What Does ESG Investing Mean and Does It Matter Yet?

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Abstract

We explore three ways to classify mutual funds as ESG-oriented: by their names, their voting records, and their holdings. ESG-named funds and ESG-voting funds tend to be smaller than non-ESG funds, and spread their investment over more individual companies. They never control more than a quarter of aggregate assets under management. Even taking a broad view of judging funds by the ESG scores of their holdings only increases this to about 33% of AUM. Voting in favor of costly shareholder E&S proposals is still rare, and the portfolio additions and deletions of ESG-oriented funds do not differ much from those of non-ESG funds. We conclude that it is surprisingly difficult to find evidence of any real impact of the talk about ESG-oriented investing, whether in voting or widespread and binding investment filters.

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1. Introduction

Who cares about ESG and how do they show it? These are significant questions considering the extensive discussion of ESG in the media and the rhetoric used by institutional investors and CEOs (such as Blackrock CEO Larry Fink's open letter to CEOs and the US Business Roundtable's Statement on the Purpose of a Corporation).[1] Yet, the extent to which institutional investors have actually altered their perspective on ESG, as evidenced by their voting and portfolio decisions, remains unclear. Currently, we must rely on potentially biased reports from ESG-focused organizations regarding the amount of assets under management (AUM) invested according to ESG principles.[2] This lack of transparency is noteworthy, especially given the extensive body of research examining the indirect effects of ESG-oriented investing on the cost of capital, asset pricing, and liquidity (for instance, see the survey conducted by Matos, 2020).

In this paper, we ask how is ESG influence manifested and how has it changed over time? Since at least 1971, there have been funds specifically targeting socially responsible investors, emphasizing this focus through their names. While there is a general consensus among investors regarding the importance of good governance, the varying emphasis on the environmental and social aspects of ESG is evident in the naming and focus of these funds, across both different periods and investor preferences. Therefore, we also aim to identify mutual funds that prioritize environmental and social issues, although we will use the term "ESG-focus" as the standard terminology. We track over time the number and assets under management (AUM) of funds with ESG-focused names, but this approach alone does not capture the growing influence of ESG.

Shareholders increasingly put forth E&S proposals for a vote at the annual general meeting. Our second measure of the manifestation of ESG influence comes from rating institutional

[1] Links to Larry Fink's letter and the US Business Roundtable's Statement.

[2] Reports using different methodologies can yield significantly different results. For instance, the Forum for Sustainable and Responsible Investment (SIF) adjusted their methodology for calculating sustainable investment AUM. The change resulted in a significant decrease in reported AUM, with $8.4 trillion in 2022 compared to $17.1 trillion in 2020. For details, see their 2022 report.

investors by their revealed voting preference. This measure demonstrates a greater level of ESG influence in terms of both the number of funds and the assets under management (AUM), compared to solely relying on fund names. Nonetheless, it is worth noting that the majority of funds do not vote in favor of approving E&S proposals, resulting in a mere 3% of these proposals being passed.

Practitioners assert that the impact of ESG is primarily manifested through investment tilts and filters. Therefore, our final assessment of ESG influence identifies funds that actively prioritize firms with lower ESG risk when constructing and rebalancing their portfolios. To accomplish this, we calculate the weighted average RepRisk ESG score for the companies held within a fund's portfolio. Subsequently, we classify funds that fall within the bottom half of the average score as ESG-focused. By employing this approach, we aim to capture the extent to which funds incorporate ESG considerations by giving preference to companies with favorable ESG risk profiles in their investment strategies.

Lastly, we explore the potential indirect effects of a particular fund's ESG focus. In particular, we investigate whether there are spillover effects within a fund family. We ask: do non-ESG funds within a fund family exhibit an increased propensity to vote favorably for E&S proposals following the family's introduction of an ESG-focused fund?

We find that the AUM of mutual funds explicitly targeted toward ESG investors, as evidenced by their ESG-oriented fund names) is growing, but is still very small relative to the universe of funds. Turning to funds that reveal their ESG preference through voting, we observe a similar pattern of growth over time. Nevertheless, even at its peak, this segment represents less than a quarter of the investable funds in the market. Our analysis reveals some evidence of spillover effects within fund families resulting from the inclusion of an ESG-focused fund. However, despite these spillover effects, sibling funds within the same family continue to vote more against, rather than in favor of, E&S proposals. Overall, while there is the growth of ESG-focused funds and voting preferences, the influence of ESG considerations within the broader investment landscape is still relatively limited.

The decision to introduce an ESG-by-vote fund within a fund family may be driven by a shift in preferences at the fund level, which may not necessarily be reflected in the voting behavior of sibling funds. On the other hand, the launch of an ESG-by-name fund is a family-level decision that could indicate a broader shift in preferences. We examine potential spillover effects within fund families resulting from the introduction of an ESG-by-name fund and find no evidence of such spillovers. We then study within-family voting consensus on proposals for families with an ESG-by-name fund. Disagreement within a family is most pronounced for E&S proposals, especially those with higher associated costs. This disagreement arises because the ESG-by-name fund tends to vote in one direction while other funds within the family, typically larger in size, vote in the opposite direction. It is worth noting that ESG-by-name funds never manage more than 1% of aggregate AUM. Overall, our findings suggest that the presence of an ESG-by-name fund within a family does not lead to spillover effects. Furthermore, disagreements within families regarding voting preferences on E&S proposals are influenced by the distinct voting patterns of the ESG-by-name fund compared to other funds in the family.

As practitioners assert, the significance of ESG considerations may be reflected through portfolio filters and weights. Thus, our final set of tests aims to uncover the extent to which ESG influences the setting of portfolio weights. Surprisingly, our findings indicate that the impact of ESG on portfolio weights is relatively limited, even in recent years. Most funds, including those that tend to vote favorably on environmental and social (E&S) proposals, exhibit significant active shares compared to an ESG benchmark. This suggests that the deviations in portfolio weights from the ESG benchmark are substantial for the majority of funds. While firms that are added to all portfolios tend to have better ESG scores than those that are dropped, the difference in ESG scores between added and dropped firms is not significantly pronounced even for funds that claim to prioritize ESG considerations through their names. This implies that funds professing to be ESG-focused do not consistently demonstrate a clear distinction in the ESG scores of the firms they add or drop from their portfolios. Overall, our findings suggest that if ESG is indeed being expressed through portfolio filters, these filters are rarely restrictive or binding.

We also study how ESG-oriented mutual funds respond to various special situations, including the close passage or failure of an E&S proposal, addition to or exclusion from the FTSE4Good index, and acquisition bids by high ESG acquirers. ESG and non-ESG funds do not

react in a noticeably different way to the close passage of an E&S proposal; they adjust their holdings in the same direction, and if anything, ESG funds tend to reduce their holdings to a greater extent than non-ESG funds. Similarly, the reactions of ESG and non-ESG funds to E&S proposals that fail with a small margin are comparable, except for ESG-by-name funds, which tend to increase their holdings compared to non-ESG funds. Moreover, our analysis shows limited reaction to FTSE4Good rebalancing events, indicating that these events primarily reflect delayed recognition of well-known changes in a firm's ESG profile. Lastly, we find some evidence that ESG-by-name funds are more inclined to vote in favor of a low premium bid if the acquirer has a high ESG rating. Overall, among the three types of funds studied, ESG-by-name funds exhibit the most consistent response to these special situations. However, it is important to note that these funds never control more than 1% of the aggregate AUM.

Finally, we explore how funds vote on material versus immaterial E&S proposals, and find that, with the exception of ESG-by-hold funds, ESG funds are more inclined to vote in favor of material proposals compared to immaterial ones. However, it is important to note that only a small percentage, 4% (29 out of 725), of these proposals actually pass. This passage rate is slightly higher than the 3% passage rate for all E&S proposals combined (103 out of 3425). Additionally, we adopt an alternative approach by focusing on the votes of funds belonging to fund families that have signed the United Nations Principles of Responsible Investing. We find that if these funds had unconditionally supported all subsequent E&S proposals, it would have resulted in a significant impact. Specifically, at least 496 E&S proposals would have experienced a change in outcome, leading to an increased overall passage rate of 17.5%.

Our study contributes to the expanding body of literature on ESG, which highlights a potential conflict between investors prioritizing financial returns and those emphasizing ESG considerations. However, our findings indicate that this conflict may be exaggerated, with a substantial amount of cheap talk about ESG, but minimal impact on firms in terms of their institutional investor base or the outcomes of shareholder proposals. Despite extensive discourse and numerous studies exploring the indirect effects such as asset pricing, cost of capital, and liquidity resulting from the increasing focus on ESG, it is surprisingly challenging to find concrete evidence of costly actions taken by institutional investors based on their professed commitment to ESG principles.

Our study focuses on examining the direct influence of ESG investing. However, it is important to note that the extant literature has found varied indirect effects of ESG investing. For instance, Glossner (2021) reports that firms with high ESG incident rates are associated with lower risk-adjusted stock returns. Specifically, a portfolio consisting of firms with high ESG incident rates generates abnormal stock returns of −3.5% per year, controlling for risk factors, industries, and firm characteristics. In the context of lending, Chava (2014) demonstrates that lenders charge higher yield spreads on loans issued to borrowers with environmental concerns, such as hazardous chemicals, substantial emissions, and climate change risks. Comparing green bonds to comparable non-green bonds, Larcker and Watts (2020) find that green and non-green securities exhibit economically identical pricing. They conclude that the "greenium," or the premium associated with green securities, is close to zero. Furthermore, Fiordelisi, Galloppo, Lattanzio, and Paimanova (2021) document that socially responsible investment (SRI)-oriented exchange-traded funds (ETFs) achieve significantly higher stock market liquidity, as indicated by trading volume. These studies highlight the complex and varied nature of the indirect effects of ESG investing.

The paper proceeds as follows: Section 2 provides a literature review. Section 3 describes the data used in the study, as well as the three measures employed to capture ESG-focus. In Section 4, we present and analyze the results, which include the evolution of ESG AUM, the effects of fund families on ESG, voting patterns on E&S proposals, responses to closely contested E&S proposals, and the examination of special ESG situations. Finally, Section 5 concludes the paper by summarizing the key findings and implications.

2. Related literature

Our research contributes to the literature studying investor preferences. Aggarwal, Erel and Starks (2015) find that proxy advisors pay attention to public opinion to gauge the preferences of ultimate shareholders, thereby allowing ESG preferences to influence their recommendations. Bubb and Catan (2022) study mutual funds' corporate governance preferences through their voting patterns. Utilizing model-based cluster analysis, they classify mutual funds into three groups: the Traditional Governance Party, the Shareholder Reform Party, and the Shareholder Protest Party. Bolton, Li, Ravina, and Rosenthal (2020) also categorize investor ideologies based on their voting behavior, creating two dimensions: pro/against ESG and traditional governance (pro-manager vs.

pro-shareholder rights). A key distinction between their approach and that of Bubb and Catan (2022) is that they aggregate votes within a family, classifying fund families instead of individual funds. In our study, we focus on the fund as the relevant unit of analysis, enabling us to examine spillover effects within a family and consensus on ESG matters among funds within the same family. Hong and Kacperczyk (2009) find that, compared to mutual funds and hedge funds, investors subjected to social norm pressures, such as pension funds, tend to hold fewer "sin stocks. Similarly, other studies demonstrate a positive association between institutional ownership and environmental and social performance (Chava, 2014; Dyck, Lins, Roth, and Wagner, 2019). Starks, Venkat, and Zhu (2023) show that preferences for corporate ESG standards depend on investor horizons: long-term investors prefer high ESG-rated firms relative to short-term investors. Lastly, Bansal, Wu, and Yaron (2022) explore whether ESG preferences act as luxury goods, being more prominent when wealth is already high. They find evidence suggesting a higher temporary demand for socially responsible investing during good economic periods. In summary, our study contributes to the existing literature by providing insights into investor preferences, aligning with previous research on proxy advisor influence, corporate governance preferences, investor horizons, institutional ownership, and the dynamics of ESG preferences under different economic conditions.

Voting on E&S proposals serves as a crucial mechanism for mutual funds to promote their ESG agendas (Broccardo, Hart, and Zingales, 2022). However, recent studies reveal that funds often vote against their declared pro-ESG mandates, even when they are influential marginal voters, resulting in a low passage rate for such proposals (Li, Naaraayanan, and Sachdeva, 2023). This behavior suggests challenges with the alignment of actions and stated ESG commitments, potentially reflecting instances of greenwashing. Michaely, Ordonez-Calafi, and Rubio (2023) find that ESG funds with explicit ESG-oriented names are particularly inclined to vote against E&S proposals when they are the marginal voter, further indicating greenwashing-like behavior among these funds. Dikolli et al. (2022) demonstrate that ESG funds, as defined by Morningstar's "Sustainable Investment Overall" designation, show greater support for E&S proposals compared to other funds. Moreover, they highlight that ESG funds exhibit a stronger inclination to support ESG shareholder proposals when they belong to fund families that are signatories of the United Nations Principles for Responsible Investment (UNPRI). Our study contributes to this body of literature by taking a comprehensive approach to classifying funds based on their names, voting patterns, and holdings. By considering these different dimensions, we provide a more holistic

perspective on fund classification and shed light on the interplay between ESG commitments and actual actions within the fund industry.

