INSURING AGAINST WRONGDOING?
SOCIALLY RESPONSIBLE INVESTING BY MUTUAL FUNDS

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Abstract

We examine whether mutual funds increase the level of their socially-responsible investing (SRI) to reduce the negative consequences stemming from alleged wrongful behavior by fund insiders. Relying on a novel hand-collected dataset covering 17 years of funds' fidelity bond claims (for theft and embezzlement by insiders) and errors and omissions claims (for mistakes) we find that funds significantly increase their SRI in the year of a claim, but not in the year before or after the claim. These results are robust to matched firm methods and instrumental variable regressions and are very similar to increases in SRI when the mutual fund trading scandals of 2003 were revealed. Further, for funds which aggressively increased their SRI, the negative flow effects usually associated with filing these claims largely dissipates. These funds are also less likely to replace their managers. These steps are not costless because the increase in SRI for these funds reduces returns by approximately 68 basis points per month in the next period. Our findings suggest that funds rely on strategic SRI investing in the year of a fidelity bond claim to repair their weakened reputations, at non-trivial costs in returns. Our findings are, to the best of our knowledge, the first in the mutual fund literature finding that strategic increases in SRI aid in reducing the negative effects arising from the announcement of bad news and thereby create an *ex post* halo effect partially repairing the fund's reputation.

I. INTRODUCTION

Scholarship studying the role of Environmental, Social and Governance (ESG) considerations in investing, business decision making, and a host of other matters has grown exponentially over the last few years. One line of scholarship explores how relying on ESG considerations or engaging in corporate social responsibility (CSR) might be of value to firms. Some identify product quality signaling (Milgrom and Roberts 1986), delegated giving (Becker 1974; Andreoni 1989), and the so-called "halo" effect (Thorndike 1920; Nisbett and Wilson 1977) as being important ways in which ESG might add value. Indeed, many studies explore the *effects* of utilizing ESG considerations, but only a handful examine the *motivations* of institutional investors in engaging in socially-responsible investing (SRI). Our paper examines whether mutual funds tilt their portfolios towards more socially-responsible companies in response to controversies that arise with the fund. This, in turn, might prevent the funds from suffering the full negative reputational consequences associated with these controversies.

Our primary focus is on examining the changes to the level of SRI by mutual funds *after* they make claims under their fidelity bond coverage and errors and omissions insurance. Registered mutual funds are required by SEC Rule 17g-1 to have a fidelity bond to cover losses sustained by the fund due to theft of fund assets by insiders. Errors & Omissions insurance are policies voluntarily acquired by funds (i.e., without a legal requirement to do so) that cover losses to directors, officers, and the fund arising from third-party claims.[1] In essence fidelity bonds and E&O insurance provide coverage for theft and mistakes. Making such claims involves acknowledging a high likelihood that theft or mistakes happened at the fund that led to losses, which of course may make the fund look less competent or otherwise less attractive. To minimize or prevent the consequences that might flow from this (e.g., negative fund net flows), a fund might enhance its SRI to signal that it has improved (or will do so).

But why might a fund think increasing its SRI would have this effect? One reason is the well-known halo effect where people take something perceived to be a positive attribute (like SRI) and extrapolate something else positive about the fund from it. Recent papers provide some evidence of this in different contexts (e.g., higher CSR spending and obtaining lower negotiated sanctions under the FCPA (Hong, et al. 2019), targeted advertising and ESG activities to curry local favor in advance of a jury trial (Cohen and Gurun 2018), and increased CSR spending in order to rebuild intangible capital after

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[1] Coverage for directors and officers and for the fund are usually bundled together in a single policy. Coverage is on a "claims made" basis each year, requiring submission of a claim in the same year a suit is brought against the fund. Because of this we can easily learn when a suit was brought against a fund. A fund is required to indicate on its annual report (on form N-SAR) whether it filed a claim during the reporting year.

unexpected corporate data breaches (Akey, et al. 2021)). We investigate this phenomenon in the context of SRI by mutual funds after the revelation of losses related to theft and mistakes.

We begin by gathering data on registered funds from January 2000 to December 2016 from their semi-annual reports (N-SARs) filed with the SEC. Then, as is common in the literature (Hong and Kacperczyk 2009), we provide a measure of the extent to which a fund invests in a socially-responsible manner by subtracting from one hundred percent the percentage of a fund's total net assets invested in socially-sensitive industries (e.g., tobacco, oil) to generate its *SRI Score*. Following this, we rely on fund fixed effects and style fixed effects regressions, with numerous controls, to explore whether funds making a fidelity bond claim or an E&O insurance claim in a given year increase their *SRI Score* in a statistically and economically significant amount. We find that firms making a fidelity bond claim increase their *SRI Score* by around 2 percentage points (significant at the 1% level) in the year of the claim, but not in years around the claim. Funds with E&O claims are already reducing their *SRI Score* in the year before the claim and continue doing so in the year after the claim, but halt that reduction in the year of the claim.

We then explore if the relationship between *SRI Score* changes and claim filing is causal. Our fund-level fixed effects regressions provide some comfort with claims of causality, but we also utilize two additional tests to address endogeneity – matched samples analysis and instrumental variables regression. We instrument with the use of custodial services because funds that spend less on these services have a greater chance of malfeasance (leading to a fidelity bond claim), but spending on these services has no particular connection to *SRI Score*. The results are consistent with our fixed effects regressions as are the matched firm results.

We then explore whether this particular behavior of mutual funds – increasing SRI when bad news occurs – is isolated just to fidelity bond claims by examining the response of mutual funds to the mutual fund trading scandals of 2003 and 2004. Here too we find similar results – mutual funds increase their *SRI Score* by 1.31 percentage points (statistically significant at the 1% level) in the scandal year.

Given that this strategy seems visible in more than one mutual fund controversy, the next natural question becomes what is achieved by increasing the *SRI Score*? Here we explore a number of issues related to whether increases in *SRI Score* are associated with less negative net flow effects, better fund performance, managerial changes at the fund, and whether these increases in *SRI Score* persist.

A reason funds may increase *SRI Score* is that doing so may counteract the negative effects an announcement of a claim might trigger (e.g., leading to negative net flows). We examine net flows over the semi-annual period that follows the date of the shareholder report of a fund. We find that disclosing a fidelity bond claim reduces net flows by more than one percent per month in the next period. However, once we include a term interacting *SRI Score* with an indicator for claims we lose statistical significance. This suggest that funds can stem shareholder departures following a fidelity bond claim through increasing

their *SRI Score*. We probe further by looking at firms in the top quartile of *SRI Score*. Here again it appears that funds which aggressively increase their SRI score and have a fidelity bond claim can stem negative net flows (the term interacting fidelity bond claims and top quartile *SRI Score* is positive and significant). For E&O claim funds their coefficients are not significant.

