	-0.019*** [-2.832]	-0.008 [-1.084]	-0.009 [-1.163]
<i>M/B</i>	0.000 [0.690]	0.000 [1.017]	-0.000 [-1.377]	-0.001*** [-2.735]	-0.001** [-2.557]
<i>ROA</i>	0.067*** [3.313]	0.065*** [3.269]	0.092*** [3.682]	0.172*** [5.423]	0.163*** [5.173]
<i>Dividend yield</i>	0.179* [1.926]	0.180** [2.022]	-0.025 [-0.201]	0.098 [0.759]	0.074 [0.574]
<i>log MV</i>	0.015*** [4.430]	0.015*** [4.734]	0.011*** [2.868]	0.017*** [3.756]	0.016*** [3.677]
<i>Past firm return</i>	-0.003 [-0.817]	-0.003 [-1.042]	-0.007* [-1.890]	-0.003 [-0.741]	-0.003 [-0.836]
<i>Amihud illiquidity</i>	1.138*** [2.983]	1.230*** [3.402]	1.081** [2.284]	1.689*** [3.385]	1.715*** [3.447]
<i>Inst ownership</i>	0.008 [0.999]	0.009 [1.193]	0.015* [1.710]	-0.002 [-0.228]	-0.003 [-0.296]
Firm FE	Yes	Yes	Yes	Yes	Yes
Sponsor type FE	Yes	Yes	Yes	Yes	Yes
Proposal category FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Observations	298,515	309,867	194,845	146,443	146,443
R-squared	.209	.208	.219	.222	.221
%(Dep.var=1)	13.53	13.36	13.72	12.55	12.55

The sample consists of mutual funds' votes in shareholder proposals related to ES issues during 2004–2016 sample period. OLS regressions with standard errors are clustered at the fund level. In each column, the dependent variable, *Vote for*, equals one if the mutual fund votes for the proposal, and zero otherwise. *Vote for* is regressed on a measure of fund short-termism in columns 1 and 2. Column 1 uses *flow-performance sensitivity (FPS)* to proxy for short-termism; this is estimated from 36month rolling regressions where fund flows are regressed on average four-factor alpha in the past 12 months. Column 2 uses *Turnover* to proxy for short-termism; this is defined as the rolling average of fund's past 12-month turnover ratio, where turnover ratio represents the minimum (of aggregated sales or aggregated purchases of securities) divided by fund's average past 12-month total net assets. In column 3, the independent variable of interest is *fund-management friendliness*, defined as the historical average of fraction (in %) of management-sponsored proposals that the fund supports when ISS recommends against, until time *t*. In columns 4 and 5, fund-management friendliness is interacted with *Management short-termism*. This is defined either as a dummy equal to one if NI (net income) over the past year was between \$0 and \$20 million (column 4) or as the percent of the past 5 years in which NI was fell within this band just above zero. Table A1 in the appendix defines all variables. The unit of observation is fund *x* proposal *x* meeting date. Regressions include firm, sponsor type, proposal category, and year fixed effects. *t*-statistics are shown in parentheses. \**p* < .1; \*\**p* < .05; \*\*\**p* < .01.



shareholder proposals related to ES issues, in annual and special meetings over the 2004–2016 period. The unit of observation is firm meeting  $\times$  proposal  $\times$  mutual fund. The dependent variable, *Vote For*, equals one if the mutual fund votes for the proposal in the firm meeting, and zero if the fund votes against or abstains. Regressions include standard control variables that have been shown in prior literature to relate to mutual fund voting, along with a wide array of fixed effects including firm, sponsor type, proposal category, and year.<sup>27</sup> Standard errors are clustered at the fund level. Table A1 in the appendix defines all explanatory variables.

Columns 1 and 2 focus on the effects of short-termism, using two alternative proxies for fund horizon: fund flow-performance sensitivity and fund turnover (see, e.g., Shleifer and Vishny 1997; Giannetti and Kahraman 2017; Hombert and Thesmar 2014).<sup>28</sup> Consistent with predictions, using either proxy for fund horizon, we find that more short-term funds are significantly less likely to vote for ES proposals. A one-standard-deviation increase in flow-performance sensitivity is associated with a 5.6% decrease in the propensity to vote for an ES proposal. This is after controlling for a variety of firm characteristics, the recommendation of ISS, and also firm fixed effects, sponsor type fixed effects (asset management, religious group, or other), proposal category fixed effects, and year fixed effects.