A separate line of research explores the relationship between performance and ESG designations. Flows to socially responsible funds tend to be more persistent and less sensitive to performance than those to conventional funds. Barber, Morse, and Yasuda (2021) demonstrate that ESG-oriented venture capital investors are willing to accept lower returns to align with their ESG preferences. Using Morningstar's introduction of sustainability ratings, Hartzmark and Sussman (2019) find that funds classified as high (low) sustainability experience positive (negative) net flows despite no discernible difference in performance. Similarly, Ceccarelli, Ramelli, and Wagner (2023) show that Morningstar's release of a "Low Carbon Designation" label affects both the demand for and supply of low-carbon-designated funds. Using firm-level CO2 emissions, Bolton and Kacperczyk (2020) find that investors require compensation for exposure to carbon emission risk. Cao, Titman, Zhan, and Zhang (2021) demonstrate that socially responsible institutions are less likely to sell overpriced stocks with good ESG scores or buy underpriced stocks with poor ESG scores, resulting in reduced informational efficiency of stocks held by such institutions. Liang, Sun, and Teo (2020) find that hedge funds endorsing the United Nations Principles for Responsible Investment (UNPRI) underperform on a risk-adjusted basis compared to other funds, yet attract greater flows. Taken together, these studies shed light on the intricate relationship between performance and ESG designations.

The existing ESG literature aims to uncover institutional investors' preferences by analyzing what they say (Amel-Zadeh and Serafeim, 2018; Krueger, Sautner, and Starks, 2020) or what they do (Dyck et al., 2019; Starks, Venkat, and Zhu, 2023). In our study, we adopt three distinct approaches to classify funds, enabling us to explore not only what funds express through their names or PRI commitments, but also their actual behavior. This allows us to examine preferences at both the fund and fund-family levels and investigate potential spillover effects within a family. By considering both the statements and actions of funds, our research provides a comprehensive understanding of the impact of ESG considerations in asset management.

3. Data and construction of ESG measures

Our firm-level ESG data are sourced from RepRisk, a comprehensive database covering both public and private companies worldwide. RepRisk specializes in monitoring and assessing material ESG risk incidents that have the potential to impact a company's financial performance, compliance, and reputation. The dataset encompasses over 200,000 companies and focuses on 28 core ESG issues, such as local pollution and discrimination in employment. These core issues align with international standards such as the World Bank Group Environmental, Health, and Safety Guidelines. Additionally, RepRisk covers 73 ESG topic tags, including topics like fracking and gender inequality, which further expand the coverage of ESG issues. Each topic tag can be linked to multiple ESG issues. The RepRisk database provides a continuous time series of daily ESG risk scores, spanning from January 1, 2007, to December 31, 2021. The risk scores range from 0 to 100, with higher scores indicating a higher level of risk exposure.

We collect mutual fund holdings data from the Center for Research in Security Prices (CRSP) Survivor-Bias-Free US Mutual Fund Database. This database offers quarterly holdings information for U.S. mutual funds, along with various fund characteristics. For our study, we specifically focus on U.S. domestic active equity funds, retaining funds with objective codes (*crsp_obj_cd*) starting with "ED**". We exclude funds flagged as index funds by dropping those with the flag "D".[3] Although the holdings data starts prior to 2007, we start the holdings sample in 2007 to avoid inconsistencies with the CRSP data prior to that period (Schwarz and Potter (2016)).

The mutual fund voting data utilized in our study is sourced from the Institutional Shareholder Services (ISS) Voting Analytics dataset. Starting from 2003, mutual funds have been required by the Securities and Exchange Commission (SEC) to report their votes through form N-PX. The ISS Voting Analytics dataset provides comprehensive information at the fund-proposal level. This includes details such as fund identifiers, firm identifiers, a concise description of the proposal, management recommendation, and the voting decision of the fund. It is important to note that there is no common fund identifier shared between the ISS voting data and the CRSP Survivor-Bias-Free Mutual Fund data. To overcome this challenge, we construct a linking file between the

[3] In CRSP, an index fund flagged as "D" represents a "pure index fund," while an objective code starting with "ED" indicates domestic equity funds.

two databases following the approach employed by Matvos and Ostrovsky (2010) and Iliev and Lowry (2015).[4]

We classify proposals as ESG or non-ESG using ISS classification codes. Specifically, we categorize proposals addressing various sustainability issues such as renewable energy, recycling, board diversity, gender pay gap, or fair lending as E&S proposals. These proposals encompass a range of items, including topics like "Improving Human Rights Standards or Policies" and "Linking Executive Pay to Social Criteria." The E&S voting data is well-populated starting in 2005, thus, our voting sample starts in 2005 and ends in 2021.

We collect data on mergers and acquisitions from 2007 to 2021 using Thomson Financials Security Data Company (SDC) Platinum. Our sample consists of completed mergers involving US firms that meet the following criteria: 1) The deal value exceeds one million dollars, 2) both the acquirer and the target firms are US-based and covered in RepRisk, 3) the acquirer is a public firm for which CRSP and Compustat data are available, 4) the acquirer initially holds less than 50% of the target's shares before the merger announcement and acquires 100% of the target's shares upon completion, 5) the target firm is included in the ISS Voting Analytics data, and 6) neither the target nor the acquirer is classified as a financial firm (SIC codes 6000-6999) or a utility firm (SIC codes 4900-4999). By applying these criteria, we identify a total of 132 successful US mergers in our sample.

Given the absence of a widely accepted definition of ESG funds in both practical and academic spheres, it remains unclear which funds should be classified as ESG-focused. To address this challenge, we employ three distinct approaches to classify funds each year. Our first measure utilizes fund names as an indicator. Mutual funds can declare their preferences through their names (e.g., “AXA Enterprise Socially Responsible Fund" or "Hartford Environmental Opportunities Fund"). We review mutual fund names and identify funds as ESG-by-name if their names indicate an ESG orientation. Specifically, we flag a mutual fund as an ESG-by-name fund if its name contains any of the following phrases: ESG, wise, clean, green, carbon, social, climate, equality, diversity, conscious, leadership, environment, organics, alternative energy, sustainable future,

women, SRI, sustainability, impact, gender, tobacco-free, and customer. To ensure accuracy, we manually validate each fund name flagged as ESG.

Our second ESG measure is based on funds' voting scores on E&S proposals. For each fund-year, we compute the following ratio using all E&S proposals fund *i* votes on in year *t*:

$$es\_vote\_ratio_{i,t} = \frac{(total\ votes\ for - total\ votes\ against)}{(total\ votes\ for + total\ votes\ against)}$$

In line with Iliev and Lowry (2015), we adopt the approach of treating abstain and withhold votes as equivalent to votes against the proposals. If the *es_vote_ratio* is positive, the fund is categorized as ESG-oriented. To ensure the reliability of our categorization and avoid basing it solely on a limited number of E&S proposals, we require that a fund must vote on at least the median number of proposals voted on by an individual fund in a given year. This median number varies between 3 and 17, with higher values generally observed in the later years of our sample. By implementing this criterion, we can ensure that funds are assessed based on a substantial number of E&S proposals, allowing for more robust categorization of their ESG orientation.

Another approach through which funds can indicate their ESG preferences is by tilting their portfolios toward sustainable companies, as demonstrated by Heinkel, Kraus, and Zechner (2001). Thus, our third ESG measure is based on fund holdings. We begin by calculating the value-weighted industry-adjusted RepRisk score of the fund's underlying portfolio for each fund-quarter. Next, we compute the average score per fund year. To identify funds with ESG preferences based on holdings, we classify funds in the bottom half of the average value-weighted industry-adjusted RepRisk scores as ESG-by-hold funds. In our holdings-based analyses, we exclusively consider active funds, as index funds have limited discretion when it comes to buying and selling stocks.

4. Results

4.1 Assets managed by funds with positive ESG preferences

Table 1 and Figure 1 present the time series of the number of funds and AUM for each of our measures.[5] Both indicate that while ESG has been experiencing growth, it lacks significance

[5] The total AUM may vary across measures due to different data requirements for their calculation. For example, while the "by-name" measure is available for all funds in CRSP, whereas the "by-vote" measure is only applicable to funds

when evaluated from a value-weighted perspective. Turning our attention to funds that specifically emphasize ESG (referred to as ESG-by-name) in panel A, it becomes evident that these funds hold little importance within the broader investing universe, never holding even 1% of the total AUM.

However, it is important to note that funds can exhibit an ESG preference without explicitly highlighting it in their name. Furthermore, through managers evolving views or manager turnover, funds can change their stance on ESG issues over time. In panel B, we assess funds based on their voting behavior, using their votes as an indicator of their ESG preference. Nevertheless, when considering the aggregate data, funds with positive ESG voting scores (voting affirmatively on a majority of E&S proposals they encounter) represent only a small portion of total AUM. This fraction recently surpassed 20% on recently, reaching a peak of 24% by the end of the sample period.

There is a limitation to our voting-based measure: it can only be calculated if a fund has the opportunity to vote on E&S proposals. Therefore, if a fund does not have enough ESG votes in a given year, the measure is not computed for that year. To address this limitation, we adopt an alternative approach by assuming that a fund's ESG preferences remain constant, regardless of whether it has voting opportunities or not. Once a fund is identified as ESG-by-vote or not, we maintain that classification unless their votes indicate a shift in preferences. Under this assumption, we naturally assign more fund-years as ESG-focused, resulting in a larger amount of AUM attributed to ESG.

However, even with this adjusted approach, the fraction of AUM held by ESG-focused funds peaks at only 26% in 2021. Even when using our relative measure of revealed ESG preference (being above the median in positive ESG votes each year), such funds consistently hold a minority share of AUM throughout the sample period. While ESG funds could potentially exert influence if they hold concentrated positions in a small number of stocks, this is not the case. Table 2 provides further insight, reporting the median AUM and number of stocks held by each type of fund. We observe that the median ESG fund is less than half the size of the median non-ESG fund (except for ESG-by-hold funds, where the median ESG fund is 63% the size of the median non-

that meet certain criteria, such as voting on a minimum number of E&S proposals in a given year and having a valid ISS-CRSP link.

ESG fund), and yet, the median ESG fund holds between 11% to 50% more stocks, depending on the ESG measure used.

Lastly, in our conversations with industry professionals, they have asserted that the impact of ESG is manifested through portfolio filters, such as the exclusion of certain industries or firms, or the requirement of specific ESG scores for investment consideration.[6] To explore this claim, in panel C, we calculate the weighted average RepRisk scores for the companies held in each fund's portfolio. We then classify funds in the bottom half of this average score annually as ESG-by-hold (recall that low scores indicate lower ESG-related risk). It is worth noting that while the relative voting and holding measures rely on a sample breakpoint (the median), they do not automatically create breakpoints in AUM in the same manner, as funds with ESG preferences may vary in size compared to the average mutual fund. Panel C reveals that funds that appear to employ ESG filters hold less than 36% of AUM in the early years of the sample, gradually declining to 27% by 2021. This suggests that the proportion of assets attributed to funds implementing ESG filters has actually decreased over time.

Irrespective of the method used to identify funds with ESG preferences, the data presented in Figure 1 unequivocally demonstrates that these preferences are experiencing consistent growth. However, when considering the overall scale of invested funds, their significance remains relatively low. Only a small fraction of total assets under management is actively voting affirmatively on environmental and social (E&S) proposals, the clearest pro-ESG action a fund can take. In line with the assertions made by industry professionals, the strongest indication of widespread adoption of ESG preferences emerges from the analysis of fund holdings. In subsequent sections, we will investigate further how binding such preferences are.

4.2 Fund family effects of ESG fund offerings

The previous section presents compelling evidence that despite growing talk about pro-ESG preferences, the majority of invested funds are in mutual funds that are not pro-focused on ESG considerations. However, it is important to recognize that ESG funds can still have an impact

[6] Investment firms also place significant emphasis on the importance of ESG filters. For instance, BlackRock's client letter explicitly states that every active investment team within the company incorporates ESG factors into its investment process and has outlined how ESG integration is integrated into their investment processes.

through their influence on other funds within the same fund family. Figure 2A shows the number of first-time ESG funds introduced within fund families. The data depicted in Figure 2 demonstrate that the inclusion of ESG-by-vote funds was rare prior to 2009. It is worth noting that as more fund families gradually incorporate ESG-by-vote funds, the pool of eligible fund families to introduce them decreases over time. However, since 2009, there has been a steady rise in the addition of ESG-by-vote funds to fund family portfolios. As of 2021, approximately 50% of fund families have introduced at least one ESG-by-vote fund at some point during the sample period. Likewise, there has been a consistent increase in the inclusion of ESG-by-name funds starting from the post-2012 period, aligning with the findings of Cooper, Gulen, and Rau (2005) who observed that fund families often rename their funds to reflect popular investment styles. By 2021, around 12% of fund families have introduced at least one ESG-by-name fund during the sample period. Notably, these specific fund families manage a significant 72% of the total AUM in the sample as of 2021. In our subsequent analysis, we will conduct a more in-depth examination of the effects that arise from the introduction of the first ESG fund within a fund family. Our aim is to explore the potential influence and implications this has on other funds within the same family, providing a deeper understanding of the dynamics at play.

Figure 2B illustrates the changes in the overall ESG voting score of a fund family surrounding the introduction of an ESG fund (excluding the mechanical effect of the ESG fund itself). The findings suggest that there is some spillover effect to sibling funds when an ESG-by-vote fund is added, which is logical given that fund families typically centralize the evaluation of proxy proposals, enabling the ESG fund to influence the voting decisions of other funds through this committee. However, it is important to note that beyond a small but noticeable initial jump, any substantial impact on voting behavior takes time to materialize.

The figure also shows that fund families with a first-time by-name or by-hold ESG fund start with a higher voting score than those with a first-time by-vote ESG fund. This disparity can be attributed to the fact that a majority of these families already have an existing ESG-by-vote fund in place. Specifically, 60% of first-time by-name institutions have an existing by-vote ESG fund, while 50% of first-time by-hold institutions have an existing by-vote ESG fund.