Another way of looking at flows is to examine the volatility of flows ("flow risk"), which can have adverse effects on funds. To measure flow risk, we compute the mean of the absolute values of monthly net flows.[2] Our key finding is that for *Fidelity Bond Claim* funds, ranking in the top quartile of funds that increase SRI scores has the effect of substantially lowering the fund's flow risk in the following period (the term interacting top quartile *SRI Score* and fidelity bond claim is significant and negative). We do not observe this effect with *E&O Claim* funds. In all, these findings suggest that funds making a fidelity bond claim increase their *SRI Score* in order to stem negative net flows and reduce flow risk arising from the negative reputational signal sent by making a claim.

Does this increase in SRI by funds with claims improve the performance of the fund? We find that aggressive use of SRI in the year of the fidelity bond claim is associated with statistically and economically significant *declines* in returns. First, compared to funds making no claims, the funds that make fidelity bond claims destroy around 360 basis points per year in value (31 basis points per month) on a risk-adjusted basis. However, when we divide funds into quartiles based on the increase in *SRI Score*, we find that the *Fidelity Bond Claim* funds in the top quartile of *SRI Score* increases have the largest decline in returns – around 68 basis points per month (and indeed this accounts for most of the decline in returns for *Fidelity Bond Claim* funds). Effects for E&O claims are statistically insignificant.

Given that increasing SRI does not enhance performance for these funds, does their increase in SRI persist? We explore the persistence of the increase in *SRI Score* by examining whether funds that increased their *SRI Score* in the year of the claim, continue to do so in the year after. We find that most funds that increase their *SRI Score* (whether they make a fidelity bond claim or not) continue to increase their *SRI Score* in the year after – with the notable exception of funds that made a fidelity board claim and were in the top quartile of funds increasing *SRI Score*. Simply put, the funds that aggressively increase their *SRI Score* in the year of the fidelity bond claim then subsequently reduce their *SRI Score* to a significant extent in the year after (by about 2 percentage points).

Finally, we examine whether funds making claims also shed some managerial personnel as a way to signal that they are "cleaning house". We define a managerial change as a change in the individual or team managing the fund. We find that funds which aggressively boost their *SRI Score*, and have fidelity bond claims, are significantly less likely to make a change in fund leadership. For these funds, changing

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[2] We also tried a second measure of flow risk, the standard deviation of monthly net flows, and obtained similar results.

SRI is the preferred means of signaling to investors that the fund has dealt with past misdeeds and is now socially responsible.

Looking at the overall results, we think the most parsimonious explanation for what we find is that firms bruise their reputations by making a fidelity bond claim which would normally affect flows adversely. To counteract this, the funds increase their *SRI Score* which, in the top quartile of *SRI Score*, seems to stem the negative flow effects, but at the cost of substantial value destructions in lower risk-adjusted returns.

Are these changes worth the reduction in net returns? That is difficult to tell with the available data, but we found that virtually no funds which make a fidelity bond claim ever make one again. Indeed, the vast majority of fidelity bond claim funds are smaller and less experienced than funds that do not make claims. A simple interpretation of this is that smaller and less experienced funds make fidelity bond claims and find the cost is not worth the gains. As a result, they do not make claims in the future (and instead simply eat the loss). This seems plausible given that the average loss to a fund making a claim is $163,000, but the negative effect on net returns from increased *SRI Score* is on the order of $1.59 million – about an order of magnitude greater. To explore this further we examine what happens to funds that reports losses, but do not make claims based on them. We find that such funds do not significantly increase their *SRI Score*, do not suffer large declines in returns, and do not suffer the negative flow effects of funds that make claims.[3]

That of course raises the issue of why announcing a loss due to theft and making a claim due to theft seem to have different effects. Although our data do not allow a crystal clear answer, we provide some speculations (leaving greater inquiry to future work). It is possible that making a claim attracts greater attention to the fund which results in greater net flow effects compared to simply reporting the loss and doing no more (which may not generate as much attention given that the amounts appear small). Alternatively, making a claim might send a negative signal about the fund's management (perhaps it is inexperienced) or about its solvency.

Our paper makes three contributions to the literature. First, we provide evidence on the use of SRI to enhance a firm's reputation once it has suffered a negative signal (Kitzmueller and Shimshack 2012; Albuquerque, Koskinen and Zhang 2019). There are few empirical papers studying this and ours differs from the existing ones because we are looking at the reactions of fund clients and fund returns rather than the broader community (cf. Cohen and Gurun 2018; Akey, et al. 2021). We also explicitly address endogeneity through instrumental variables regressions and matched firm samples, which to our knowledge no other paper does.

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[3] The average size loss for which funds do not seek reimbursement is $50,000.

Second, much of the literature examining the role of pro-social firm behavior as creating a "halo" has focused on the effect of the firm's *existing* pro-social behavior (Hong, et al. 2019) rather than the behavior being a strategic response to a negative signal, which has been studied more theoretically than empirically (Margolis, Elfeinbein, and Walsh 2009; Benabou and Tirole 2010; Albuquerque, et al. 2019).

Third, we contribute to a greater understanding of why some mutual funds choose to increase their SRI (Borgers, et al. 2015; Hong and Kacperczyk 2009). Our findings suggest that creating a "halo" effect or counteracting a negative signal is an important contributor. Of course, this does not exclude other reasons to increase SRI, but it provides an example of where an increase in SRI can be used to reduce the negative effects of bad news and in that sense "muddy the waters."

The rest of the paper is organized as follows: Section II describes the data. Section III contains the results of our main analyses. Section IV provides additional findings and Section V concludes.

II. DATA

Mutual fund data for this analysis come from several sources. The first source is Form N-SAR, a semi-annual report all registered funds file with the SEC (covering six or twelve months of its fiscal year). Form N-SAR contains information about each mutual fund's insurance practices, including descriptions of its fidelity bonds and E&O policies as well as any claims submitted under either. Each individual N-SAR filing is available electronically on the SEC's EDGAR database as a plain text file. We obtain all N-SARs filed from January 2000 to December 2016.

The second source of data is the Center for Research in Security Prices Survivor-Bias-Free U.S. Mutual Fund Database (CRSP). CRSP provides other information about a fund, including returns and characteristics such as size, expenses, age, turnover, active or passive management, and investment objective. Since CRSP reports variables at the share class level, certain variables (e.g., returns, expenses) are aggregated to the fund level on a value-weighted basis using beginning-of-period total net assets (TNA). Fund size is the sum of all share class TNAs; fund age is the age in years of the oldest share class. Investment objective is based on the fund's CRSP investment objective code. Data are obtained for all open-end funds in CRSP.

We match the N-SAR dataset to the CRSP dataset. Since there is no common identifier, the data must be matched using fund names. We use algorithmic string matching techniques supplemented by manual checks, following recent studies (e.g., Warburton and Simkovic 2019; Natter et al. 2016). We find that 80% of fund-year observations in CRSP have been matched to an N-SAR filing. We eliminate funds that are not open-end domestic equity mutual funds, funds with total assets less than $1 million, and funds less than one year old.