Results also show that ES funds are 33% more likely to vote for ES proposals.<sup>29</sup> While the sign and significance of this effect is presumably not surprising, the magnitude is remarkable. Relative to the unconditional mean of the dependent variable of 13.5%, this represents a nearly 2.5 magnitude increase. The other most economically significant variable is the residual of ISS support, calculated in a manner similar to Table 6. The significance of this variable is consistent with findings in prior literature. Even after controlling for all other observable factors, mutual funds are 27% more likely to vote for a proposal that ISS supports.

Columns 3–5 of Table 7 examine funds' incentives to be friendly toward management. Friendliness toward management is defined as the percentage of proposals on which the fund voted for, across all past proposals on which ISS recommended against. We focus on proposals where ISS recommends against management to identify more contentious cases. Results again support predictions. Column 3 shows that a one-standard-deviation increase in

<sup>27</sup> Firm-level control variables are introduced in Table 1 and fund-level controls include fund TNA and fund alpha. For proposal category fixed effects, we use ISS's category code (*AgendaItemID*). The full list of category codes for the ES proposals in our sample is reported in Internet Appendix Table A1.

<sup>28</sup> As originally argued by Shleifer and Vishny (1997), funds with high flow-performance sensitivity are reluctant to invest in companies that may experience poor performance in the short-run, even if these companies have strong long-term prospects, and high turnover is a commonly used metric of a short horizon.

<sup>29</sup> ES funds are the funds that have one of the ES-related words ("environment," "environmentally," "climate," "green," "social," "socially," "responsible") in their reported names.

friendliness is associated with a 22.0% lower likelihood of voting for the shareholder proposal.

To explore this finding further, we relate it to the extent of management's short-termism. We conjecture that funds' friendliness toward management will play the greatest role when management has the most short-term focus. Our measures of managerial short-termism are based on Hayn (1995) and Burgstahler and Dichev (1997), who find a discontinuity in firms' earnings, with firms being significantly more likely to have values just above zero than just below zero. We introduce a dummy equal to one if the firm's net income (NI) in the past year is just above zero, specifically between 0 and \$10 million. We include both this dummy and its interaction with fund management friendliness. Consistent with predictions, the interaction term is significantly negative: the lower likelihood of management-friendly funds to vote for ES proposals is pronounced among cases in which management is under more short-term pressure. A one-standard-deviation in management short-termism decreases funds' propensities to vote for ES proposals by 4.2%, relative to the -22.0% effect from column 3. As shown in column 5, results are qualitatively similar when we use an alternative proxy for managerial short-termism, the percentage of the past 5 years in which NI was within this narrow band just above zero.<sup>30</sup>

#### 4.2 Agency-related frictions and the informativeness of fund votes

The voting results in Table 7 raise the question of what types of investors drive the predictability results, that is, the finding that funds' support on failed ES proposals predicts subsequent firm outcomes. We conjecture that these predictability results should be driven by the votes of funds that are less susceptible to agency frictions. Alternatively, one might hypothesize that votes of *more* agency-prone funds are more informative, for example, if they vote in favor of ES proposals only when they create significant long-term value (whereas the less agency-prone funds vote for them even when the long-term value effects are modest). We test these competing hypotheses in Table 8. Panel A focuses on the predictability of ES incidents following the ES proposal vote, and panel B examines the daily abnormal returns on the incident days.<sup>31</sup>

Looking first at panel A, the dependent variable is ES incidents, as proxied by the number of ES negative news issues over the 12 months following the annual meeting. The regression specification is similar to that in Table 2, but here we split the independent variable of interest (*Failed*

<sup>30</sup> Results are robust to including fund family fixed effects, which is consistent with Iliev and Lowry's (2015) finding that fund families do not always vote as a block, particularly on contentious issues. They are also robust to including fund fixed effects, to isolate intrafund dynamics (Internet Appendix Table A9).

<sup>31</sup> We are unable to conduct a calendar time portfolio analysis based on portfolios of firms with ES proposals that received high versus low support among more agency-prone funds or among less agency-prone funds. The resultant number of firms in each portfolio is too small.