In Table 3, we conduct a more detailed analysis of family voting patterns on E&S proposals. Specifically, for any given proposal at a subject firm, a fund family could have multiple funds

holding stock in the firm, each with varying numbers of votes based on their respective holdings. The table presents the net effect of the family's voting, indicating whether the total votes cast by the family for a specific shareholder proposal were in favor or against it. This analysis takes into account the possibility that smaller ESG funds and other like-minded funds within the family may vote in favor of the proposal, while larger funds that control the majority of the family's shares may vote against it. To illustrate the computation of this voting score, consider the following example: A fund family consists of three funds, all holding shares in company XYZ, which is facing an E&S proposal from shareholders. Fund 1 holds 100 shares in XYZ, Fund 2 holds 200 shares, and Fund 3 holds 400 shares. Fund 1 and Fund 2 vote in favor of the proposal, while Fund 3 votes against it. As a result, at the family level, the overall vote is against the proposal. The family-proposal score, in this case, would be -1/7, calculated as the net vote tally (100 + 200 - 400) divided by the total number of shares held by the family (100 + 200 + 400).

Our analysis reveals a consistent upward trend in the family-level voting score, evidence of rising influence of ESG funds within fund families and a broader recognition of ESG preferences. However, even as of 2021, the net family score remains negative, indicating that while fund families may offer ESG funds to their clients, their overall stance on E&S proposals is still to vote against them.

We extend our analysis to explore measures of disagreement within fund families on proposal voting, specifically focusing on families with at least one by-name ESG fund. We first find that E&S proposals generate significantly higher levels of within-family disagreement compared to other types of proposals. In Panel A of Table 4, we present mean values of within-family consensus on proposals where disagreement is possible (i.e., when at least two funds from the same family are voting, and at least three funds for columns 2 and 3). The unit of observation in this table is the fund-family-proposal, where we calculate the averages by proposal type, highlighting the top 10 proposal types with the highest ESG-induced disagreement.

Column 1 shows the unconditional mean, column 2 shows the mean consensus when at least one by-name ESG fund and two non-ESG funds from the same family are voting on the same proposal, column 3 shows the mean consensus of non-ESG funds when at least one by-name ESG fund from the same family is voting on the same proposal, and column 4 shows the difference (3)-(2). The first row shows that funds voting from the same family agree on 83% of shareholder-

proposed E&S proposals. However, when conditioning on a by-name ESG fund also voting, funds in the same family agree on 62% of E&S proposals, the consensus among non-ESG funds when a by-name ESG fund from the same family is voting is 84%, indicating that 22% (84%-62%) of the disagreement comes from the ESG fund voting one way while other, non-ESG funds, voting the other. Panel A of Table 3 shows that the top 3 proposal types in terms of ESG fund-caused within-family disagreement are all ESG-related proposals.

In Panel B of Table 4, we limit the analysis to E&S proposals, and present values for each E&S category. We manually categorize E&S proposals based on their agenda general descriptions; Appendix A provides more detailed information about the specific proposals within each category. Panel B reveals that the E&S proposals with higher expected costs tend to exhibit greater levels of ESG fund-caused disagreement. Notably, Privacy, Board, Human Rights, Climate, and Pay (linked to ESG) related proposals experience the highest levels of disagreement. Although we cannot tell with certainty, it is reasonable to think that investors would view these proposals as being costlier than ones related to ESG reporting.

In Appendix B, we present the results of a comparable analysis using the by-hold and by-vote ESG measures. As expected, the by-vote measure leads to similar conclusions regarding voting disagreement. However, when it comes to by-hold ESG funds, they seldom disagree with sibling funds when voting on E&S proposals. In the next subsection, we examine the voting patterns of ESG and non-ESG funds on various subcategories of E&S proposals.

4.3 Analysis of voting on E&S proposals

In Figure 1, we presented the AUM based on different methods of identifying ESG-focused funds, including voting, fund name, and fund holdings. However, it is important to note that even if funds advertise themselves as ESG-focused or incorporate ESG considerations in their holdings, it does not necessarily mean that they consistently vote in favor of E&S proposals, especially those that may entail significant costs to implement. To provide further insights into this aspect, Table 5 examines how ESG-focused funds vote on various categories of E&S proposals. This analysis helps us understand the alignment between funds identified as ESG-focused by voting, name, or holdings. Figure 3 provides a summary of the information presented in Table 5.

ESG-by-vote funds, as per their definition, tend to vote more favorably on all categories of E&S proposals compared to other funds. However, it is important to acknowledge that their voting preferences still exhibit some level of heterogeneity. While ESG-by-vote funds generally support the majority of Climate, DEI (Diversity, Equity, and Inclusion), Donation, Human Rights, Lobbying, Pay (linked to ESG), Privacy, and General Social proposals, they do not show the same level of support for other categories such as Animal Rights, Board composition, Holy Lands, Labor, Report (ESG), Tobacco, and Weapons. Among the E&S proposal categories, Donation-related proposals receive the highest level of support (91%) from ESG-by-vote funds. However, proposals related to Climate, Human Rights, Pay, and General Social receive just above 50% support from these funds. This variation in voting preferences reflects the significant differences in the details of each proposal. Even among ESG funds, there is not a unanimous 100% agreement on any particular type of proposal. In Appendix A we list the agenda general description of proposals within each E&S proposal category.

Shifting focus to funds that explicitly declare an ESG preference in their name, we observe that these funds generally support the majority of E&S (Environmental and Social) proposals in 7 out of the 8 categories endorsed by ESG-by-vote funds. The only exception is the Human Rights category, where ESG-by-vote funds support a majority of 53%, whereas ESG-by-name funds support 49.8% of human rights proposals. The strikingly similar voting pattern is justified by the overlap between the two groups; 65% of by-name ESG funds are also by-vote ESG. However, only 5% of by-vote ESG funds are by-name ESG, indicating that many funds that vote in favor of E&S proposals do not declare an ESG preference in their name.

Finally, we examine the voting behavior of funds that appear to utilize ESG filters for selecting their portfolio companies (ESG-by-hold funds). We find that these funds' pro-ESG stance is limited to the filtering process, as they never back the majority of proposals in any E&S category. Their highest support is for Donation proposals (44%), followed by DEI (37%), while for the rest of the categories they never support more than a third of the proposals.

Overall, the results in Table 5 suggest that the support for E&S proposals is still low; even funds that declare an ESG preference in their name do not support the majority of E&S proposal categories. The low support could still matter if ESG funds have concentrated positions, but this is not the case; ESG funds are smaller and hold more stocks than non-ESG funds (see Table 2). As

a result, only 3% of E&S proposals pass throughout the sample period. The results are also consistent with strategic E&S voting where funds strategically express greater support for proposals that are farther from the passing threshold (Michaey, Ordonez-Calafi, and Rubio, 2023).

4.4 Response to votes

4.4.1 Close votes and fund holdings

The overwhelming majority of shareholder E&S proposals receive minimal support, although a few proposals come close to passing and some even pass. To gain insights into fund behavior, we analyze their reactions to close voting outcomes in Table 6. We examine two bandwidths for close votes: a difference of 10% or less between votes for and against, and a difference of 5% or less. We calculate the changes in fund holdings by comparing the quarter following the vote outcome with the quarter preceding the vote outcome.

It is important to note that our analysis focuses on computing the percentage change in holdings around voting outcomes, which excludes cases where funds initiate ownership after a close vote. ESG funds may strategically establish positions in firms where E&S proposals narrowly pass and subsequently propose additional E&S initiatives to advance the company's ESG profile. While this aspect could be significant, our primary focus remains on the close votes and changes in positions surrounding voting outcomes. We find that both the median ESG-by-vote fund and the median ESG-by-hold fund reduce their holdings following close-vote proposals, regardless of the voting outcome. ESG-by-vote funds tend to reduce their holdings more when the proposal fails, whereas ESG-by-hold funds exhibit greater reductions when the proposal passes. Considering the larger decrease in holdings by ESG-by-vote funds after narrow proposal failures, one could argue that these funds aim to maintain their holdings in firms where proposals narrowly pass, maximizing the likelihood of similar proposals passing in the future. However, this implies that for firms with proposals narrowly failing, ESG-by-vote fund's departure means that a substantial number of non-ESG-by-vote funds must start supporting E&S proposals in the future in order for these proposals to pass.

Conversely, ESG-by-name funds increase holdings following close-vote E&S proposals, regardless of the voting outcome, consistent with increasing voting power in firms where it is most

influential for voting outcomes. In fact, ESG-by-name funds show the highest increase in holdings after the failure of proposals at a narrower threshold (within 5% of the passing threshold), indicating a potential strategy to flip future votes. However, it is important to note that ESG-by-name funds never exceed 1% of aggregate AUM throughout the sample period. Furthermore, their AUM is distributed across many firms, making it unlikely that they accumulate enough shares to significantly impact the voting outcomes of a significant number of proposals.

Although E&S proposals face low success rates, their introduction and subsequent voting can still exert influence on firms, compelling management to make changes. In the upcoming subsection, we conduct an analysis to examine this phenomenon in more detail.

4.4.2 Changes within the firm

Even if the majority of proposals fail, the act of proposing them can still compel management to make changes to the company's ESG policies. Figure 4 presents RepRisk scores surrounding votes on E&S proposals, categorized by whether the proposal passed or failed. It is important to note that the number of firms with successful E&S proposals is low, resulting in a small sample size represented by the line in the figure for passing proposals. As anticipated, companies where the proposals failed exhibit higher average overall risk scores prior to the vote, indicating poorer ESG practices within those firms. Furthermore, their scores show no significant reaction to the vote. Assuming that ESG scores accurately reflect firm-level ESG practices, this rules out the possibility that failed proposals lead to improvements in ESG outcomes.

Companies where the proposals passed initially exhibit lower overall scores, indicating better ESG practices. Notably, their scores show a slight increase concurrent with the proposal. However, by the third quarter following the proposal, their scores return to their pre-passing level. One possible explanation is that the E&S proposals at these firms reveal current ESG practices that may need improvement, leading to temporary increases in their RepRisk scores. The passing of E&S proposals can contribute to mitigating these transient increases in ESG risks. Nevertheless, upon examining the figures, it becomes evident that the outcome of the proposal vote appears to have minimal long-term impact on the subject firms.

4.5 Special situations

We conclude our analysis by examining several special situations: reactions to FTSE4Good index inclusion and exclusion events, voting on acquisition bids by high ESG acquirers, voting on material versus immaterial E&S proposals, and voting by institutions that have signed the UNPRI.

4.5.1 FTSE4Good index rebalances

Our first special situation involves the reconstitutions of the FTSE4Good index. It is possible that FTSE lags other indicators, and adds a company to the FTSE4Good index only after its ESG scores have consistently been high. In this case, the inclusion of a company in the index may not have a significant effect on the holdings of ESG funds, as they would have already held the company prior to its inclusion. The same could be true for exclusions from the index. On the other hand, the certification provided by FTSE could hold meaningful value or provide incremental information. In such cases, we would expect to observe changes in the ownership composition of the affected companies. It is ultimately an empirical question, which we attempt to answer in Table 7.

We analyze the impact of FTSE rebalancing announcements on fund holdings in included and excluded stocks. Table 7 presents the percentage of ESG and non-ESG funds that increase, decrease, or maintain their holdings in these event stocks from the quarter before to the quarter after the rebalancing announcement. Additionally, we report the percentage of funds that do not own these stocks during the rebalancing events. The findings indicate that, except for ESG-by-name funds, ESG funds are slightly more likely to decrease their holdings rather than increase them around both inclusion and exclusion events. In contrast, ESG-by-name funds show a higher likelihood of increasing their holdings, particularly around inclusion events. However, it is important to note that regardless of the ESG measure, the majority of funds do not hold FTSE4Good stocks during the quarters surrounding the rebalancing events.

We conduct a further analysis by comparing mutual fund holdings to the FTSE4Good US index. This allows us to assess the significance of ESG filters used by mutual funds. Specifically, we calculate an active share measure that is analogous to the approach introduced by Cremers and Petajisto (2009), but relative to the FTSE4Good US index. By employing this methodology, we

are able to evaluate the extent to which mutual funds deviate from the holdings of the FTSE4Good index, where greater deviation signifies less strict ESG filters. The active share measure is computed as follows:

$$\text{Active Share} = \frac{1}{2}\sum_{i=1}^{N} |\omega_{fund,i} - \omega_{index,i}|$$

where $\omega_{fund,i}$ and $\omega_{index,i}$ are portfolio weights of asset i in the fund and in the index, respectively. Based on this definition, a lower active share relative to the FTSE4Good US index signifies a mutual fund that closely adheres to ESG filters when selecting its holdings. In other words, a lower active share indicates a stronger alignment with the ESG benchmark. For instance, a fund that replicates the index exactly will have an active share of 0, while a fund that does not hold any securities that are included in the index will have an active share of 1.

Table 8 presents the results of calculating the active share each year for different types of ESG funds using all three ESG measures. The consistently high active shares relative to the FTSE4Good US benchmark reaffirm our previous finding that the majority of funds hold portfolios that significantly deviate from what would be expected based on an ESG focus. Funds that explicitly identify as ESG-focused in their name start with a relatively low active share of 0.72 in 2010 and fluctuate throughout the sample period, ultimately settling at around a similar level in 2021. When using voting as a criterion to identify funds with a demonstrated ESG preference, we do find that their active share has trended downward over time, reaching a low of 0.73 in 2020 before rebounding very slightly in 2021. Nevertheless, non-ESG-by-vote funds also exhibit a similar downward trend in their active share. Notably, ESG-by-hold funds maintain a relatively stable and high active share of around 0.97. This could be attributed to the divergences between RepRisk's ESG ratings and FTSE's methodology for index inclusion and exclusion. Another possibility is the fact that RepRisk's approach of using media coverage mechanically makes smaller firms look better than larger, more newsworthy firms. To the extent that the FTSE index contains larger firms than the typical fund, the fund's active share will be higher. This is why it's important to examine funds' decisions to add or drop firms directly, which we do next.