Finally, we follow prior work on socially-conscious investing by mutual funds and measure the extent to which a fund screens out securities that are deemed socially sensitive. Hong and Kacperczyk (2009) define socially-sensitive securities as "sin" stocks, those issued by companies that, according to their SIC and NAICS codes, operate primarily in industries that promote vice. Using the CRSP stocks and mutual fund holdings databases, we identify socially-sensitive companies in a fund's portfolio using SIC and NAICS codes indicating companies with core operations in the alcohol, tobacco, gambling, firearms, and oil industries. We subtract from one hundred percent the percentage of a fund's TNA that is invested in these socially-sensitive industries. This variable, *SRI Score*, measures the extent to which a fund invests in a socially-conscious manner.

A. Claims

All funds are required to disclosure on their annual shareholder report (Form N-SAR) any claims that were made under their fidelity bonds and E&O policies during the reporting year. Reporting a claim has significant repercussions for a fund. We find that funds that disclose claims have net cash flows that are negative, on average, over the six month period that follows. In contrast, funds that do not report claims have positive net cash flows over the following period.

Do funds adjust their portfolios in a socially-conscious manner around such claims? We take each fund that indicates on its annual shareholder report that it filed a claim under a fidelity bond or an E&O policy during its reporting year. We compute *SRI Score* for the fund's portfolio on the ending date of the fund's shareholder report, and on each year surrounding that date. We also compute *SRI Score* for funds that report filing no claims. Since socially-responsible investing might vary by investment style, we also subtract from a fund's SRI score the average SRI score of its style. This adjusted SRI score measures the percent of the fund's TNA that does not contain socially-sensitive stocks, relative to the typical fund with the same style. It indicates the extent to which funds screen out such sensitive stocks, relative to their peers.

In Figure 1, the vertical axis displays the average adjusted SRI score for funds in each claim group, and the horizontal axis displays the year. According to the figure, funds that file fidelity bond claims behave differently from other funds. Funds that file fidelity bond claims adjust their portfolios towards socially-acceptable stocks when they disclose the claim. The figure also shows adjusted SRI scores for funds with E&O claims, and for funds with no claims. The lines are essentially horizontal for both, indicating that these funds make no changes to the SRI composition of their portfolios.

Figure 1: SRI score, by claim group
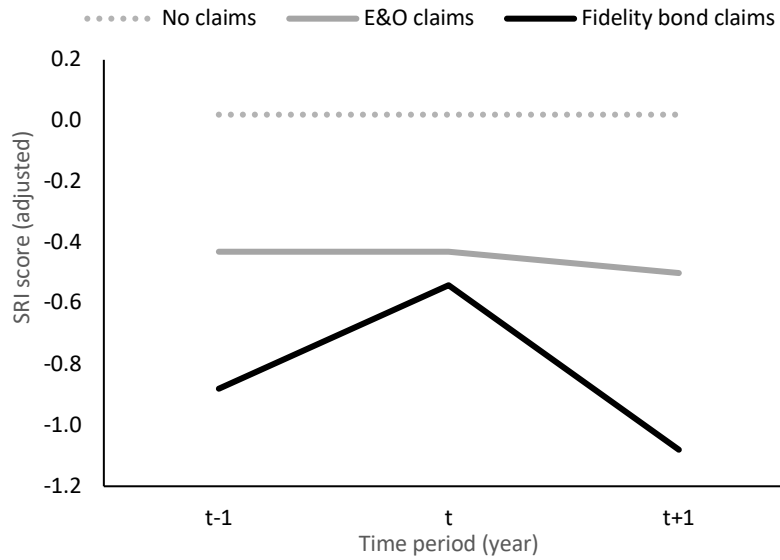
B. *Characteristics of Funds in the Sample*

Table 1 reports mean statistics for the SRI score and other characteristics of funds in our sample. It reports figures separately for funds that disclose on their annual shareholder report having filed no claims under any insurance policies (either E&O policies or fidelity bonds) (*No Claim*), having filed claims under E&O policies (*E&O Claim*), and having filed claims under fidelity bonds (*Fidelity Bond Claim*).

The average SRI score is 93 percent for *No Claim* funds. *E&O Claim* funds have lower SRI scores, at 92.54 percent on average. *Fidelity Bond Claim* funds have higher average SRI scores, at 93.26 percent. Since socially-responsible investing might vary by investment style, we also subtract from a fund's SRI score the average SRI score of its investment style. This style-adjusted SRI score, on average, is 0.02 percent for *No Claim* funds, versus –0.43 percent and –0.54 percent for *E&O Claim* and *Fidelity Bond Claim* funds, respectively. In other words, funds that report claims on their annual shareholder report have SRI scores that are below those of the typical fund with the same investment style. More importantly, Table 1 also shows the average style-adjusted return in the year prior to the disclosure of a claim. *No Claim* funds do not make any changes in their style-adjusted SRI scores from the prior year. Neither do *E&O Claim* funds. However, *Fidelity Bond Claim* funds increase their style-adjusted SRI scores, from –0.88 to –0.54 on average, boosting their SRI scores by 34 basis points over the year. That is, *Fidelity Bond Claim* funds

move their SRI scores closer to those of typical funds in the sector during the year in which they disclose a fidelity bond claim.

Table 1 also shows mean statistics for other fund characteristics. Compared to *No Claim* funds, on average, *E&O Claim* funds are larger in size (by total net assets) while *Fidelity Bond Claim* funds are smaller in size. Similarly, *E&O Claim* funds come from larger fund families than *No Claim* funds, while *Fidelity Bond Claim* funds come from smaller families. The findings suggest that smaller funds and smaller families find it appealing to file a claim under a fidelity bond because they lack the resources to absorb losses or do not have sufficient experience to know these are not always desirable claims to make. Compared to *No Claim* funds, *E&O Claim* funds tend to be older while *Fidelity Bond Claim* funds tend to be younger. *E&O Claim* funds charge similar expense ratios as *No Claim* funds, while *Fidelity Bond Claim* funds charge greater expense ratios, on average. Compared to *No Claim* funds, *E&O Claim* funds have lower annual returns and lower portfolio turnover, while *Fidelity Bond Claim* funds have higher annual returns and higher turnover, on average. Greater turnover is consistent with *Fidelity Bond Claim* funds adjusting their portfolios to increase socially-responsible holdings. In sum, *Fidelity Bond Claim* funds and *E&O Claim* funds differ from *No Claim* funds, though they differ in opposing ways. *Fidelity Bond Claim* funds and *E&O Claim* funds are similar only with respect to institutional ownership and passive management: Both *Fidelity Bond Claim* funds and *E&O Claim* funds manage fewer institutional assets than do *No Claim* funds, and index funds comprise a similar proportion of funds in each category, on average.