**Table 8**  
**Are predictability results driven by less agency-prone firms?**

*A. Subsequent negative ES incidents*

	Dep't var = ES incidents over the subsequent 12 months	
	All firm-years	Firm-years with at least one shareholder proposal within the past year
	(1)	(2)
<i>Failed ES proposal</i> × <i>Support by less agency-prone funds</i>	2.051*** [3.304]	1.877*** [2.897]
<i>Failed ES proposal</i> × <i>Support by more agency-prone funds</i>	−0.997 [−1.481]	−1.039 [−0.737]
<i>Failed ES proposal</i>	−0.046 [−0.899]	−0.012 [−0.206]
Firm FE	Yes	Yes
Year FE	Yes	Yes
Control variables	Yes	Yes
Observations	15,303	2,181
R-squared	.745	.844

*B. Daily alpha on ES incident days and high ES support from different fund types*

	Dep't var = Daily alpha on ES incident days, over the subsequent 12 months	
	(1)	(2)
<i>ES incident day</i> × <i>High support from less agency-prone funds</i>	−0.0009** [−2.2397]	
<i>ES incident day</i> × <i>High support from more agency-prone funds</i>		−0.0001 [−0.3301]
<i>ES incident day</i>	0.0001 [0.2921]	−0.0003 [−0.8635]
<i>High support from less agency-prone funds</i>	−0.0000 [−0.1599]	
<i>High support from more agency-prone funds</i>		−0.0002** [−2.0722]
Observations	156,198	156,198
R-squared	.0001	.0000

In panel A, the sample includes firm-years from 2007 to 2019, and the dependent variable is *ES incident*. Regressions are similar to those of Table 2 with the exception that we split the support variable into support coming from different types of funds. *Less agency-prone funds* are the funds that are both long-term oriented (defined as flow performance sensitivity below the sample median within the same year) and nonmanagement friendly (defined as propensity to vote with management when ISS recommends against is below the sample median within the same year), and *Support by less agency-prone funds* is the total support by these funds as a fraction of all votes by these funds. In the same vein, *more agency-prone funds* include funds with both flow performance sensitivity and management friendliness above the sample median within the same year. Columns 1 and 2, respectively, report results using samples of all firm-years and firm-years with at least one shareholder proposal within the past year. Regressions include controls used in Table 2 plus firm and year fixed effects. Panel B is similar to panel B of Table 4, except that we examine the role of support from less and more agency-prone funds separately. Regressions include all firm-day observations of firms which had at least one failed ES proposal within the past year. The dependent variable is *daily alpha*. *ES incident day* is a dummy variable that equals one if the firm has an ES incident (as reported in RepRisk) on that day, and zero otherwise. *High support from less (more) agency-prone funds* is a dummy variable that equals one if the firm has an above-median mutual fund support among less (more) agency-prone funds. OLS regressions with standard errors are clustered at the firm level. *t*-statistics are shown in parentheses. \**p* < .1; \*\**p* < .05; \*\*\**p* < .01.

*ES proposal* × *Support for ES*) into two separate variables: *Failed ES proposal* × *Support by less agency-prone funds*, and *Failed ES proposal* × *Support by more agency-prone funds*. Funds that are both long-term-oriented

(defined as flow performance sensitivity below the sample median) and non-management-friendly (defined as propensity to vote with management when ISS recommends against below the sample median) are defined as *Less agency-prone funds*; *Support by less agency-prone funds* is the total support by these funds as a fraction of all votes by these funds. In a similar vein, *More agency-prone funds* include funds with both flow performance sensitivity and management friendliness above the sample median. Similar to Table 2, the sample includes all firm-years and we use the same set of control variables along with firm and year fixed effects.

We find that the predictive power of mutual fund support is concentrated among less agency-prone funds. A one-standard-deviation increase in *Failed ES proposal*  $\times$  *Support by less agency-prone funds* predicts 14% more incidents, significant at the 1% level. This shows that, within firm-years with failed ES proposals, those that obtained higher support from less agency-prone funds tend to experience more ES incidents in the future, compared to those that obtained lower support from these funds. That is, votes of this group of funds are informative about future ES incidents. In contrast, the coefficient for *Failed ES proposal*  $\times$  *Support by more agency-prone funds* has the opposite sign and is not significant at conventional levels; that is, variation in support by more agency-prone funds is not predictive of firm's future ES incidents.