Complementing our active share analysis, Table 9 presents summary statistics of the industry-adjusted RepRisk scores for companies that are added and dropped from the portfolios of both ESG and non-ESG funds. We define stock-added events as cases where a fund starts holding

a stock that it did not hold in the previous quarter, and stock-dropped events where a fund sells all of its shares in a company (the current quarter has zero shares, and the previous quarter had positive shares). For comparison, we provide additional statistics for all stocks held by the funds in Panel C, and statistics of raw and adjusted RepRisk scores for all CRSP firms in Panel D. Note that the median firm in CRSP has a raw RepRisk score of zero, making the majority of industry adjusted RepRisk scores negative (75^{th} percentile is -7.83).

The analysis reveals that added stocks generally have lower industry-adjusted RepRisk scores compared to dropped stocks, indicating that portfolios are evolving to include firms with lower ESG risk. However, the difference in ESG scores between added and dropped firms is not significantly different for funds that identify as ESG-focused. In fact, this difference is more pronounced for non-ESG funds, suggesting that those funds make larger ESG score improvements when updating their portfolios. One possible explanation for this phenomenon is that ESG-focused funds may already hold stocks with better ESG profiles, making it more challenging to replace them with even better firms. Panel C of Table 9 shows that this is not the case; the ESG score of the median stock held by ESG funds is not significantly different from that held by non-ESG funds, except for ESG-by-hold funds, which aligns with their specific definition.

The fact that added stocks have lower ESG risk than dropped stocks across the board could indicate that funds are universally implementing ESG filters. This is unlikely to be the case since ESG-by-name and ESG-by-vote funds look to be implementing less stringent filters than their non-ESG counterparts. For example, the median added stock for non-ESG-by-vote funds has an adjusted RepRisk score that is 4.57 lower than the median dropped stock (11.09 - 15.67), compared to 3.06 for ESG-by-vote funds (10.61 - 13.67). If all funds are implementing ESG filters, we would expect funds that show more support for E&S proposals or explicitly state ESG preferences in their name to implement more strict filters than their non-ESG counterparts, but this is not the case. Alternatively, added stocks being better than dropped stocks across the board could be a by-product of how scores and valuations are changing for all firms. We investigate this further in Figure 5.

Figure 5 presents the value-weighted industry-adjusted RepRisk score for the median ESG and non-ESG fund using each of the three ESG measures. The figure also shows the score of a value-weighted portfolio of all firms in CRSP, and the score of the median firm in CRSP. First,

the line representing the median CRSP firm is lower than each of the other lines, indicating that the ESG risk of the median firm is lower in comparison to the median fund's portfolio or the value weighted CRSP portfolio. This is unsurprising given that RepRisk is constructed using different media sources, which tend to focus on larger firms with high institutional ownership, and so will mechanically identify more risks for larger firms typically held by funds. Second, besides the median non-ESG hold and non-ESG vote funds, whose portfolio scores are almost identical to that of the CRSP value-weighted portfolio, all other funds have lower scores, indicating that funds tend to avoid high reputation-risk firms. Third, the wedge between the median fund, irrespective of the ESG measure, and the CRSP portfolio is not changing over time. This indicates that the RepRisk score patterns of portfolio additions and deletions reflect passive changes as opposed to active ESG screening by funds; the correlation between each of the fund scores and the CRSP value-weighted score is greater than 90%. Last, the portfolio changes discussed in Table 9 do not result in a clear downward trend in value-weighted fund-level RepRisk scores, suggesting that, on a value-weighted basis, these changes are not important drivers of overall portfolio scores.

Overall, the findings suggest limited evidence to support the widespread application of binding ESG filters, both across funds and within funds that claim to be ESG-focused. Despite the discussions surrounding ESG integration, it appears that the implementation of strict ESG filters is not pervasive.

4.5.2 Acquisition votes

The next special situation we examine is voting on M&A (merger and acquisition) proposals. We investigate whether ESG funds are more inclined to approve a low-premium bid when the acquiring company has a better ESG profile compared to the target company. Additionally, we explore whether ESG funds are more likely to reject high-premium deals if the acquiring company's ESG profile is worse than that of the target company.

Table 10 presents the results of regression analyses of the support of M&A proposals.[7] The dependent variable is an indicator variable that takes a value of 1 if the fund, acting as a shareholder of the target company, votes in favor of the acquisition, and 0 otherwise. The main independent

[7] We conduct additional tests by dividing the sample into responsive and non-responsive funds. Responsive funds are defined as those that voted against at least one merger proposal during the sample period. The results of these subsample tests are consistent with the overall findings.

variable is an indicator variable that takes a value of 1 if the target shareholder fund is an ESG fund, and 0 otherwise. We report the results using each of the three ESG measures and control for various deal characteristics, including whether the deal is all-cash, whether the acquirer and target are in the same industry, and hostility (attitude) in the deal. We also control for acquirer characteristics such as cash, book leverage, market-to-book ratio, and book assets, measured prior to the shareholders' meetings.

Panel A presents the regressions for deals where the acquirer's ESG profile is better than that of the target (the acquirer has a lower RepRisk score than the target), while Panel B presents the regressions for deals where the acquirer's ESG profile is worse than that of the target (the acquirer has a higher RepRisk score than the target). We further analyze the results by deal premium, defining high-premium deals as those with a premium above the yearly median, and low-premium deals as those with a premium below the yearly median.

ESG-by-name funds demonstrate a preference for high-ESG acquirers, even in low-premium deals. They are 2.1% more likely than non-ESG funds to support a low-premium bid by a high-ESG bidder. However, we do not find evidence that they vote against a merger by a low-ESG acquirer if it comes with a high premium (they are more likely to vote against it if the premium is low, although this effect is not statistically significant). Thus, while ESG-by-name funds provide some additional support to high ESG firms, it is not enough to override their primary obligation to accept a high premium deal regardless of the ESG score of the acquiring firm. In contrast, both ESG-by-vote and ESG-by-hold funds do not show a notable inclination to support actions by high ESG firms. There is no evidence that these funds are more likely than non-ESG funds to support high ESG bidders in low-premium deals. However, we do find some evidence that ESG-by-vote funds tend to vote against high-premium deals by low-ESG bidders. Overall, ESG-by-name funds exhibit the most consistent support for ESG considerations among the three types of funds analyzed. However, given that they control less than 1% of aggregate AUM, the impact of their actions is unlikely to be material.

4.5.3 Material E&S proposals

Next, we examine ESG funds voting on material versus immaterial E&S proposals. We collect materiality data from the Sustainability Accounting Standards Board (SASB) website.

SASB provides information on the ESG issues that are most relevant to each industry.[8] SASB identifies five key sustainability dimensions: Environmental, Social Capital, Human Capital, Business Model & Innovation, and Leadership & Governance. It also specifies the industries for which each dimension is considered material, along with the materiality issues within each dimension. By leveraging this information, we can link industry-specific materiality issues from SASB to the E&S proposals in our analysis, allowing us to classify them as either material or immaterial. For example, SASB identifies greenhouse gas emissions as a material ESG issue for the Airlines industry. We link greenhouse gas emissions to the ISS voting item (ISSAGENDAITEMID) with the code 'S0743'. This voting item typically encompasses proposals that seek to enhance transparency regarding greenhouse gas emissions oversight, control mechanisms, and reduction goals. Consequently, we classify these proposals as material for the Airlines industry. Appendix C provides details of the five sustainability dimensions and their corresponding issues. Additionally, it includes materiality information for six SASB industries, highlighting the material issues specific to each industry using color-coded markers.[9]

Table 11 presents a summary of material and immaterial E&S shareholder proposals. The proportion of material proposals relative to immaterial ones is relatively modest, with material proposals comprising an average of 21% of all E&S proposals during our sample period. Nevertheless, this proportion is growing over time, with 29% of all E&S proposals classified as material in 2021. Furthermore, the percentage of material proposals that pass has also exhibited an upward trend. By the end of the sample period, a higher percentage of material proposals have passed compared to immaterial ones.

Next, we analyze funds' voting patterns on material versus immaterial E&S shareholder proposals. While it is commonly assumed that ESG-oriented funds are more inclined to support E&S proposals, it remains uncertain how they vote on material proposals. If their commitment to enhancing the sustainability of their portfolio companies is genuine, we would expect ESG-oriented funds to show a greater inclination, or at least an equal inclination, to approve material

[8] SASB is an independent non-profit organization established in 2011. Its primary objective is to develop sustainability accounting standards that help companies disclose the sustainability topics relevant to their investors. To address the varying sustainability concerns in different industries, SASB has created the Sustainable Industry Classification System (SICS). This classification system categorizes companies based on shared sustainability risks and opportunities within their respective industries.

[9] For additional information, see https://www.sasb.org/.

proposals. However, this pattern may not hold if their voting decisions are driven by greenwashing incentives or if their ESG orientation is significantly influenced by non-relevant E&S issues.

The results presented in Table 12 highlight a notable finding: material proposals receive higher approval rates, irrespective of funds' ESG preferences, as evidenced by the significantly positive coefficient for Materiality across all panels. Furthermore, ESG-focused funds identified by their names and voting patterns demonstrate an even stronger inclination to approve material proposals. Despite these findings, the overall trend indicates that material E&S proposals rarely pass. Out of a total of 725 material proposals analyzed in the sample, only 29 were approved, resulting in a passing rate of merely 4%. The increased support observed from both ESG and non-ESG funds for these proposals could potentially be attributed to strategic voting, wherein these funds lend their support to relevant proposals that are unlikely to pass.

4.5.4 Voting by PRI signatories

In our analysis of the last special situation, we calculate the number of E&S proposals that would have been passed if all funds belonging to families that signed the United Nations Principles for Responsible Investing (UNPRI) had unconditionally supported all subsequent E&S proposals they voted on. It is worth noting that 55% of U.S. signatories of PRI joined after 2016. However, if these funds had provided unconditional support, the voting outcome would have been reversed for a minimum of 496 E&S proposals, potentially increasing the passage rate of E&S proposals to 17.5% (103 proposals out of 3425 already pass). Table 13 provides a breakdown of these proposals by category, with 25% of the proposals that would have passed being climate-related.

Overall, despite institutions publicly declaring their commitment to sustainable investing, their actual voting behavior often falls short of their stated commitment. While these institutions collectively hold significant influence as the marginal voter on many E&S proposals, their votes rarely align with their public commitment to sustainable investing.

5 Conclusion

There has been a growing focus on ESG issues in both practitioner and academic communities. However, despite the attention and numerous announcements related to ESG investing, there is limited evidence on how these issues impact mutual fund voting and portfolio decisions in the aggregate. This is noteworthy considering the large literature studying the indirect effects of ESG-oriented investing on asset pricing, cost of capital, and liquidity, for example.

In this paper, we employ three different approaches to identify ESG-oriented mutual funds: analyzing their names, examining their voting preferences, and evaluating their portfolio holdings. Regardless of the identification method used, it is evident that assets under ESG-focused management represent a small fraction of the total assets. Furthermore, even ESG-oriented funds often vote against shareholder proposals related to E&S issues. When considering portfolio holdings and turnover, firms added to portfolios have better ESG scores than those dropped for both ESG and non-ESG funds. Nevertheless, portfolio additions and deletions do not improve fund scores on a value-weighted basis, and those scores closely track the ESG score of a value weighed portfolio of all public firms. This suggests that while investment filters based on ESG criteria may exist, they rarely bind.

We also explore various special situations, such as funds' response to inclusions and exclusions from the FTSE4Good index, voting on M&A proposals, and voting on material proposals. Our findings indicate that FTSE4Good rebalancing events generally have minimal impact. In acquisitions, we do observe that funds explicitly declaring ESG preferences in their names tend to support low-premium bids by high-ESG acquirers. However, it is important to note that these funds never control more than 1% of aggregate AUM, which significantly limits their influence. Additionally, we find that material E&S proposals receive more support, but only a small proportion (4%) of these proposals actually pass. Lastly, unconditional support from funds associated with families that have signed the United Nations Principles for Responsible Investing (UN PRI) would lead to a significant change in the voting outcomes of numerous E&S proposals.

Overall, our findings suggest that the effects of ESG investing are growing but remain relatively limited. E&S proposals rarely pass, and the ESG scores of funds declaring ESG preferences are not that different from the rest of funds.