Finally, Table 1 also shows the total number of observations and the total number of unique funds in the sample. Funds that report an E&O claim tend to do so twice over the 17-year sample period, on average. In contrast, funds that report a fidelity bond claim do so only once.

III. MAIN RESULTS

A. Socially-Responsible Investing

To isolate the effect of insurance claims on socially-responsible investing, we use multivariate regression analysis with controls for fund characteristics. The dependent variable is the fund's SRI score, *SRI Score*, which measures the percentage of a fund's portfolio that is invested in a socially-responsible manner as of the date of its annual shareholder report (Form N-SAR). Our variables of interest, *Fidelity Bond Claim* and *E&O Claim*, are indicator variables equal to one if a fund reports on its annual shareholder report that it filed a claim under a fidelity bond or an E&O policy, respectively, and zero for a fund with neither claim. Since prior work suggests that institutional investors exhibit a preference for investing in a socially-responsible manner (e.g., Hong and Kacperczyk 2009), we also include as an independent variable the percentage of a fund's total net assets that is from institutional investor share classes. Additional control variables include fund size (log), fund age (log), an index fund dummy, the fund's expense ratio (percent),

the fund's turnover ratio (percent), the fund's annual return (percent), and the size (log) of the fund's family. Each control variable is lagged to lessen the potential for endogeneity. In addition, we include controls for investment style fixed effects and fund fixed effects. We include style fixed effects to control for *SRI Score* varying by a fund's investment style. We include fund fixed effects in order to exploit within-fund variation in the SRI score. In this way, each individual fund becomes its own control group; a fund's SRI score accompanying a disclosed claim can be compared to its SRI score prior to the claim (and to SRI scores for funds not changing claims status). In other words, fund fixed effects enables us to study changes in the SRI score resulting from claims. Fund fixed effects is a powerful approach to addressing endogeneity that allows us to control for time-varying characteristics that might affect the SRI score (through control variables) as well as time-invariant ones (through the fixed effects) even if unobserved.

Results appear in Table 2. In the table, the center column shows how a fund's SRI score changes in the year a claim is reported. The columns to the left and right, respectively, show how its SRI score changes in the year before and the year after a claim is reported. In the center column, the coefficient on *Fidelity Bond Claim* is positive and significant at the 1% level. A fund with a fidelity bond claim significantly increases its SRI score in the year it makes the claim. The claim is responsible for more than a two percentage point increase in the fund's SRI score, all else equal. When a funds makes a fidelity bond claim, it substantially boosts the proportion of socially-responsible assets in its portfolio as a result of making the claim. In contrast, the fidelity bond claim does not impact the fund's SRI score before or after the year of the claim. The claim raises the SRI score only in the year the fidelity bond claim is made. Unlike the case with fidelity bond claims, we do not observe significant increases in the SRI score when funds report E&O claims. The coefficient of *E&O Claim* is statistically and economically equal to zero, indicating that such a claim does not impact a fund's SRI score in the year of the claim. However, *E&O Claim* does have a negative and significant impact on a fund's SRI score in the years before and after the claim year. An E&O claim lowers a fund's SRI score by 0.56 percentage points in the year before the claim, and lowers it by 0.80 percentage points in the year after the claim, all else equal. Funds with E&O claims are actively reducing the proportion of socially-responsible assets in the portfolio in the year prior to making claim. They halt that activity in the year they make the claim, then resume shrinking the portfolio's socially-conscious holdings.

One of the control variables in the regressions is the percentage of a fund's assets that are from institutional share classes (*Institutional*). The coefficient on *Institutional* is positive (equaling 0.01) and statistically significant in all regressions (not shown for brevity). Funds with a greater proportion of assets from institutional share classes have greater SRI scores, all else equal. The results indicate that the more a fund caters to institutions, the more it invests in a socially-responsible manner, a finding consistent with prior work (e.g., Borgers et al. 2015).

B. Endogeneity

In our analysis, we have assumed that fidelity bond claims are exogenous or, in other words, that the treatment variable (*Fidelity Bond Claim*) causes the difference in the outcome variable (*SRI Score*). However, *Fidelity Bond Claim* might be endogenously determined. To reduce the risk of endogeneity, first, we have used a fund-level fixed effects model in our main results (Table 2). The fund fixed effects model uses repeated observations on a fund to control for unobserved fund characteristics that are time invariant. While fund fixed effects is a powerful approach to addressing endogeneity, we also tried other approaches.

We tried employing a second method that the literature has developed to address endogeneity concerns: matched samples. The matched samples approach uses matching methods to balance the sample along observable dimensions that might influence the outcome variable. The general approach is to find claim–nonclaim matches where the funds are identical along observable dimensions except for the choice to file a fidelity bond claim. The advantage of the matched samples approach is that it removes potential bias from model misspecification, and does so under less restrictive assumptions than other approaches. We use both multivariate distance (Mahalanobis) matching and propensity score matching (using a probit model) and pick non-treatment funds with the smallest distance (nearest neighbor) to the treatment fund. The matching incorporates the complete set of covariates. Columns 1 through 4 of Table 3 report the difference in the SRI score for the treatment group (funds that file fidelity bond claims) relative to the non-treatment group (funds that file no claims) using the different matching methods. Using the Mahalanobis distance matching method, we find that the average treatment effect on the treatment group (ATET) of a fidelity bond claim is an increase of 2.34 percentage points in the SRI score (significant at the 1% level) (column 1). Using the propensity score matching method, the effect of a fidelity bond claim is an increase of 1.54 percentage points in the SRI score (significant at the 5% level) (column 2). The effects are similar to the 2.18 percentage point increase using fund fixed effects (in Table 2). Moreover, the results are robust to changes in the number of matches. We have required that each fund with a fidelity bond claim be matched with two nonclaim funds in order to minimize the bias potential. But because there are more nonclaim funds than claim funds in the dataset, we also tried ten matches, and observe similar results — treatment effects of 1.80 percentage points using Mahalanobis distance matching and 1.13 percentage points with propensity score matching (at 1% and 10% significance levels, respectively) (columns 3 and 4). Thus, after establishing the equivalence of claim funds and nonclaim funds along observable dimensions, the matched samples analysis confirms the significant positive impact of fidelity bond claims on the SRI score.