In panel B of Table 8, we examine the extent to which support by each of these types of funds is related to daily abnormal returns on ES negative news days. The specification is similar to that in panel B of Table 4, but we again split the independent variable into two separate variables. Specifically, we interact *Negative ES news day* with both *High support from less agency-prone funds* and with *High support from more agency-prone funds*. Results are again consistent with prior findings. In addition to support among less agency-prone funds predicting the frequency of ES incidents (as shown in panel A), support among this group also predicts the costliest incidents. The coefficient for *Negative ES news day*  $\times$  *High support from less agency-prone funds* is negative and significant at the 5% level. In contrast, the analogous coefficient for the more agency-prone funds is insignificant at conventional levels.<sup>32</sup>

In sum, results provide strong support for the hypothesis that support among long-term-oriented and non-management-friendly investors for ES shareholder proposals is informative, but agency frictions between the remaining investors contributes to the failure of these proposals. The predictability results are driven by the support from less agency-prone funds.

<sup>32</sup> We have also reestimated the tests in panels A and B over longer horizons, such as 3 years. Results are qualitatively similar, though statistically weaker.

## 5. Auxiliary Tests for Addressing Identification Concerns

As with nearly all empirical analyses, correlated omitted variables can be a concern. Throughout the paper, our empirical tests are motivated by the premise that investors' votes are based on assessments of firms' ES-related risks.<sup>33</sup> However, it is possible that votes are correlated with other factors unrelated to these risks. Our rich set of analyses, which include a wide array of control variables and multiple dimensions of fixed effects, mitigate many such concerns. Nonetheless, to complement these findings, in this section we employ a quasi-natural experiment that generates exogenous variation in support for environmental ("E") proposals.

Following [Liang and Renneboog \(2017\)](#) and [Dyck et al. \(2018\)](#), we focus on the period around the April 2010 BP Deepwater Horizon oil spill. The BP event represented a shock to investors' beliefs about the value of having robust environmental policies. The event both attracted attention to and provided information on the potential costs of environmental-related disasters. This enables a difference-in-differences type analysis, in which we examine support for failed shareholder proposals related to environmental versus other issues, in the period prior to versus following the BP shock. We further enrich this test by taking advantage of the heterogeneity across investors. Because this shock arguably had differential effects on different groups of investors, we can compare effects before versus after the event and across more versus less affected investors in a triple-differences setup.

Our first prediction is that voting support on E shareholder proposals (treatment group) will increase after this shock, relative to voting support for proposals on other issues (control group). Our second prediction relates to the differential impact of the BP event among different types of shareholders. The hypothesis for which we find support throughout the paper is that investors who are more short-term oriented and friendlier toward management prioritize objectives other than long-term value-maximization when voting on ES proposals. Because the BP event represented a shock that called attention to the potential severity of these issues, these more agency-prone investors should be more affected by this shock. Thus, our second prediction is that the increased tendency of shareholders to vote for E proposals will be pronounced among investors who are more short-term oriented and friendlier toward management.<sup>34</sup>

Table 9 tests these predictions. The sample consists of a proposal  $\times$  mutual fund  $\times$  firm meeting panel. Across all columns, the dependent variable, *Vote*

<sup>33</sup> Specifically, investors either directly evaluate firms' risks or they rely on the recommendations of proxy advisory service companies, such as ISS, which evaluates such risks.

<sup>34</sup> It is possible that the BP event also increased the likelihood of shareholder proposals related to these issues or resulted in changes in the focus of the wording of these proposals. Such effects would be consistent with private ordering (i.e., the ability of individual parties to achieve change without government intervention), but it would nevertheless not be effective unless sufficient shareholders vote for the proposals. Our empirical tests focus on this voting.

**Table 9**  
**Impact of BP oil spill on predictability and mutual fund voting**

Sample =	Dependent variable: <i>Vote for</i>	
	E vs. non-E proposals	E vs. non-ES proposals
	(1)	(2)
<i>Failed E proposal</i> × <i>After</i> × <i>More agency-prone fund</i>	0.048** [2.175]	0.043* [1.695]
<i>Failed E proposal</i> × <i>After</i>	0.053*** [4.913]	0.072*** [5.602]
<i>More agency-prone fund</i>	-0.108*** [-6.420]	-0.127*** [-6.372]
<i>Failed E proposal</i>	-0.105*** [-11.777]	-0.142*** [-12.791]
<i>Residual of ISS support</i>	0.415*** [27.579]	0.394*** [25.631]
<i>Failed E proposal</i> × <i>More agency-prone fund</i>	-0.028 [-1.570]	-0.002 [-0.118]
<i>More agency-prone fund</i> × <i>After</i>	-0.015 [-0.724]	-0.013 [-0.528]
<i>After</i>	-0.053*** [-3.081]	-0.063*** [-3.206]
Control variables	Yes	Yes
Sponsor type fixed effects	Yes	Yes
Observations	115,071	93,748
R-squared	.220	.253
%(Dep.var=1)	32.92	37.92