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Appendix A: Categories of E&S Proposals

Category	Agenda General Description
ANIMAL	Animal Slaughter Methods
ANIMAL	Animal Testing
ANIMAL	Animal Welfare
BOARD	Establish Environmental/Social Issue Board Committee
BOARD	Require Environmental/Social Issue Qualifications for Director Nominees
BOARD	Sustainability Activities and Action
CLIMATE	Climate Change Action
CLIMATE	Community- Environmental Impact
CLIMATE	Energy Efficiency
CLIMATE	Environmental – Related Miscellaneous (INACTIVE)
CLIMATE	GHG Emissions
CLIMATE	Genetically Modified Organisms (GMO)
CLIMATE	Hydraulic Fracturing
CLIMATE	Nuclear Power – Related
CLIMATE	Operations in Protected Areas
CLIMATE	Publish Two Degree Scenario Analysis
CLIMATE	Recycling
CLIMATE	Renewable Energy
CLIMATE	Report on Climate Change
CLIMATE	Report on Environmental Policies
CLIMATE	Report on Sustainability
CLIMATE	Toxic Emissions
CLIMATE	Wood Procurement
DEI	Adopt Sexual Orientation Anti-bias Policy
DEI	Black Economic Empowerment(BEE)Transactions(SouthAfrica)
DEI	Board Diversity
DEI	Fair Lending
DEI	Gender Pay Gap
DEI	Income Inequality
DEI	MacBride Principles
DEI	Report on EEO
DEI	Report on Pay Disparity
DONATE	Approve Charitable Donations
DONATE	Approve Political Donations
DONATE	Charitable Contributions
DONATE	Political Contributions Disclosure
HL	Adopt Holy Land Principles
HL	Holy Land Principles
HUMAN	Human Rights Risk Assessment
HUMAN	Improve Human Rights Standards or Policies

HUMAN	Operations in High Risk Countries
LABOR	Facility Safety
LABOR	Health Care – Related
LABOR	Labor Issues – Discrimination and Miscellaneous
LABOR	Plant Closures
LOBBY	Political Activities and Action
LOBBY	Political Lobbying Disclosure
PAY	Link Executive Pay to Social Criteria
PRIVACY	Data Security, Privacy, and Internet Issues
REPORT	Accept/Approve Corporate Social Responsibility Report
REPORT	Anti-Social Proposal
REPORT	Disclose Prior Government Service
REPORT	Miscellaneous – Environmental and Social Counterproposal
SOC	Approve/Amend Corporate Social Responsibility Charter/Policy
SOC	Review Drug Pricing or Distribution
SOC	Social Proposal
SOC	Product Safety
TOBAC	Reduce Tobacco Harm to Health
TOBAC	Review Tobacco Marketing
TOBAC	Sever Links with Tobacco Industry
TOBAC	Tobacco – Related – Miscellaneous
TOBAC	Tobacco – Related – Prepare Report
WEAP	Review Foreign Military Sales
WEAP	Weapons – Related

Appendix B: Table 4 Using the by-Vote and by-Hold ESG Measures

Table B1
Results of Table 4 Using the ESG-by-vote Classification of Mutual Funds

	Unconditional Mean Consensus	Consensus when an ESG fund is voting	Non-ESG funds Consensus when an ESG fund is voting	
	(1)	(2)	(3)	(3)-(2)
Panel A: Consensus by Proposal Type				
SH – E&S Proposal	86%	62%	87%	25%
SH – Social Proposal	86%	60%	83%	23%
SH – Environmental Proposal	87%	69%	87%	18%
SH – Compensation	82%	64%	81%	17%
SH – Severance Agreement	81%	61%	75%	14%
SH – Proxy Contest Expenses	82%	69%	83%	14%
SH – Shareholder Rights	82%	63%	76%	13%
SH – Board-Related	85%	68%	81%	13%
Re-Registration	91%	83%	89%	6%
Proxy Contest	90%	83%	87%	5%
Panel B: Consensus by E&S Proposal Category				
PRIVAC	81%	50%	82%	32%
LOBBY	79%	46%	77%	32%
PAY	84%	57%	88%	31%
DONATE	82%	52%	79%	27%
CLIMAT	84%	56%	81%	26%
BOARD	86%	64%	89%	25%
HUMAN	87%	62%	85%	23%
DEI	84%	60%	82%	22%
SOC	89%	61%	81%	20%
ANIMAL	94%	79%	97%	18%
WEAP	97%	77%	95%	17%
LABOR	89%	70%	86%	16%
HL	94%	87%	99%	12%
TOBAC	97%	85%	95%	10%
REPORT	97%	91%	99%	8%

Table B2
Results of Table 4 Using the ESG-by-hold Classification of Mutual Funds

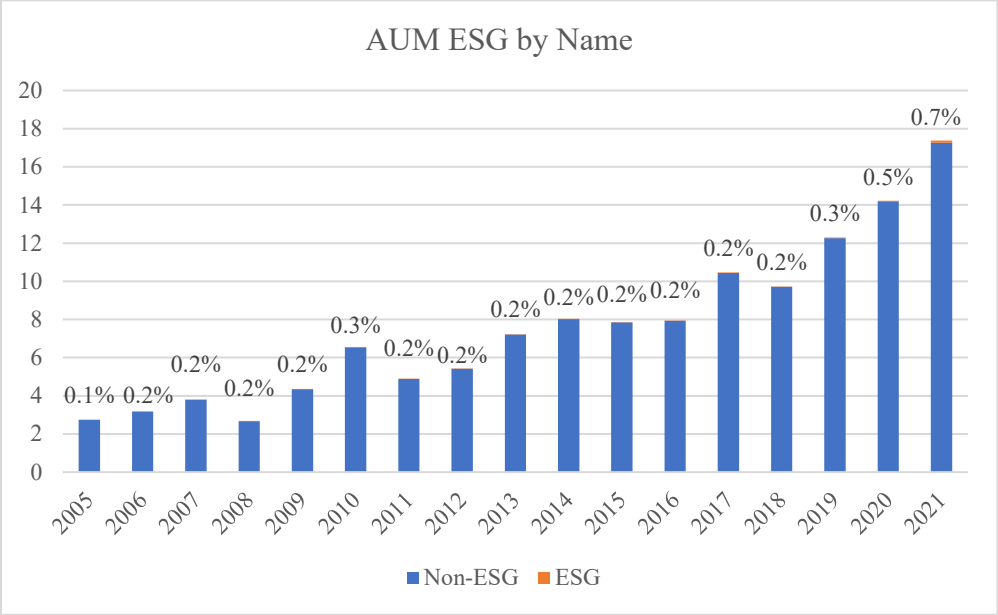
	Unconditional Mean Consensus	Consensus when an ESG fund is voting	Non-ESG funds Consensus when an ESG fund is voting	
	(1)	(2)	(3)	(3)-(2)
Panel A: Consensus by Proposal Type				
SH – Director Election – Cumulative	99%	82%	90%	8%
Statutory Auditor – Related	98%	93%	98%	5%
Director Election – Cumulative	97%	82%	85%	3%
Non-Routine Business	95%	92%	94%	2%
Proxy Contest	91%	90%	91%	2%
Director Election – Bundled	95%	92%	93%	2%
SH – Proxy Contest	95%	92%	94%	1%
SH – Board-Related	86%	84%	86%	1%
SH – Shareholder Rights	84%	82%	83%	1%
Compensation-Related	97%	93%	94%	1%
Panel B: Consensus by E&S Proposal Category				
PRIVAC	83%	83%	85%	1%
DONATE	83%	83%	85%	1%
ANIMAL	94%	94%	95%	1%
HUMAN	88%	87%	88%	1%
CLIMAT	85%	83%	84%	1%
LOBBY	80%	80%	81%	1%
DEI	85%	83%	84%	1%
PAY	85%	83%	84%	1%
LABOR	90%	86%	86%	1%
BOARD	86%	84%	85%	1%
SOC	89%	85%	85%	0%
REPORT	97%	96%	96%	0%
HL	94%	92%	92%	0%
TOBAC	97%	92%	92%	0%
WEAP	97%	97%	97%	0%

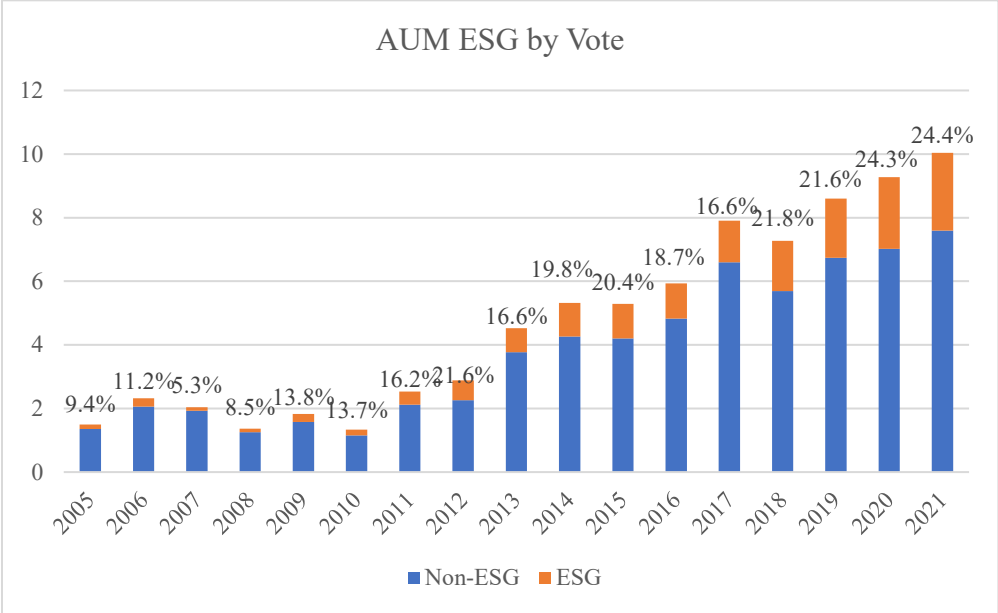
Appendix C: SASB Materiality Map

		6 of SASB's 77 industries					
Dimension	General Issue Category	Health Care Delivery	Non- Alcoholic Beverages	Electric Utilities & Power Generators	Advertising & Marketing	Auto Parts	Metals & Mining
Environment	GHG Emissions		■	■			■
	Air Quality	■		■		■	■
	Energy Management		■	■			■
	Water & Wastewater Management	■	■	■		■	■
	Waste & Hazardous Materials Management						■
	Ecological Impacts						■
Social Capital	Human Rights & Community Relations	■			■		■
	Customer Privacy	■		■			
	Data Security	■	■			■	
	Access & Affordability	■			■		
	Product Quality & Safety	■	■				■
	Customer Welfare						■
	Selling Practices & Product Labeling						
Human Capital	Labor Practices	■				■	
	Employee Health & Safety	■	■		■	■	
	Employee Engagement, Diversity & Inclusion						
Business Model & Innovation	Product Design & Lifecycle Management			■			
	Business Model Resilience						
	Supply Chain Management	■					
	Materials Sourcing & Efficiency	■	■				
	Physical Impacts of Climate Change		■				
Leadership & Governance	Business Ethics						
	Competitive Behavior						
	Management of the Legal & Regulatory Environment						
	Critical Incident Risk Management			■			■
	Systemic Risk Management			■		■	

Figure 1
Assets Under Management (AUM) by ESG Type

This figure presents the time series of AUM (in $tn) by ESG type. We classify funds into ESG or Non-ESG based on their names, their votes on E&S proposals, or the ESG score of their underlying portfolio. ESG-by-name funds are funds with an ESG-oriented name, ESG-by-vote funds are funds with a positive *es_vote_ratio* in a given year, and ESG-by-hold funds are funds with below median value-weighted average adjusted RepRisk score in a given year. The ESG-by-hold sample only includes active funds. The percentages above bars in each figure indicate the percentage of AUM managed by ESG funds each year. The ESG-by-name and ESG-by-vote measures are available from 2005 till 2021, whereas the ESG-by-hold measure is available from 2007 till 2021.





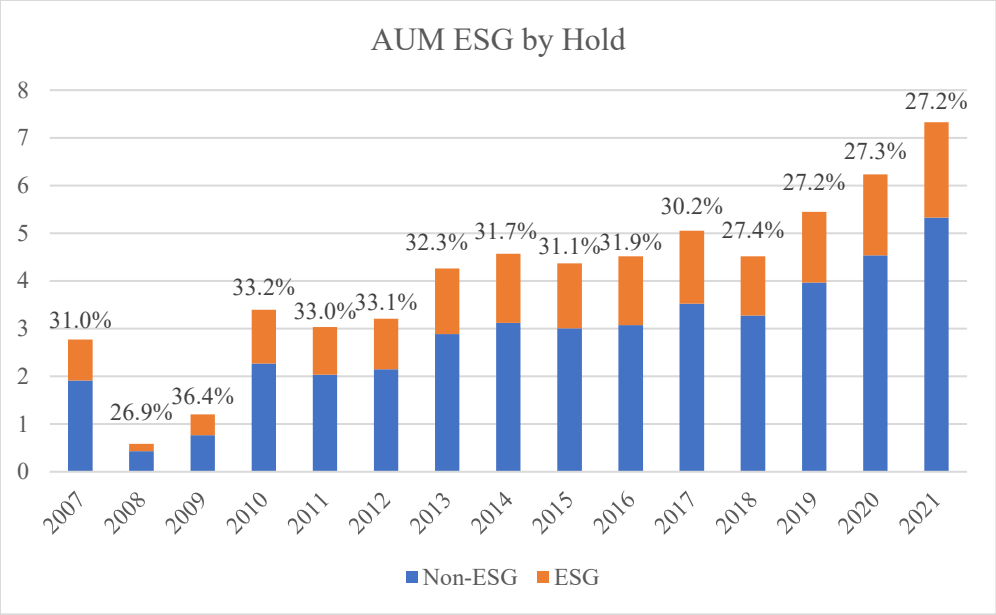
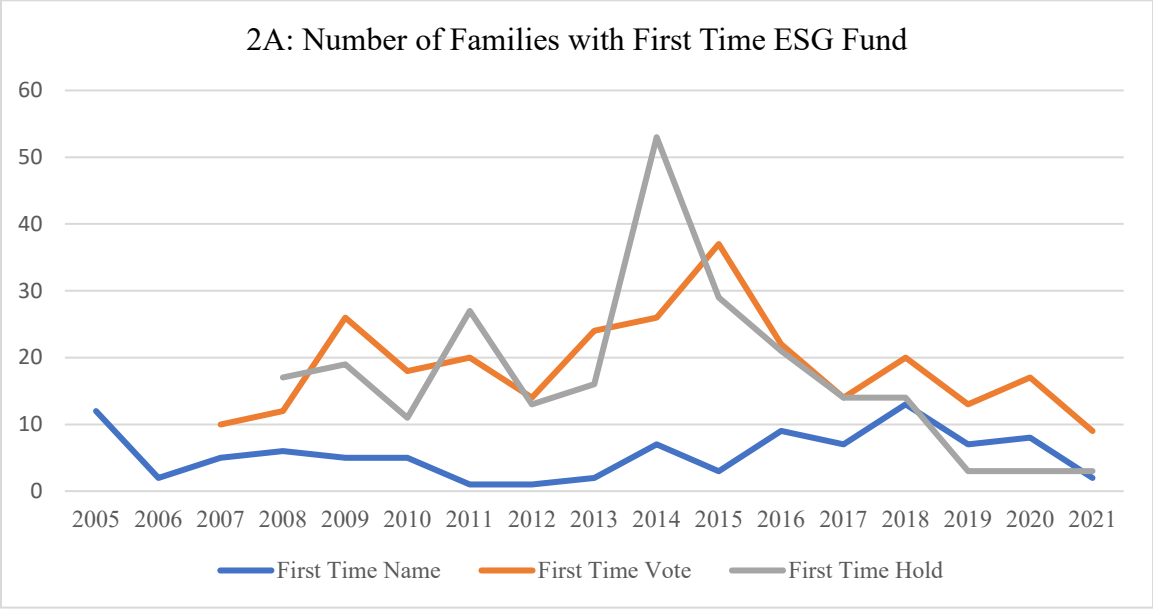

AUM ESG by Hold
8
7
6
5
4
3
2
1
0
31.0%
26.9%
36.4%
33.2%
33.0%
33.1%
32.3%
31.7%
31.1%
31.9%
30.2%
27.4%
27.2%
27.3%
27.2%
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
Non-ESG
ESG

Figure 2
Voting Spillover Effects

Figure 2A presents the number of families with a first-time ESG fund throughout the sample using each of the three ESG measures. ESG-by-name funds are funds with an ESG-related name. ESG-by-vote funds are funds with a positive voting score on E&S proposals in a given year. We require the fund to vote on enough E&S proposals (above the median) in a year to compute the fund's voting score. ESG-by-hold funds are funds with portfolios that fall below the median portfolio RepRisk score in a given year on a value-weighted basis. We compute the by-hold ESG measure for active funds only. Figure 2B shows the average voting score for fund families around the introduction of a first-time ESG fund (we exclude the newly introduced ESG fund when calculating the family's voting score). Year 0 is the year a first-time ESG fund is introduced into the family.