We confirm this conclusion by using a third method developed in the literature to address endogeneity concerns: a two-step treatment effects model. This approach involves specifying a variable that belongs in the treatment equation but not in the outcome equation. In other words, we employ an

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instrument, a variable associated with fidelity bond claims (the treatment variable) but not SRI score (the outcome variable). As our instrument, we use the dollar amount the fund spends on custodial services, per shareholder. Intuitively, the instrument is appealing because a fund that skimps on custodial services offers greater opportunities for malfeasance and other actions that lead to fidelity bond claims. But there is no reason to expect custodial expenses to be related to a fund's SRI score. In fact, this variable (*Custodial Expenses*) is significantly inversely correlated with *Fidelity Bond Claim* and uncorrelated with *SRI Score*. We find that funds with fidelity bond claims spend $0.13 per shareholder on custodial services, while funds without claims spend $1.36 per shareholder on custodial services, on average. In our two-step model, we replace the *Fidelity Bond Claim* variable in the second stage with its predicted value from the first stage, where *Fidelity Bond Claim* is regressed on the instrument, *Custodial Expenses*. Both stages employ the same control variables and fixed effects. Column 5 of Table 3 indicates that the predicted value of *Fidelity Bond Claim* has a positive impact on the SRI score (increasing it by 9 percentage points). The coefficient is statistically significant at the 5% level. The findings are consistent with the main results, supporting the conclusion that those results are not driven by endogeneity.

In sum, we have used three different methods to address endogeneity concerns, each with its own assumptions and tradeoffs. Yet all three indicate that the relationship between fidelity bond claims and the SRI score is not driven by endogeneity, but is instead causal.

C. Generalizability of the Results: The Mutual Fund Trading Scandal.

The behavior we observe in the fidelity bond context should be observable in a different context where funds come under close scrutiny for wrongdoing. To this end, we examine the mutual fund trading scandal that began in 2003. In 2003 and 2004, dozens of investment advisers to mutual funds were accused of fraud by federal and state regulators for engaging in improper late trading and market timing in their funds' portfolios. Funds implicated in the trading scandal were subject to close scrutiny by regulators. We hypothesize that the implicated funds would boost their SRI scores in the same manner as funds with fidelity bond claims.

We first identify fund families that were charged by regulators in the 2003-2004 trading scandal. Following Ferris and Yan (2007), we compile a list of scandal families based upon the "Fund Industry Investigation Update" section of Morningstar's website and the "Fund Scandal Scorecard" section of the Wall Street Journal's website. We create an indicator variable, *Scandal*, which is set equal to one for a fund that belongs to a scandal family. We run the same regressions used in Table 2, but substitute *Scandal* in

place of *Fidelity Bond Claim*.[4] Results appear in Table 4. In the center column, the coefficient on *Scandal* equals 1.31 and is significant at the 1% level. Being implicated in the trading scandal increases a fund's SRI score by 1.31 percentage points, after controlling for other effects. The effect is similar in magnitude to the 2.18 percentage point increase for funds that file fidelity bond claims. As with fidelity bond claims, *Scandal* does not impact the SRI score in the year before or after it is named in the scandal (columns 1 and 3). In all, the behavior we observe with fidelity bond claims we also observe with the trading scandal.

IV. ADDITIONAL RESULTS

A. Flows

The disclosure of a claim might have significant repercussions for a fund's net cash flows. We examine net flows over the semi-annual period that follows the date of the shareholder report of a fund. Net flows are computed as the average monthly net flow relative to the beginning-period size of the fund (in percent).[5] Mean statistics appear in Table 5. On average, funds with no claims on their shareholder report experience positive net flows of 3.79 percent over the following six month period. In contrast, funds that disclose E&O claims have net flows of -7.44 percent over the next six month period. That 11.23 percentage point difference in flows is statistically significant (at the 5% level). However, funds that disclose fidelity bond claims show no significant difference in flows compared to funds with no claims. Disclosure of a fidelity bond claim appears to have no meaningful impact on a fund's net flows. However, these results do not control for other potential factors that might impact flows.

We next examine whether the relationships continue after we control for other effects. We use a regression model similar to that used in the prior tables. We regress *Net Flow* for the semi-annual period following the date of a fund's shareholder report on the indicator variables for insurance claims, with controls (including fixed effects). Results appear in Table 6.[6] In column 1, we see that disclosure of a fidelity bond claim has a significant negative impact on net flows. Disclosure of such a claim reduces net flows by more than one percent per month in the subsequent period. In column 2, we include *SRI Score* as an additional control variable. The coefficient on *SRI Score* is not significant. In addition, despite the inclusion of *SRI Score*, the coefficient on *Fidelity Bond Claim* retains its magnitude and statistical

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[4] In the reported results, we dropped any *Scandal* funds that issued a fidelity bond claim. Results are substantially similar if we retain these funds.

[5] Similar results are obtained using aggregate net flows in place of average monthly net flows.

[6] The table displays results using fixed effects for investment style and year. We obtain similar results even when we employ fund fixed effects. In addition, we obtain similar results when we use aggregate net flows in place of average monthly net flows.

significance. In column 3, we include a term interacting *SRI Score* with the indicator variable for claims.[7] The coefficient on *Fidelity Bond Claim* is [not statistically significant in this specification]. The effect of fidelity bond claims on net flows disappears when we include *SRI Score* and the interaction term in the regression. Disclosure of a fidelity bond claim no longer has a statistically detectible impact on flows. The results indicate that funds can stem shareholder departures following a fidelity bond claim though the SRI score. The coefficient on *SRI Score* itself remains statistically equal to zero. The interaction term is positive, indicating that the SRI score has more impact for a fund with a fidelity bond claim (though it lacks statistical and economic significance). The evidence suggests that while the SRI score does not impact flows itself, it can be used successfully to distract from fidelity bond claims, which can impact flows.

Table 6 also shows results for funds with E&O claims. In contrast to *Fidelity Bond Claim*, the variable *E&O Claim* has no meaningful impact on flows. The disclosure of an E&O claim does not have ramifications for a fund's net flows.

We next explore whether there is a relationship between *large* increases in SRI and net flows. We sort all funds into quartiles each year according to the change (year over year) in their *SRI Score* on the date of their annual shareholder report. Figure 2 displays *Net Flow* by quartile, for *Fidelity Bond Claim* funds.

**Figure 2: Net flow by ΔSRI quartile:
funds with fidelity bond claims**
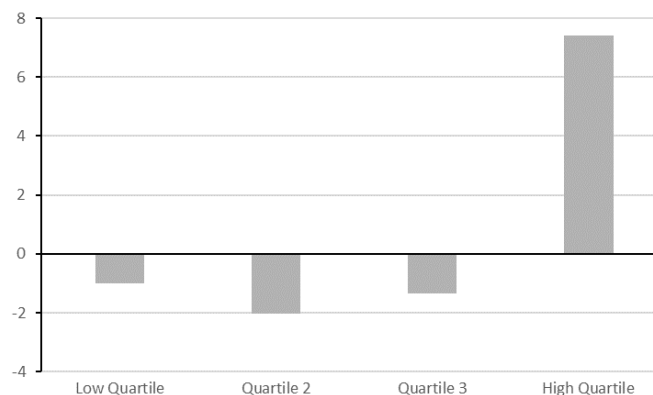
The figure displays *Net Flow*, the average monthly net flow (relative to the beginning-period fund size) over the semi-annual period following a fund's shareholder report (in percent), by quartile. Funds are sorted into quartiles according to change in *SRI Score* during the 12-month period of the shareholder report. Figures are shown for funds with fidelity bond claims.