This table tests the impact of the BP oil spill on mutual fund voting. The BP oil spill occurred in April 2010. April 2010 is not included in the regressions. The dependent variable is *Vote for*, which equals one if the mutual fund votes for the proposal, and it is zero otherwise. *More agency-prone fund* is a dummy variable that equals one if both FPS and management friendliness are larger than sample median within the same year (as previously defined in Table 7). *Failed E proposal* equals one if the firm has at least one failed Environmental proposal in the past year (as previously defined in Table 3). *After* equals one for meetings occurring after April 2010. Regressions use an event window of 24 months around April 2010 (specifically, 12 months before and after the event). Columns 1 and 2, respectively, compare between E versus non-E, and E versus non-ES proposals (thus excluding S proposals from the sample in column 2). The unit of observation is fund x proposal x meeting date. Regressions include the control variables used in Table 6. *t*-statistics are shown in parentheses. \*  $p < .1$ ; \*\*  $p < .05$ ; \*\*\*  $p < .01$ .

*for*, equals one if the mutual fund votes for the proposal in the firm meeting, zero otherwise. *After* equals one if the firm meeting occurred in the 12 months after April 2010, and it equals zero if the meeting falls within the 12 months before April 2010 (April 2010 is skipped). Consistent with analyses in Table 7, *More agency-prone fund* is a dummy variable that equals one if both flow-performance sensitivity and management friendliness are larger than their sample medians. *Failed E proposal* equals one for failed environmental proposals. The main variables of interest are: *Failed E proposal* × *After* and *Failed E proposal* × *After* × *More agency-prone fund*. We compare voting in E (treatment) versus non-E (control) proposals in column 1, and we compare E (treatment) versus non-ES (control) proposals in column 2. In column 2, we also exclude the S proposals in case some S proposals are affected by the event.

Regressions include control variables used in prior regressions as well as sponsor type fixed effects.<sup>35</sup> The inclusion of sponsor type fixed effects means

<sup>35</sup> In these regressions, we omit firm, year, and (finer) proposal category fixed effects as there is not sufficient variation within these fixed effect groups during the event window.

that we are contrasting the tendency of funds to vote for E proposals before versus after the BP spill, within proposals brought by a given sponsor type, for asset management companies, individuals, or other. We find significant support for both of our predictions. First, we find that, compared with other proposals, on average funds increase their support for E proposals after the BP event, as indicated by the significantly positive coefficient for *Failed E proposal*  $\times$  *After*. Second, this increase is significantly greater among more agency-prone funds, as indicated by the significantly positive coefficient for the triple interaction term, *Failed E proposal*  $\times$  *After*  $\times$  *More agency-prone fund*. In sum, this quasi-natural experiment analysis provides added reassurance for our conclusions.

## 6. Conclusion

Over the last decade, approximately 25% of all shareholder proposals have related to environmental and social (ES) issues. Strikingly, the majority of these proposals are sponsored by asset management companies, who have a fiduciary duty to maximize shareholder value. ES proposals are unique in that the shareholder support almost never crosses the 50% threshold (and thus are not implemented). We study the voting behavior of mutual funds in these failed ES proposals and analyze whether their votes are informative regarding firms' ES risks, despite the proposals not passing.

Our analysis reveals several new findings. We find that the degree of support in failed ES proposals is informative about subsequent negative firm outcomes. Firms that have failed ES proposals with higher investor support have more ES-related adverse incidents and negative abnormal returns in subsequent years. Examining the detailed records of voting by individual mutual funds, our results highlight the ways in which agency frictions within a group of funds contribute to the failure of these ES initiatives. We find that the informativeness of fund votes in ES proposals is predominantly driven by the support coming from less agency-prone funds.