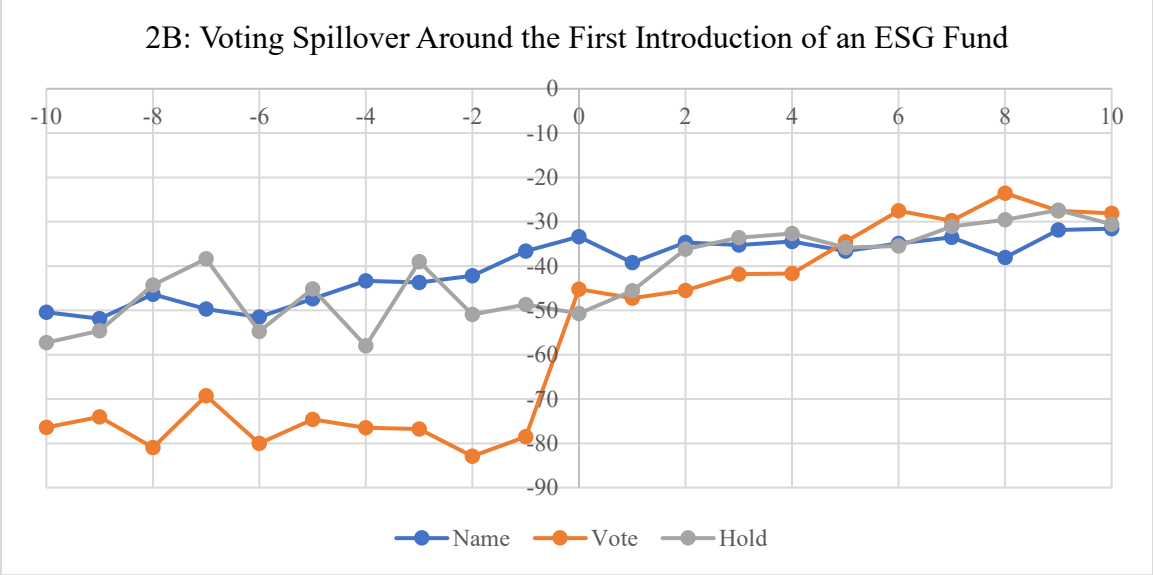
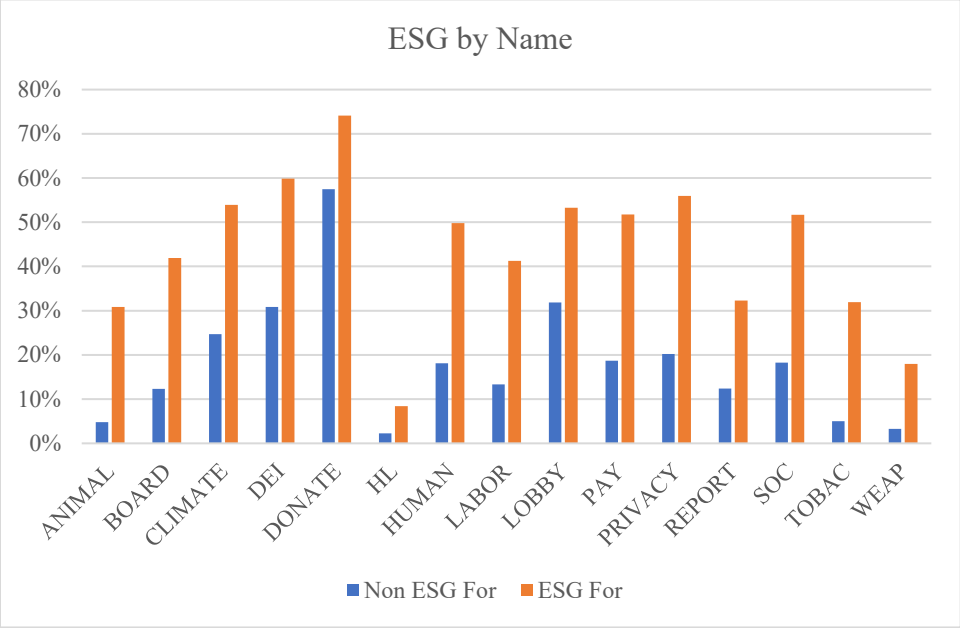
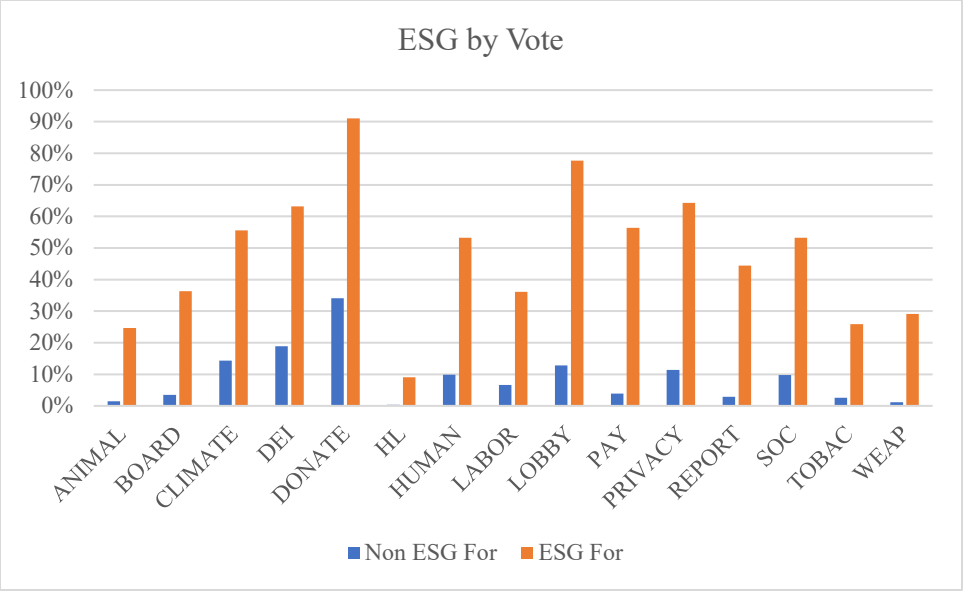


Figure 3
Voting by E&S Proposal Categories

This figure summarizes the information in Table 4. It presents the percentage of For votes by each type of funds on different E&S proposal categories. We classify funds into ESG or Non-ESG based on their name, their voting on E&S proposals, or the weighted average ESG score of their portfolio. ANIMAL includes proposals such as "Animal Slaughter Methods", BOARD includes "Establish Environmental/Social Issue Board Committee", CLIMATE includes "Climate Change Action", DEI includes "Gender Pay Gap", DONATE includes "Approve Charitable Donations", HL includes "Adopt Holy Land Principles", HUMAN includes "Improve Human Rights Standards or Policies", LABOR includes "Labor Issues – Discrimination and Miscellaneous", LOBBY includes "Political Lobbying Disclosure", PAY includes "Link Executive Pay to Social Criteria", PRIVACY includes "Data Security, Privacy, and Internet Issues", REPORT includes "Accept/Approve Corporate Social Responsibility Report", SOC includes "Approve/Amend Corporate Social Responsibility Charter/Policy", TOBAC includes "Sever Links with Tobacco Industry", and WEAP includes "Weapons-Related".




ESG by Vote
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
ANIMAL
BOARD
CLIMATE
DEI
DONATE
HL
HUMAN
LABOR
LOBBY
PAY
PRIVACY
REPORT
SOC
TOBAC
WEAP
Non ESG For
ESG For

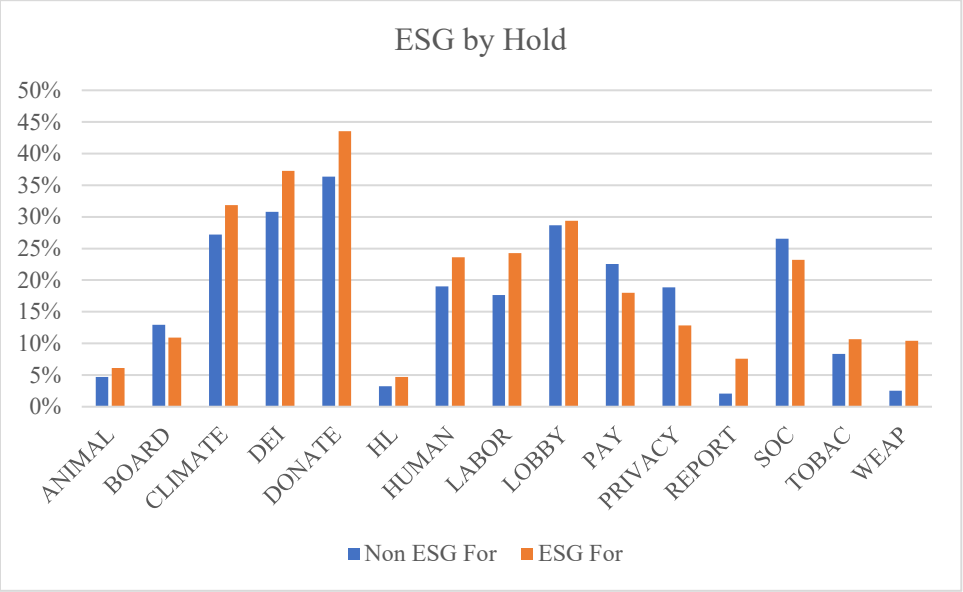

ESG by Hold
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
ANIMAL
BOARD
CLIMATE
DEI
DONATE
HL
HUMAN
LABOR
LOBBY
PAY
PRIVACY
REPORT
SOC
TOBAC
WEAP
Non ESG For
ESG For

Figure 4
Firm ESG Scores Around E&S proposals

This figure presents averages of firm-level RepRisk scores for the 8 quarters surrounding E&S proposals. Quarter 0 is the shareholder meeting quarter that includes an E&S proposal on the agenda. We split the sample by voting outcome and exclude cases where the same shareholder meeting includes multiple E&S proposals with different outcomes.

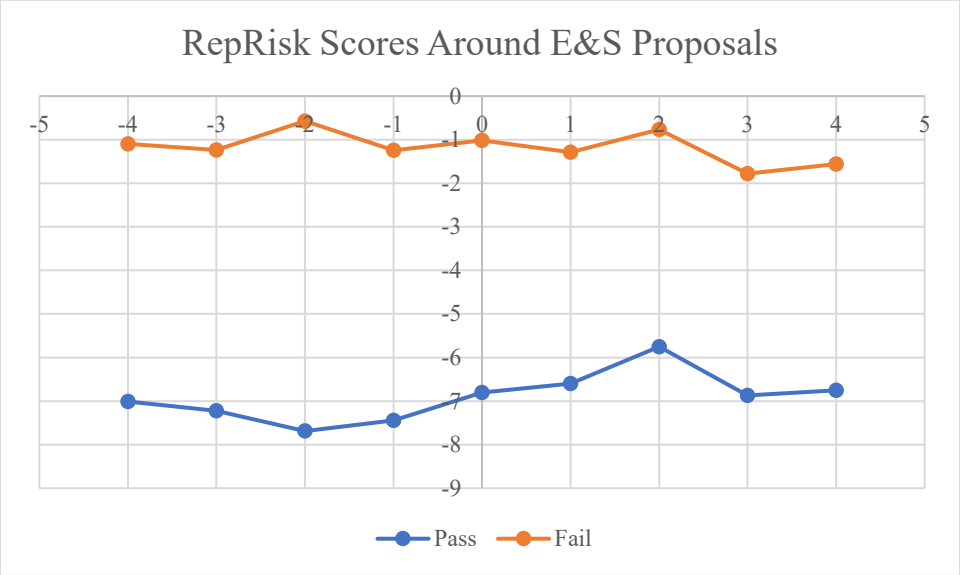


Figure 5
Fund RepRisk Scores

This figure presents the value weighted RepRisk scores of the median ESG and non-ESG fund using each of the three ESG measures. The figure also shows the value weighted RepRisk score of a portfolio of all firms in CRSP, and the RepRisk score of the median firm in CRSP. All scores are industry adjusted. The figure shows quarterly datapoints spanning from the first quarter of 2007 to the fourth quarter of 2021.