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[7] We tried lagging *SRI Score* in columns (2) and (3) to lessen potential endogeneity between it and *Fidelity Bond Claim* and obtained similar results.

For *Fidelity Bond Claim* funds that rank in the bottom three quartiles by change in *SRI Score*, subsequent net flows are negative. For *Fidelity Bond Claim* funds that rank in the top quartile, subsequent net flows are positive. Moreover, the net flows for these funds are rather large (nearly 8%). Funds that file fidelity bond claims experience positive net flows when they aggressively increase their SRI score in the year of the claim.

We examine whether this relationship between net flows and aggressive use of SRI exists in a regression context with controls for other effects. We use a dummy variable, *Top Quartile*, to indicate a fund ranked in the top quartile by change in *SRI Score*. We run a regression which includes *Top Quartile*, a term interacting *Top Quartile* with our indicator variable for an insurance claim, and our usual control variables. Results appear in column (1) of Table 7. We observe that a fidelity bond claim has a negative impact on flows, reducing them by 1.63 percent per month. The impact is statistically significant at the 1% level. We also observe that an aggressive increase the SRI score (i.e., raking in the top quartile) has a significant negative impact on net flows, reducing them by 0.83 percent. But this is not the case for funds with fidelity bond claims: the coefficient on the term interacting *Fidelity Bond Claim* and *Top Quartile* is significant and positive. Moreover, the coefficient on this interaction term is about twice the size of that on *Top Quartile*, indicating the effect fully offsets the impact of *Top Quartile* and partially offsets the impact of *Fidelity Bond Claim*. Hence, funds with fidelity bond claims that aggressively increase their SRI score can offset the outflows associated with fidelity bond claims.[8] In contrast, none of the coefficients are significant for *E&O Claim* funds.

We find similar results when we examine the volatility of monthly flows. Volatile flows can have adverse effects on a fund, known in the literature as flow risk.[9] The volatility of monthly flows might not be captured in our analysis of average monthly flows. To measure flow risk, we compute the mean of the absolute values of monthly net flows (following Rohleder et al. 2017).[10] The results are reported in column (2) of Table 7 and are similar to the results in column (1). *Fidelity Bond Claim* has a positive coefficient. The disclosure of a fidelity bond claim increases flow risk in the months following disclosure of the claim. In addition, *Top Quartile* has a positive coefficient. Ranking in the top quartile of funds that increase their SRI scores also increases flow risk for the fund. However, neither coefficient is statistically significant. More importantly, the term interacting the two variables is significant at the 5% level, and has a negative coefficient. That is, for *Fidelity Bond Claim* funds, ranking in the top quartile of funds that increase SRI

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[8] We also tried indicator variables for the other quartiles but the coefficients for those variables and for their interaction terms lacked statistical significance.

[9] Volatile flows, for instance, can lead to increased trading costs and underperformance (see, e.g., Rakowski 2010; Coval and Stafford 2007; and Edelen 1999).

[10] We also tried a second measures of flow risk, the standard deviation of monthly net flows, and obtained similar results.

scores has the effect of substantially lowering the fund's flow risk in the following period. We do not observe this effect with *E&O Claim* funds.

Overall, we find that funds with fidelity bond claims are able to manage fund flows by manipulating the socially-responsible holdings in their portfolios.

B. Performance

We next examine the performance of funds with claims. We examine performance on a risk-adjusted basis using a four-factor model (following Carhart 1997) with factors for the market, size, value, and momentum:

$$R_{i,t} - R_{f,t} = \alpha_i + \beta_i(R_{MKT,t} - R_{f,t}) + s_i SMB_t + h_i HML_t + u_i UMD_t + \varepsilon_{i,t} \qquad (1)$$

where $R_{i,t}$ is the one-month return of fund i in month t, $R_{f,t}$ is the risk-free rate (one-month treasury bill rate) in month t, $R_{MKT,t}$ is the one-month return on the market in month t, SMB_t is the difference in one-month returns in month t between a portfolio of small cap stocks and a portfolio of large cap stocks, HML_t is the difference in one-month returns in month t between a portfolio containing value stocks and one containing growth stocks, UMD_t is the difference in one-month returns in month t between a portfolio of past winners and a portfolio of past losers, and α_i is the risk-adjusted abnormal monthly return of fund i.[11] Estimates are obtained using monthly returns over the twelve-month period of the annual shareholder report.[12] Fund returns are computed net of fund expenses.

The average (equal-weight) risk-adjusted return appears in Table 8 for *No Claim* funds, *E&O Claim* funds, and *Fidelity Bond Claim* funds. All three groups of funds generate significant negative alphas. Alphas are –10 basis points for *No Claim* funds, –14 basis points for *E&O Claim* funds, and –36 basis points for *Fidelity Bond Claim* funds, on average per month. All groups of funds destroy significant value for their investors (net of fund expenses). However, the magnitude of the value destruction is much greater for *Fidelity Bond Claim* funds. Funds with fidelity bond claims produce about three times the value destruction as do the other funds. Compared to *No Claim* funds, *Fidelity Bond Claim* funds generate an extra 26 basis points of value destruction per month and *E&O Claim* funds generate an extra 5 basis points of destruction per month. This difference in risk-adjusted performance versus *No Claim* funds is economically significant, amounting to additional value destruction per year of 60 basis points for *E&O Claim* funds and 316 basis points (or 3.17 percent) for *Fidelity Bond Claim* funds. In sum, funds with claims underperform other funds in an economically meaningful way on a risk-adjusted basis.

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[11] $R_{MKT} - R_f$, *SMB*, *HML*, and *UMD* are from Ken French's web site http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library.

[12] We screen for funds with fewer than twelve months of returns in the year.

Next, we examine whether the underperformance of *Fidelity Bond Claim* funds exists in a regression context. We regress *Alpha* for the 12-month period of the shareholder report on the indicator variables for insurance claims. Results appear in Table 9. Column (1) includes our fund-level control variables as well as fixed effects for investment style and year. *Fidelity Bond Claim* has a significant negative impact on *Alpha*, reducing alphas by more than 23 basis points per month. In contrast, *E&O Claim* does not have a statistically significant impact on alphas. We observe similar results in column (2) which incorporates *SRI Score* as an additional control variable. The coefficient on *SRI Score* is not significant, indicating that a fund's SRI score does not have a significant impact on its risk-adjusted performance. Despite the inclusion of *SRI Score*, the coefficient on *Fidelity Bond Claim* retains its statistical significance, and its magnitude increases. *Fidelity Bond Claim* reduces alphas by 31 basis points, while *E&O Claim* continues to have no statistical impact on alphas.