## Appendix

**Table A1**  
**Variable descriptions**

Variable	Definition
<b>Proposal variables</b>	
<i>ES proposal</i>	A dummy variable that equals one if the proposal relates to environmental or social (ES) issues. See Table A1 in the appendix for detailed information about the proposal classification
<i>ISS for</i>	A dummy variable that equals one if ISS recommends for the proposal
<i>Residual of ISS support</i>	The residual from an OLS regression of average ISS support for all ES proposals (in the same annual meeting) on the set of control variables in the table
<i>Asset mgmt co. sponsor</i>	A dummy variable that equals one if an asset management company sponsors the proposal
<i>Religious group sponsor</i>	A dummy variable that equals one if a religious group (including religious funds) sponsors the proposal
<i>Other sponsor</i>	A dummy variable that equals one if individuals, a union, or nongovernmental organizations (NGOs) sponsor the proposal
<b>Mutual fund variables</b>	
<i>Vote for</i>	A dummy variable that equals one if the fund votes for the proposal
<i>FPS</i>	Flow-performance sensitivity estimated from 36-month rolling regressions in which fund flows are regressed on average four-factor alpha in the past 12 months, divided by 100
<i>Fund turnover</i>	Rolling average of fund's past 12-month turnover ratio; the turnover ratio is defined as the minimum (of aggregated sales or aggregated purchases of securities) divided by fund's average past 12-month total net assets
<i>Fund-mgmt friendliness</i>	Historical average of fraction (in %) of management-sponsored proposals that fund supports when ISS recommends against until time $t$
<i>ES fund</i>	A dummy variable that equals one if the fund name includes one of the ES-related words ("environment," "environmentally," "climate," "green," "social," "socially," "responsible") in its reported name
<i>log TNA</i>	Natural logarithm of fund's total net assets as of month-end (in billions)
<i>Fund alpha</i>	Average monthly four-factor alpha estimated from past 12-month rolling regressions
$\Delta$ PortWeight	Quarterly change in portfolio weight of a stock in a fund
$\Delta$ log TNA	Change in a fund's log total net assets
<b>Firm variables</b>	
<i>ES incidents</i>	Natural logarithm of one plus the total number of negative environmental and social issues, as reported in the media. Data provided by RepRisk and available from January 2007. E (S) incidents are defined analogously but focus on environmental (social) issues
<i>ES incident day</i>	A dummy variable that equals one if the firm has a negative ES incident on that day (as reported by RepRisk) and zero otherwise
<i>High (low) ES support</i>	A dummy variable that equals one if voting support for an ES proposal falls into the upper quartile (lower quartile), across all ES proposals within our sample
<i>ES incidents with high or medium severity</i>	Natural logarithm of one plus the total number of negative environmental and social issues with high or medium severity, as reported by Reprisk. Reprisk classifies severity according to factors such as: whether incident is caused by negligence or intent, number of people affected, and consequences of intent.
<i>ES incidents with high or medium reach</i>	Natural logarithm of one plus the total number of negative environmental and social issues with high or medium reach, as reported by Reprisk. Reprisk classifies reach according to the readership of the outlet in which the story was published

(Continued)