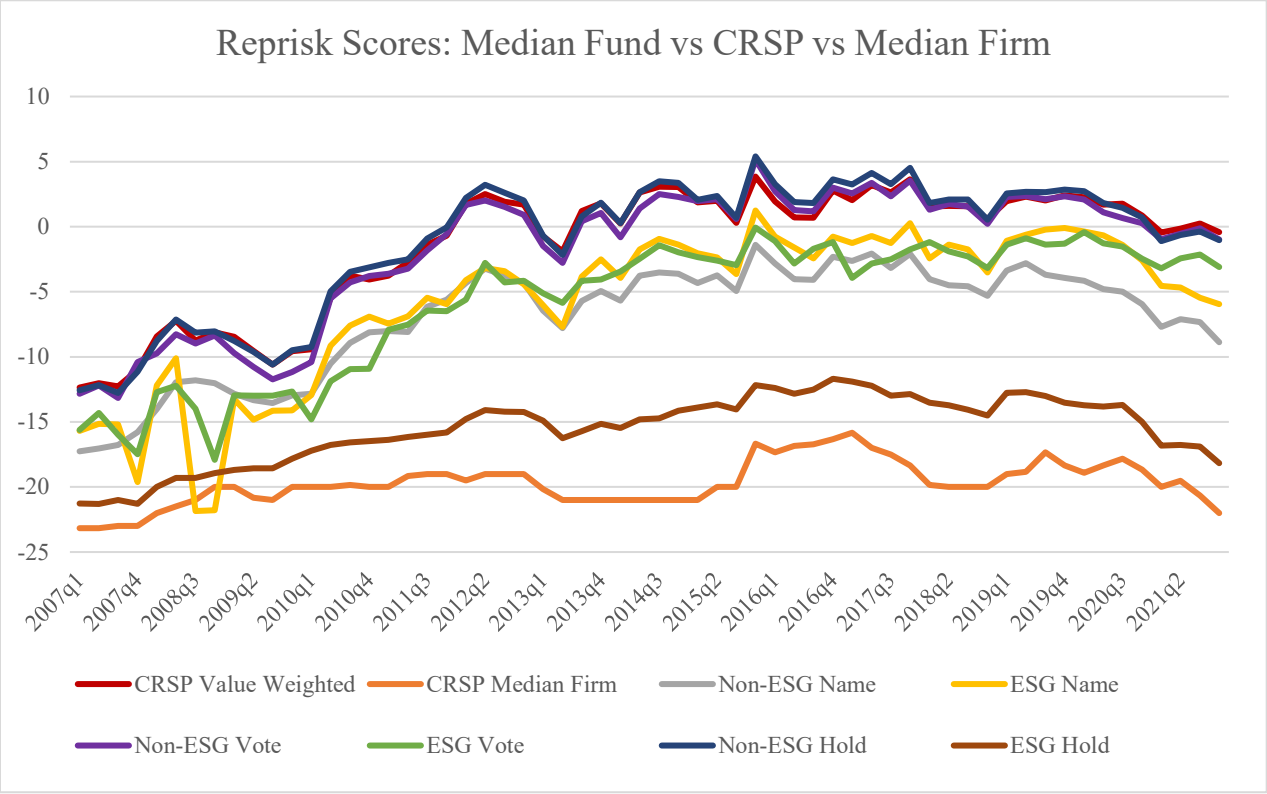


Table 1
AUM (in $m) and Number of Funds by ESG Type

This table reports the AUM (in $m) and number of funds by ESG type. Panel A reports values for funds classified based on their names. Panel B reports values for funds classified based on their voting on E&S proposals. Panel C reports values for active equity funds classified based on the ESG score of their portfolio. In Panel B, we only classify funds that vote on enough E&S proposals each year (above the median fund). Our firm-level ESG data spans from 2007 till 2021 and thus the ESG-by-Hold measure is only available for those years.

	Panel A: ESG by Name				Panel B: ESG by Vote				Panel C: ESG by Hold			
	AUM		N		AUM		N		AUM		N	
Year	ESG (1)	Non-ESG (2)	ESG (3)	Non-ESG (4)	ESG (5)	Non-ESG (6)	ESG (7)	Non-ESG (8)	ESG (9)	Non-ESG (10)	ESG (11)	Non-ESG (12)
2005	3097	2729811	14	2044	139987	1352598	31	253				
2006	4994	3169852	19	2152	260232	2064172	48	391				
2007	8167	3786581	19	2497	108337	1933055	29	415	859449	1910770	1039	929
2008	5925	2673311	29	3676	116372	1253057	68	541	157678	428872	537	520
2009	8981	4340053	46	5367	252437	1573591	91	457	437059	764680	741	710
2010	16436	6539239	71	7007	182985	1152021	71	313	1125172	2268568	1822	1805
2011	10323	4874453	45	5110	408832	2120111	211	576	1000361	2033258	1747	1734
2012	11086	5424207	43	5107	624541	2260456	193	624	1061096	2147253	1689	1688
2013	14566	7216063	40	5081	748647	3774448	284	698	1377209	2886894	1645	1651
2014	17207	8023134	39	5157	1055736	4265419	408	806	1449045	3123517	1653	1668
2015	15761	7852842	39	5386	1079128	4206625	437	871	1359833	3008154	1698	1705
2016	17025	7926564	49	5483	1109469	4822473	436	916	1439603	3075486	1702	1701
2017	21093	10440676	72	5504	1309816	6599125	437	1094	1525224	3526252	1657	1654
2018	20675	9712301	83	5555	1587469	5688998	633	903	1239363	3277649	1637	1636
2019	37664	12258382	92	5451	1856401	6739057	597	815	1480375	3967981	1592	1604
2020	70964	14150187	124	5395	2250719	7019314	520	700	1699467	4533814	1554	1570
2021	120246	17261307	157	5222	2450151	7589640	463	441	1995712	5328813	1599	1593

Table 2
Median Fund Size and Number of Stocks Held by ESG Type

This table reports the size and number of stocks held for the median ESG and non-ESG fund using all three ESG measures. ESG-by-name funds are defined as funds with an ESG-related term in their name. ESG-by-vote funds are defined as funds with positive *es_vote_ratio* and with an above median votes on E&S proposals in a given year. ESG-by-hold funds are funds with below-median portfolio RepRisk scores on a value-weighted basis.

	N	Median Size ($m)	Median Number of Stocks Held
Non-ESG Name	58172	223.6	71
ESG Name	741	72.4	83
Non-ESG Vote	8719	687.2	126
ESG Vote	4462	310.1	189
Non-ESG Hold	19868	298.1	76
ESG Hold	19811	187.5	84

Table 3
Fund Family Votes

This table reports the time series of fund family voting scores. We compute a fund family voting score for every ESG proposal-fund family pair. Specifically, for each fund family and ESG proposal *p*, we identify all the family's funds voting on *p* and their stockholdings in the firm. Then, we aggregate votes for *p* and votes against *p* at the family level and compute a family voting score as (total votes for – total votes against) / (total votes for + total votes against). We report the yearly averages of the family-level voting score in the table below.

Year	Family Voting Score
2005	-0.929
2006	-0.683
2007	-0.710
2008	-0.708
2009	-0.609
2010	-0.634
2011	-0.540
2012	-0.578
2013	-0.499
2014	-0.404
2015	-0.471
2016	-0.414
2017	-0.387
2018	-0.199
2019	-0.164
2020	-0.100
2021	-0.015

Table 4
Within-family Voting Disagreement

This table presents mean values of within-family voting consensus for families with an ESG-by-name fund. Consensus is an indicator variable equal to 1 when all funds within a family cast the same vote on a given proposal, and 0 otherwise. In Panel A, we average Consensus by proposal type and present mean values for the 10 proposal types with the highest ESG-caused disagreement. Column 1 shows the unconditional mean where at least two funds from the same family vote on the same proposal, column 2 shows the mean consensus when at least one by-name ESG fund and two non-ESG funds from the same family vote on the same proposal, column 3 shows the mean consensus of non-ESG funds when at least one by-name ESG fund and two non-ESG funds from the same family vote on the same proposal, and column 4 shows the difference (3)-(2). In Panel B, we limit the analysis to E&S proposals and present values by category of E&S proposals. We classify E&S proposals into categories based on their agenda general description (more details are available in Appendix A). ANIMAL includes proposals such as "Animal Slaughter Methods", BOARD includes "Establish Environmental/Social Issue Board Committee", CLIMATE includes "Climate Change Action", DEI includes "Gender Pay Gap", DONATE includes "Approve Charitable Donations", HL includes "Adopt Holy Land Principles", HUMAN includes "Improve Human Rights Standards or Policies", LABOR includes "Labor Issues – Discrimination and Miscellaneous", LOBBY includes "Political Lobbying Disclosure", PAY includes "Link Executive Pay to Social Criteria", PRIVACY includes "Data Security, Privacy, and Internet Issues", REPORT includes "Accept/Approve Corporate Social Responsibility Report", SOC includes "Approve/Amend Corporate Social Responsibility Charter/Policy", TOBAC includes "Sever Links with Tobacco Industry", and WEAP includes "Weapons-Related".

Table 4 (continued)

	Unconditional Mean Consensus (1)	Consensus when an ESG fund is voting (2)	Non-ESG funds Consensus when an ESG fund is voting (3)	(3)-(2)
Panel A: Consensus by Proposal Type				
SH – E&S Proposal	83%	62%	84%	22%
SH – Social Proposal	83%	67%	84%	17%
SH – Environmental Proposal	86%	70%	87%	17%
SH – Proxy Contest Expenses	82%	79%	92%	13%
SH – Compensation	81%	76%	89%	13%
SH – Board-Related	84%	75%	87%	11%
SH – Severance Agreement	82%	75%	86%	10%
SH – Shareholder Rights	82%	74%	82%	9%
SH – Capitalization Amendments	98%	94%	100%	6%
Proxy Contest	89%	86%	91%	6%
Panel B: Consensus by E&S Proposal Category				
PRIVAC	78%	58%	85%	27%
BOARD	82%	60%	85%	25%
HUMAN	84%	63%	85%	22%
CLIMAT	81%	62%	84%	22%
PAY	81%	57%	79%	22%
DONATE	79%	63%	83%	20%
LABOR	87%	64%	84%	20%
LOBBY	76%	58%	78%	20%
SOC	85%	66%	83%	17%
ANIMAL	93%	79%	95%	17%
DEI	81%	66%	82%	16%
HL	92%	84%	96%	12%
WEAP	97%	82%	88%	7%
REPORT	97%	93%	97%	4%
TOBAC	96%	85%	88%	2%

Table 5
Voting Patterns on Different Categories of E&S proposals

This table shows the voting patterns of different types of funds by category of E&S proposals. We classify funds into ESG or Non-ESG based on their name, their voting on E&S proposals, or the weighted average ESG score of their portfolio. ANIMAL includes proposals such as "Animal Slaughter Methods", BOARD includes "Establish Environmental/Social Issue Board Committee", CLIMATE includes "Climate Change Action", DEI includes "Gender Pay Gap", DONATE includes "Approve Charitable Donations", HL includes "Adopt Holy Land Principles", HUMAN includes "Improve Human Rights Standards or Policies", LABOR includes "Labor Issues – Discrimination and Miscellaneous", LOBBY includes "Political Lobbying Disclosure", PAY includes "Link Executive Pay to Social Criteria", PRIVACY includes "Data Security, Privacy, and Internet Issues", REPORT includes "Accept/Approve Corporate Social Respobsibility Report", SOC includes "Approve/Amend Corporate Social Responsibility Charter/Policy", TOBAC includes "Sever Links with Tobacco Industry", and WEAP includes "Weapons-Related".

	ESG by Name		ESG by Vote		ESG by Hold	
CATEGORY	Non ESG For (1)	ESG For (2)	Non ESG For (3)	ESG For (4)	Non ESG For (5)	ESG For (6)
ANIMAL	5%	31%	1%	25%	5%	6%
BOARD	12%	42%	3%	36%	13%	11%
CLIMATE	25%	54%	14%	56%	27%	32%
DEI	31%	60%	19%	63%	31%	37%
DONATE	58%	74%	34%	91%	36%	44%
HL	2%	8%	0%	9%	3%	5%
HUMAN	18%	50%	10%	53%	19%	24%
LABOR	13%	41%	7%	36%	18%	24%
LOBBY	32%	53%	13%	78%	29%	29%
PAY	19%	52%	4%	56%	23%	18%
PRIVACY	20%	56%	11%	64%	19%	13%
REPORT	12%	32%	3%	44%	2%	8%
SOC	18%	52%	10%	53%	27%	23%
TOBAC	5%	32%	3%	26%	8%	11%
WEAP	3%	18%	1%	29%	3%	10%

Table 6
Funds' Reaction to Close Vote Outcomes

This table presents summary statistics of the percentage change in stock holdings around E&S proposals that pass or fail by a narrow margin. For each mutual fund *f* voting on ESG proposal *p* of firm *i* in quarter *t*, we compute the percentage change in *f*'s holdings of *i*'s stock as [(*t*+1 holdings)-(*t*-1 holdings)]*100/(*t*-1 holdings), and present the summary statistics of the percentage change by fund type and voting outcome. Panel A presents the results using proposals within 10% of their passing threshold, and Panel B presents the results using proposals within 5% of their passing threshold.