In column 3, we include a term interacting *SRI Score* with the indicator variable for claims.[13] The coefficient on *SRI Score* is not significant in any of the regressions. In addition, the coefficients are not significant for *Fidelity Bond Claim* or the term interacting *Fidelity Bond Claim* with *SRI Score*. For funds with fidelity bond claims, the SRI score has no impact on the fund's performance. The result suggests that such funds manipulate their SRI score for motives other than improving performance. We observe different results for funds with E&O claims. For these funds, an E&O claim has a significant negative impact on performance, reducing alphas by 74 basis points. Moreover, for these funds, the interaction term is statistically significant and positive. An increase in the *SRI Score* by these funds has a significant, positive impact on performance. In other words, funds with E&O claims are able to use SRI investing in a manner that appears to add value for their shareholder. But the magnitude of the impact is rather small, increasing alphas by less than one basis point, far smaller than the negative impact of an E&O claim itself. A change in the SRI score does not have a meaningful economic impact on such a fund's performance. The result, again, suggests another motive for manipulating the SRI score.

Next, we examine whether there is a relationship between *large* increases in SRI and a fund's risk-adjusted performance. As before, we sort funds into quartiles each year by their year-over-year increase in *SRI Score* on the date of their shareholder report. We use the dummy variable, *Top Quartile*, to indicate a fund in the top quartile by change in *SRI Score*, and run a regression which includes *Top Quartile*, a term interacting *Top Quartile* with our indicator variable for an insurance claim, and our usual control variables. Results appear in Table 10. The coefficient on *Top Quartile* is not statistically significant, indicating that aggressively increasing the SRI score does not impact a fund's risk-adjusted performance in a meaningful way, for most funds. The coefficient on *Fidelity Bond Claim* also lacks statistical significance. However,

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[13] We tried lagging *SRI Score* in columns (2) and (3) to lessen potential endogeneity between it and *Fidelity Bond Claim* and obtained similar results.

the term interacting *Fidelity Bond Claim* with *Top Quartile* is significant (at the 5% level) and negative. For funds with fidelity bond claims, aggressively increasing the SRI score has a meaningful impact on fund performance, reducing risk-adjusted returns by 68 basis points. Hence, the value destruction that we previously observed among *Fidelity Bond Claim* funds comes mostly from those that increase their SRI scores the most. In contrast, we do not observe this effect within *E&O Claim* funds.

C. Persistence of the Increase in SRI

We have seen that, for funds with fidelity bond claims, boosting SRI is useful for managing flows, but boosting SRI also comes at a cost for the fund (in terms of negative alpha). Do funds with fidelity bond claims maintain their SRI after having made the costly "investment" in it? We examine persistence in *SRI Score* by sorting funds into quartiles each year, as before using the change (year over year) in their *SRI Score* on the date of their annual shareholder report. For each quartile, we show the average change in *SRI Score* over the *following* year. Table 11 shows results for *No Claim* funds and *Fidelity Bond Claim* funds. Funds in the top quartile reduce their SRI scores in the following year. *No Claim* funds that are in the top quartile of funds that boost their SRI scores this year subsequently reduce their SRI scores by 0.13 percentage points in the following year, on average. In other words, funds that most aggressively boost their SRI scores then reduce them slightly over the next year. In contrast, *Fidelity Bond Claim* funds that are in the top quartile this year then reduce their SRI scores by a much larger amount in the following year – by 2.63 percentage points. The difference in the reduction is statistically significant. *Fidelity Bond Claim* funds that aggressively boost their SRI scores then aggressively reduce them, indicating that the increase in SRI is viewed as a one-time investment for these funds. We do not observe this behavior in the other three quartiles. Funds in the other quartiles, on average, increase their SRI scores in the following year. This is the case for both *No Claim* funds and *Fidelity Bond Claim* funds.

We confirm our results in a regression context, after controlling for other potential effects. We use a regression similar to that used in Table 2 with *SRI Score* (in year t+1) as the dependent variable (in column 3 of that table), but now we include *Top Quartile* and the interaction of *Top Quartile* with *Fidelity Bond Claim*, along with the same controls (including fixed effects for fund and style). Results appear in Table 12. First, the coefficient on *Top Quartile* is significant and positive. Overall, funds that rank in the top quartile in the current year by increase in *SRI Score* again increase their SRI score in the next year, all else equal. Funds that most aggressively increase their *SRI Score* this year add another 0.76 percentage points to their score over the subsequent year. In addition, funds with fidelity bond claims, overall, increase their *SRI Score* in the subsequent year, all else equal. The coefficient on *Fidelity Bond Claim* is significant and positive, indicating that funds with such claims boost their *SRI Score* by 1.59 percentage points over the next year. However, the coefficient on the interaction term is significant and negative. The reduction in

SRI by these funds more than offsets the increase in SRI for *Top Quartile* funds and *Fidelity Bond Claim* funds combined. For funds with fidelity bond claims, those that aggressively increase their *SRI Score* in the year of the claim then subsequently reduce their *SRI Score* to a significant extent. These funds aggressively boost their *SRI Score* in the year of a claim, only to reduce it aggressively in the subsequent year – by a total of 1.91 percentage points.

The table shows different behavior within E&O funds. The coefficient on *E&O Claim* is significant and negative, indicating that funds with E&O claims reduce their SRI scores in the year after they report the claim, lowering SRI by 0.69 percentage points. But the coefficient interacting *E&O Claim* with *Top Quartile* lacks significance. E&O funds that aggressively increase their SRI scores in the claim year do not then lower their SRI scores any more than E&O funds do generally.

D. Managerial Changes at the Fund

We next examine whether funds with claims make changes in the leadership of the fund. When a fund submits a claim under a fidelity bond, there has been an instance of theft or fraud which might prompt a change in fund leadership. We compare the individuals that are disclosed as the fund's managers in the year of the shareholder report to those disclosed in the prior year. We define a managerial change as a change in the individual or team managing the fund, including a change in co-manager or a reversal of the order in which co-managers are named (which might signal demotion of the prior manager). Using an indicator variable, *Managerial Change*, we run a probit regression of that variable on *Fidelity Bond Claim*, *Top Quartile* and the interaction between the two, along with the control variables.

Results appear in Table 13. Disclosure of a fidelity bond claim has a positive impact on the likelihood of a managerial change, but not a statistically significant one. The same is true for raking in the top quartile of SRI increases. However, the coefficient on the interaction term is significant (at the 5% level) and negative. *Fidelity Bond Claim* funds that aggressively boost their SRI scores are significantly less likely to change fund leadership. For these funds, changing SRI is preferred over changing managers as a means of signaling to investors that the fund has dealt with past misdeeds and is now socially responsible.[14] Table 13 also shows results for funds with E&O claims. The coefficients on *E&O Claims* and on its interaction with *Top Quartile* are negative and significant (at the 10% level). Funds with E&O claims are less likely to make managerial changes, especially when the fund has aggressively boosted its SRI.