**Table A1**  
**Continued**

Variable	Definition
<i>Support for ES proposal</i>	Average support across all ES proposals in a given company. Support is calculated as taking the average of (a) mutual fund shareholder votes or (b) ISS recommendations. Support for E (S) proposals is defined analogously
<i>Failed ES proposal</i>	A dummy variable that equals one if the firm has at least one failed ES proposal. Failed E (S) Proposal is defined analogously
<i>ES proposal receives high support</i>	A dummy variable that equals one if the firm has an ES proposal with above-median mutual fund support
<i>Less agency-prone funds</i>	Funds that are both long-term oriented (defined as flow performance sensitivity below the sample median within the same year) and nonmanagement friendly (defined as propensity to vote with management when ISS recommends against is below the sample median within the same year)
<i>More agency-prone funds</i>	Funds with both flow performance sensitivity and management friendliness above the sample median within the same year
<i>log MV</i>	Natural logarithm of market capitalization defined as price times shares outstanding as of fiscal year-end (in millions)
<i>IVOL</i>	Idiosyncratic volatility of firm's $\varepsilon$ over 12 months, where $\varepsilon$ is the residual is estimated from regressing daily stock returns on three-factor Fama-French along with Momentum factor
<i>M/B</i>	Market value of equity divided by book value of equity as of fiscal year-end. Book Equity is the book value of stockholders' equity, plus balance sheet deferred taxes and investment tax credit (if available), minus the book value of preferred stock. Depending on availability, we use the redemption, liquidation, or par value (in that order) to estimate the book value of preferred stock. Stockholders' equity is the value reported by Moody's or Compustat if it is available. If not, we measure stockholders' equity as the book value of common equity plus the par value of preferred stock, or the book value of assets minus total liabilities (in that order). Market equity is price times shares outstanding.
<i>ROA</i>	Earnings before interest, tax, depreciation, and amortization (EBITDA) as of the fiscal year-end divided by the previous year's total assets
<i>Dividend yield</i>	Common plus preferred dividends divided by the sum of market value of common stocks and book value of preferred stocks, as of fiscal year-end
<i>Past firm return</i>	12-month buy-and-hold stock (raw) return
<i>Cash</i>	Sum of cash and cash equivalents divided by total assets, as of fiscal year-end
<i>Sales growth</i>	Growth rate of sales over the fiscal year
<i>Amihud illiquidity</i>	12-month average of daily illiquidity ratio: 1,000 $\sqrt{ Return }/(Dollar\ Trading\ Volume)$
<i>Inst ownership</i>	Total number of shares held by 13F institutions divided by stock's total shares outstanding, as of (calendar) quarter-end
<i>Management short-termism</i>	Portion of years prior to the shareholder meeting in which NI is between 0 and \$20 million. We code two variables: NI is near zero in the past 1 year (a dummy variable equal to one or zero), and NI is near zero in the past 5 years (the fraction of years).
<i>ES score</i>	Equal-weighted average of company's net strength (strengths minus concerns) across ES-related KLD categories. To be consistent with our definition of ES proposals, we use the KLD categories of "product," "community," "employee relation," "environment," and "human rights" Available annually and through 2014
$\Delta$ ES score	Change in firms' ES scores during, either the fiscal year the voting took place or the year after
<i>Past industry ES incidents</i>	Natural logarithm of one plus the average number of ES-related incidents per firm, across all firms within the same two-digit SIC code, over the 12 months up to the month of the annual meeting
<i>Past left-tail alpha</i>	Past 12-month four-factor alpha if it is below the 25th percentile, and zero otherwise

## References

- Admati, A., and P. Pfleiderer. 2009. The “Wall Street Walk” and shareholder activism: Exit as a form of voice. *Review of Financial Studies* 22:2445–85.
- Barko, T., Cremers, M. and Renneboog, L. 2022. Shareholder engagement on environmental, social, and governance performance. *Journal of Business Ethics* 180:777–812.
- Benabou, R., and J. Tirole. 2010. Individual and corporate social responsibility. *Economica* 77:1–19.
- Berg, F., J. F. Koelbel, and R. Rigobon. 2022. Aggregate confusion: the divergence of ESG ratings. *Review of Finance* 26:1315–44.
- Bolton, P., and M. T. Kacperczyk. 2020. Carbon premium around the world. Working Paper, Imperial College London.
- Brandon, R., S. Glossner, P. Krueger, P. Matos, and T. Steffan. 2022. Do responsible investors invest responsibly? *Review of Finance* 26:1389–432.
- Brandon, R., P. Krueger, and P. Schmidt. 2021. ESG rating disagreement and stock returns. *Financial Analysts Journal* 77:104–27.
- Burgstahler, D., and I. Dichev. 1997. Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics* 24:99–126.
- Cai, J., J. Garner, and W. Walkling. 2009. Electing directors. *Journal of Finance* 64:2389–421.
- Carhart, M. 1997. On persistence in mutual fund performance. *Journal of Finance* 52:57–82.
- Cuculiza, C., A. Kumar, W. Xin, and C. Zhang. 2022. Climate sensitivity, mispricing, and predictable returns. Working Paper, Marquette University.
- Cvijanović, D., A. Dasgupta, and K. Zachariadis. 2016. Ties that bind: How business connections affect mutual fund activism. *Journal of Finance* 71:2933–66.
- Davis, G., and E. Kim. 2007. Business ties and proxy voting by mutual funds. *Journal of Financial Economics* 85:552–70.
- Dimson, E., O. Karakaş, and X. Li. 2015. Active ownership. *Review of Financial Studies* 28:3225–68.
- . 2018. Coordinated engagements. Working Paper, University of Cambridge.
- Dyck, A., K. Lins, L. Roth, and H. Wagner. 2018. Do institutional investors drive corporate social responsibility? International evidence. *Journal of Financial Economics* 131:693–714.
- Edmans, A., and D. Manso. 2011. Governance through trading and intervention: A theory of multiple blockholders. *Review of Financial Studies* 24:2395–428.
- Ertimur, Y., F. Ferri, and S. Stubben. 2010. Board of directors’ responsiveness to shareholders: Evidence from shareholder proposals. *Journal of Corporate Finance* 16:53–72.
- Field, L., and M. Lowry. 2009. Institutional versus individual investment in IPOs: The importance of firm fundamentals. *Journal of Financial and Quantitative Analysis* 44:489–516.
- Flammer, C. 2015. Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. *Management Science* 61:2549–68.
- Francis, J., and D. Philbrick. 1993. Analysts’ decisions as products of a multi-task environment. *Journal of Accounting Research* 31:216–30.
- Gantchev, N., and M. Giannetti. 2021. The Costs and Benefits of Shareholder Democracy. *Review of Financial Studies* 34: 5629–5675.
- Gantchev, N., M. Giannetti, and R. Li. Forthcoming. Does money talk? Market discipline through selloffs and boycotts. *Review of Finance*.