	Result	N	Mean	Std	P10	P25	P50	P75	P90
Panel A: Proposals within 10% of the passing threshold									
Non ESG Name	Pass	10539	71	2017	-100	-29	-3	8	48
ESG Name	Pass	345	73	665	-100	-8	2	30	70
Non ESG Vote	Pass	2926	2926	1452	-100	-24	-1	8	46
ESG Vote	Pass	1359	120	3146	-100	-43	-4	9	54
Non ESG Hold	Pass	4605	116	2516	-100	-48	-4	8	60
ESG Hold	Pass	2187	-4	301	-100	-100	-10	3	47
Non ESG Name	Fail	25457	46	2603	-100	-33	-3	8	51
ESG Name	Fail	766	35	182	-59	-6	4	35	107
Non ESG Vote	Fail	7188	64	4331	-100	-28	-1	9	47
ESG Vote	Fail	3427	58	2334	-100	-46	-6	7	47
Non ESG Hold	Fail	13553	38	1374	-100	-49	-5	6	56
ESG Hold	Fail	3885	15	479	-100	-67	-6	9	69
Panel B: Proposals within 5% of the passing threshold									
Non ESG Name	Pass	6140	43	1531	-100	-30	-2	8	47
ESG Name	Pass	171	116	923	-100	-14	0	18	78
Non ESG Vote	Pass	1696	46	1358	-100	-20	0	9	50
ESG Vote	Pass	775	25	752	-100	-33	-2	13	62
Non ESG Hold	Pass	2718	82	2249	-100	-43	-3	7	56
ESG Hold	Pass	1368	-5	323	-100	-100	-9	4	47
Non ESG Name	Fail	12274	30	1335	-100	-26	-2	9	50
ESG Name	Fail	345	46	191	-53	-4	8	53	133
Non ESG Vote	Fail	3546	14	514	-100	-21	0	10	48
ESG Vote	Fail	1680	42	1985	-100	-41	-4	8	51
Non ESG Hold	Fail	6759	34	1223	-100	-34	-3	9	59
ESG Hold	Fail	1755	-2	149	-100	-60	-8	8	58

Table 7
Ownership Changes Around FTSE4Good US Index Rebalances

This table presents the percentage of funds that increase, decrease, and keep constant their holdings in firms included or excluded from the FTSE4Good US Index, broken down by ESG and non-ESG funds using each of the three ESG measures. We compare holdings in the quarter right before to the quarter right after the index rebalancing announcement quarter. % No Change includes funds that own included or excluded stocks before the rebalancing event and keep the same number of shares after the rebalancing event. % Never Own includes funds that do not own shares of included or excluded firms around the rebalancing event. Panel A presents the summary statistics for inclusion events, while panel B presents the summary statistics for exclusion events.

	% Increase	% Decrease	% No Change	% Never Own	Total
			Panel A: Inclusion		
Non ESG Name	4.69%	4.78%	0.87%	89.66%	100%
ESG Name	11.91%	6.23%	4.49%	77.37%	100%
Non ESG Vote	9.56%	7.59%	1.56%	81.30%	100%
ESG Vote	5.21%	5.50%	1.14%	88.15%	100%
Non ESG Hold	6.30%	7.14%	1.56%	84.99%	100%
ESG Hold	2.42%	2.58%	0.46%	94.53%	100%
			Panel B: Exclusion		
Non ESG Name	4.14%	4.66%	0.81%	90.38%	100%
ESG Name	8.05%	5.85%	3.83%	82.28%	100%
Non ESG Vote	7.41%	7.35%	1.38%	83.86%	100%
ESG Vote	3.94%	5.01%	0.82%	90.24%	100%
Non ESG Hold	4.98%	6.35%	1.26%	87.41%	100%
ESG Hold	2.46%	2.54%	0.45%	94.54%	100%

Table 8
Active Share

The table presents active shares of ESG and non-ESG funds using each of the three ESG measures. Active share is defined as the percentage of fund holdings that differ from the benchmark holdings, and is computed as follows: $\frac{1}{2}\sum_{i=1}^{N}|\omega_{fund,i} - \omega_{index,i}|$, where $\omega_{fund,i}$ and $\omega_{index,i}$ are portfolio weights of asset i in the fund and in the index, respectively. We calculate a version of Cremers and Petajisto's (2009) active share, relative to the FTSE4Good US index.

	ESG by Name		ESG by Vote		ESG by Hold	
Year	ESG	Non-ESG	ESG	Non-ESG	ESG	Non-ESG
2010	0.716	0.878	0.944	0.817	0.973	0.797
2011	0.835	0.888	0.871	0.820	0.972	0.808
2012	0.763	0.886	0.906	0.811	0.972	0.794
2013	0.786	0.889	0.852	0.816	0.975	0.806
2014	0.819	0.892	0.848	0.825	0.979	0.807
2015	0.809	0.889	0.831	0.801	0.978	0.800
2016	0.781	0.882	0.806	0.796	0.979	0.790
2017	0.796	0.882	0.783	0.781	0.976	0.782
2018	0.788	0.875	0.783	0.778	0.973	0.774
2019	0.756	0.870	0.768	0.763	0.974	0.759
2020	0.682	0.861	0.729	0.738	0.971	0.745
2021	0.701	0.864	0.734	0.730	0.975	0.756

Table 9
ESG Scores of Newly Initiated or Exited Positions

This table presents summary statistics of industry adjusted RepRisk scores of newly initiated and exited positions by type of mutual fund. Panel A presents scores of newly added stocks, panel B presents scores of dropped stocks, and panel C presents scores of all holdings. Panel D presents adjusted and raw RepRisk scores for all firms in RepRisk and CRSP. The unit of observation is the fund-firm-quarter in Panels A through C, and firm-quarter in Panel D.

	N	Mean	Std	P10	P25	P50	P75	P90
				Panel A: Added Stocks				
Non ESG Name	1178291	-13.37	11.38	-24.00	-22.00	-19.00	-4.56	1.99
ESG Name	18202	-12.07	11.84	-24.00	-21.67	-15.00	-3.50	3.00
Non ESG Vote	226064	-12.12	11.93	-23.83	-21.50	-15.67	-3.00	3.00
ESG Vote	80614	-11.91	12.35	-24.00	-21.83	-13.67	-3.00	3.10
Non ESG Hold	500098	-11.11	12.26	-23.72	-21.00	-12.83	-2.00	3.96
ESG Hold	549294	-15.72	10.09	-24.00	-22.00	-20.00	-8.44	-0.50
				Panel B: Dropped Stocks				
Non ESG Name	1228154	-12.39	11.60	-24.00	-22.00	-15.61	-3.67	2.45
ESG Name	20721	-11.39	11.77	-24.00	-21.33	-12.17	-2.83	2.72
Non ESG Vote	234031	-10.62	12.11	-23.17	-21.00	-11.09	-2.00	4.00
ESG Vote	91522	-10.58	12.20	-24.00	-21.00	-10.61	-2.19	3.94
Non ESG Hold	494655	-9.87	12.45	-23.17	-21.00	-10.00	-1.28	5.00
ESG Hold	555088	-14.86	10.44	-24.00	-22.00	-19.28	-6.67	0.00
				Panel C: All Holdings				
Non ESG Name	25474923	-11.06	12.45	-24.00	-21.17	-13.33	-2.33	4.17
ESG Name	553192	-10.81	12.15	-24.00	-21.00	-11.50	-2.39	3.83
Non ESG Vote	5968099	-9.20	12.89	-23.00	-21.00	-9.50	-0.67	6.09
ESG Vote	1889648	-9.07	12.97	-23.00	-21.00	-9.00	-0.83	6.36
Non ESG Hold	9220834	-7.24	13.58	-23.00	-20.00	-7.00	1.00	10.14
ESG Hold	7996572	-15.12	10.15	-24.00	-22.00	-19.83	-7.33	-0.28
				Panel D: All Companies in RepRisk and CRSP				
Adjusted Scores	114242	-15.78	11.30	-25.00	-22.89	-20.00	-7.83	0.00
Raw Scores	114242	7.74	11.04	0.00	0.00	0.00	16.25	23.17

Table 10: Merger Voting

This table reports regression results analyzing votes on M&A proposals. The M&A sample includes deals where: (i) both the acquirer and target are public companies covered in CRSP, Compustat, and Reprisk, (ii) the acquirer owns less than 50% of the target pre-announcement and 100% post-completion, and (iii) the target is covered in the ISS Voting Analytics database. We exclude deals involving financial and utility firms. Panel A includes deals where the acquirer's ESG profile is better than that of the target (acquirer's Reprisk score is lower than the target's), while Panel B includes deals where the acquirer's ESG profile is worse than that of the target (acquirer's RepRisk score is higher than the target's). High (low) premium deals are defined as deals with an above (below) median premium in a given year. The dependent variable is an indicator variable equal to one if the fund, acting as the target's shareholder, votes for an M&A proposal, and zero otherwise. Control variables include deal characteristics including *All Cash Deal* (indicator), *Same Industry* (SIC 2-digit, indicator), and *Hostile* (indicator), as well as acquirer characteristics including *Book Assets*, *Book Leverage*, *Market-to-Book*, and *Cash Holdings*, measured before the shareholder meeting. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Panel A

	ESG by Name		ESG by Vote		ESG by Hold	
Deal Premium	Low	High	Low	High	Low	High
Dep. Variable	Vote For	Vote For	Vote For	Vote For	Vote For	Vote For
ESG Fund	0.021***	0.010***	-0.006	-0.011	0.019	0.056**
t-value	(3.706)	(3.662)	(-0.930)	(-1.481)	(1.37)	(2.025)
Acquirer Characteristics	Y	Y	Y	Y	Y	Y
Deal Characteristics	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
N	2,954	2,003	1,862	1,381	463	288
R-squared	0.167	0.008	0.285	0.01	0.3	0.062

Panel B

	ESG by Name		ESG by Vote		ESG by Hold	
Deal Premium	Low	High	Low	High	Low	High
Dep. Variable	Vote For	Vote For	Vote For	Vote For	Vote For	Vote For
ESG Fund	-0.011	0.002	-0.002	-0.037***	0.006	-0.011
t-value	(-0.820)	(0.192)	(-0.503)	(-6.626)	(1.087)	(-0.982)
Acquirer Characteristics	Y	Y	Y	Y	Y	Y
Deal Characteristics	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
N	7,309	7,833	4,857	5,334	1,209	1,239
R-squared	0.023	0.129	0.04	0.133	0.047	0.239

Table 11
Materiality of Environmental and Social Shareholder Proposals

This table provides a summary of environmental and social (E&S) shareholder proposals, both material and immaterial, from January 1, 2005 to June 30, 2021. The table reports the total number of proposals and the number (N) and proportion (%) of proposals that pass.

		Material E&S Proposals				Immaterial E&S Proposals			
Year	N of E&S Proposals	N	%	N Pass	% Pass	N	%	N Pass	% Pass
2005	176	22	12.500	0	0.000	154	87.500	0	0.000
2006	184	23	12.500	1	4.348	161	87.500	1	0.621
2007	199	26	13.065	0	0.000	173	86.935	1	0.578
2008	212	52	24.528	0	0.000	160	75.472	1	0.625
2009	181	35	19.337	1	2.857	146	80.663	1	0.685
2010	184	42	22.826	0	0.000	142	77.174	1	0.704
2011	173	46	26.590	1	2.174	127	73.410	1	0.787
2012	175	34	19.429	0	0.000	141	80.571	0	0.000
2013	205	43	20.976	1	2.326	162	79.024	4	2.469
2014	232	58	25.000	0	0.000	174	75.000	2	1.149
2015	241	55	22.822	0	0.000	186	77.178	0	0.000
2016	247	69	27.935	0	0.000	178	72.065	5	2.809
2017	284	62	21.831	3	4.839	222	78.169	3	1.351
2018	190	38	20.000	2	5.263	152	80.000	9	5.921
2019	195	37	18.974	0	0.000	158	81.026	10	6.329
2020	198	40	20.202	7	17.500	158	79.798	14	8.861
2021	149	43	28.859	13	30.233	106	71.141	21	19.811

Table 12
Funds' Voting on Material Environmental and Social Shareholder Proposals

This table reports regression results analyzing funds' voting on material and immaterial environmental and social (E&S) shareholder proposals. The dependent variable is an indicator variable equal to one if a fund votes in favor of an E&S proposal, and zero otherwise, *ESG Fund* is an indicator variable equal to one if the fund is ESG-oriented, and zero otherwise, and *Materiality* is an indicator variable equal to one for material E&S shareholder proposals, and zero for immaterial ones. We control for management recommendation in all regressions. Standard errors are clustered at the fund level. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	ESG by Name		ESG by Vote		ESG by Hold	
Dep. Var. (dummy)	Vote For	Vote For	Vote For	Vote For	Vote For	Vote For
ESG Fund x Materiality	0.021*	0.035***	0.041***	0.038***	-0.026***	-0.007
t-value	(1.958)	(3.16)	(12.59)	(14.273)	(-3.198)	(-0.834)
ESG Fund	0.235***	0.232***	0.439***	0.457***	0.036**	-0.022
t-value	(7.009)	(6.654)	(73.439)	(93.861)	(2.191)	(-1.297)
Materiality	0.026***	0.027***	0.021***	0.018***	0.030***	0.031***
t-value	(19.295)	(24.618)	(17.361)	(15.545)	(7.698)	(10.193)
Management Rec	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Firm FE	N	Y	N	Y	N	Y
N	2,129,151	2,129,140	1,992,738	1,992,730	320,530	320,514
R-squared	0.06	0.145	0.231	0.325	0.054	0.127

Table 13
Voting by PRI Signatories

This table reports the number and percentage of failed E&S proposals that would pass had all funds belonging to fund families that signed the United Nations Principles for Responsible Investments (UN PRI) unconditionally supported all subsequent E&S proposals. We break down E&S proposals by category and report the total number of failed E&S proposals within each category.

	Number of Failed Proposals	Number of Failed Proposals That Would Have Passed	% of Failed Proposals that Would Have Passed
ANIMAL	73	10	14%
BOARD	39	22	56%
CLIMAT	619	128	21%
DEI	305	55	18%
DONATE	467	76	16%
HL	8	3	38%
HUMAN	179	33	18%
LABOR	68	17	25%
LOBBY	193	95	49%
PAY	43	11	26%
PRIVAC	22	6	27%
REPORT	83	14	17%
SOC	246	19	8%
TOBAC	49	5	10%
WEAP	45	2	4%
Total	2439	496	20%