- Giannetti, M., and B. Kahraman. 2017. Open-end organizational structures and limits to arbitrage. *Review of Financial Studies* 31:773–810.
- Giglio, S., B. Kelly, and J. Stroebe. 2020. Climate Finance. *Annual Review of Financial Economics* 13:15–36.
- Graham, J., J. Grennan, C. Harvey, and S. Rajgopal. 2022. Corporate culture: Evidence from the field. *Journal of Financial Economics* 146:552–93.
- Grewal, J., G. Serafeim, and A. Yoon. 2016. Shareholder activism on sustainability issues. Working Paper, Harvard University.
- Harris, M., and A. Raviv. 2010. Control of corporate decisions: shareholders vs. management. *Review of Finance Studies* 23:4115–47.
- Hayn, C. 1995. The information content of losses. *Journal of Accounting and Economics* 20:125–53.
- Hoepner, A., I. Oikonomou, Z. Sautner, L. Starks, and X. Zhou. 2022. ESG shareholder engagement and downside risk. Working Paper, University College Dublin.
- Hombert, J., and D. Thesmar. 2014. Overcoming limits of arbitrage: Theory and evidence. *Journal of Financial Economics* 111:26–44.
- Hong, H., F. Li, and J. Xu. 2019. Climate risks and market efficiency. *Journal of Econometrics* 208:265–81.
- Iliev, P., and M. Lowry. 2015. Are mutual funds active voters? *Review of Financial Studies* 28:446–85.
- Ilhan, E., P. Krueger, Z. Sautner, and L. Starks. 2022. Climate risk disclosure and institutional investors. Working Paper, National University of Singapore.
- Jiang, W., T. Li, and D. Mei. 2019. Activist arbitrage in M&A acquirers. *Finance Research Letters* 29:156–61.
- Kacperczyk, M., and A. Seru. 2007. Fund manager use of public information: new evidence on managerial skills. *Journal of Finance* 62:485–528.
- Krueger, P., Z. Sautner, and L. Starks. 2020. The importance of climate risks for institutional investors. *Review of Financial Studies* 33:1067–111.
- Li, J., and D. Wu. 2020. Do corporate social responsibility engagements lead to real environmental, social and governance impact? *Management Science* 66:2564–88.
- Liang, H., and L. Renneboog, L. 2017. On the foundations of corporate social responsibility. *Journal of Finance* 72:853–910.
- McCahery, J. A., Z. Sautner, and L. Starks. 2016. Behind the scenes: The corporate governance preferences of institutional investors. *Journal of Finance* 71:2905–32.
- Parrino, R., R. Sias, and L. Starks. 2003. Voting with their feet: Institutional ownership changes around forced CEO turnover. *Journal of Financial Economics* 68:3–46.
- Shleifer, A., and R. Vishny. 1997. The limits of arbitrage. *Journal of Finance* 52:35–55.
- Starks, L., P. Venkat, and Q. Zhu. 2023. Corporate ESG profiles and investor horizons. Working Paper, University of Texas at Austin.
- Stroebe, J., and J. Wurgler. 2021. What do you think about climate finance? *Journal of Financial Economics* 142:487–98.