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[14] Separately, we also examined whether managerial changes impact the fund's SRI score. In regressions with our usual control variables (available upon request), we found that *Managerial Change* does not impact the fund's *SRI Score,* either in the year of the managerial change or the year after. This is also the case when we interact *Managerial Change* with *Fidelity Bond Claim* and with *E&O Claim*.

V. CONCLUSION

We find that mutual funds increase their socially-responsible investing activities in order to reduce the negative consequences stemming from alleged wrongful behavior by fund insiders. Using 17 years of fidelity bond claims (for theft and embezzlement by insiders) and errors and omissions claims (for mistakes), we find that mutual funds significantly increase their SRI in the year of a claim, but not in the year before or after the claim. These results are robust to matched firm methods and instrumental variable regressions and are very similar to increases in SRI when the mutual fund scandals of 2003 were revealed. We also find that, for funds which aggressively increased their SRI, the negative flow effects usually associated with filing these claims largely dissipates, and managerial changes become substantially less likely. These steps are not costless because the increase in SRI for these funds reduces returns in the next period.

Our findings suggest that funds rely on strategic SRI investing in the year of a fidelity bond claim to repair their weakened reputations, at non-trivial costs in returns. Our findings are, to the best of our knowledge, the first in the mutual fund literature finding that strategic increases in SRI aid in reducing the negative effects arising from the announcement of bad news and thereby create an *ex post* halo effect partially repairing the fund's reputation.

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Table 1: Fund Characteristics
This table reports the characteristics of funds in our sample. It reports figures for funds that disclose on their annual shareholder report having filed no claims under insurance policies (either E&O policies or fidelity bonds) (*No Claim*), having filed claims under E&O policies (*E&O Claim*), and having filed claims under fidelity bonds (*Fidelity Bond Claim*). *SRI Score unadjusted* is the percentage of a fund's portfolio that is invested in a socially-responsible manner as of the date of its annual shareholder report (in percent). *SRI Score style-adjusted* is *SRI Score unadjusted* minus the mean of the fund's investment style (in percent). *Fund size* is the total net assets (TNA) of the fund (in millions). *Family size* is the total TNA of all funds in the fund family (in millions). *Fund age* is the age of the fund (in years). *Expense ratio* is the fund's expense ratio (in percent). *Index fund* is a dummy variable indicating an index fund. *Annual Return* is the fund's annual total return net of expenses (in percent). *Turnover ratio* is the fund's annual portfolio turnover ratio (in percent). *Institutional* is the percentage of a fund's total net assets that is from institutional investor share classes (in percent).

	Mean		
	No Claim	E&O Claim	Fidelity Bond Claim
SRI Score			
Unadjusted (current year)	93.02	92.54	93.26
Style-Adjusted (current year)	0.02	-0.43	-0.54
Style-Adjusted (prior year)	0.02	-0.43	-0.88
Other Fund Characteristics			
Fund size	1,100.72	1,690.96	481.72
Family size	2,587,003.00	4,778,411.00	2,339,211.00
Fund age	10.65	11.63	8.04
Expense ratio	1.13	1.13	1.49
Index fund (indicator)	16.15	16.58	16.81
Annual return	7.31	4.63	10.24
Turnover ratio	97.33	89.90	417.12
Institutional	45.56	35.14	40.68
Number of Observations	43,655	1,598	120
Number of Funds	6,003	886	116

Table 2: SRI Regressions

This table reports results from regressions of the SRI score on an indicator variable for insurance claims, with controls. The dependent variable, *SRI Score*, is the percentage of a fund's portfolio that is invested in a socially-responsible manner as of the date of its annual shareholder report (in percent). *Fidelity Bond Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under a fidelity bond, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. *E&O Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under an E&O policy, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. Control variables are the following: *Institutional*, the percentage of a fund's total net assets that is from institutional investor share classes (in percent); *Fund size,* the TNA of the fund (in log form); *Fund age,* the age (in years) of the fund (in log form); *Index fund,* a dummy variable equal to 1 for an index fund and 0 otherwise; *Expense ratio,* the fund's expense ratio (in percent); *Turnover ratio,* the fund's annual portfolio turnover ratio (in percent); *Performance*, the fund's annual net return (in percent); *Family size,* the total TNA of all funds in the fund family (in log form). All control variables are lagged by one year. Regressions include style fixed effects and fund fixed effects. Standard errors shown in parentheses and the notation *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	SRI Score t-1	SRI Score t	SRI Score t+1
Fidelity Bond Claim	0.48 (1.28)	2.18 (0.76)***	− 0.23 (0.84)
Controls	Y	Y	Y
Fund fixed effects	Y	Y	Y
Style fixed effects	Y	Y	Y
R^2	0.70	0.68	0.71
Observations	6,917	9,362	6,903
E&O Claim	− 0.56 (0.31)*	0.01 (0.24)	− 0.80 (0.30)***
Controls	Y	Y	Y
Fund fixed effects	Y	Y	Y
Style fixed effects	Y	Y	Y
R^2	0.69	0.68	0.71
Observations	7,187	9,693	7,110

Table 3: Robustness

Matching models are used in columns 1, 2, 3, and 4 and show the average treatment effect on the treated (ATET) of *Fidelity Bond Claim* on *SRI Score*. *SRI Score* is the percentage of a fund's portfolio that is invested in a socially-responsible manner as of the date of its annual shareholder report (in percent). *Fidelity Bond Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under a fidelity bond, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. Mahalanobis distance matching is used in columns 1 and 3 with 2 and 10 nearest neighbor matches respectively, and propensity score matching is used in columns 2 and 4 with 2 and 10 nearest neighbor matches respectively. Covariates used for matching are: *Institutional*, the percentage of a fund's total net assets that is from institutional investor share classes (in percent); *Fund size,* the TNA of the fund; *Fund age,* the age (in years) of the fund; *Index fund,* a dummy variable equal to 1 for an index fund and 0 otherwise; *Expense ratio,* the fund's expense ratio (in percent); *Turnover ratio,* the fund's annual portfolio turnover ratio (in percent); *Performance*, the fund's annual net return (in percent); *Family size,* the total TNA of all funds in the fund family; *Year* and *Style*. Column 5 reports results from the regression of *SRI Score* on the estimated value of fidelity bond claim obtained from a first stage regression of *Fidelity Bond Claim* on an instrument, *Custodial Expenses,* equal to the fund's custodial expenses per shareholder. The first-stage and second-stage regressions use the same control variables: *Institutional*, *Fund size* (in log form), *Fund age* (in log form), *Index Fund*, *Expense ratio*, *Turnover ratio*, *Performance*, *Family size* (in log form). In both stages, control variables are lagged by one year and the regressions include year fixed effects and style fixed effects. N=8,044. Standard errors shown in parentheses and the notation *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

| | Matching | | | | |
| | M-2 | PS-2 | M-10 | PS-10 | Instrument |
	(1)	(2)	(3)	(4)	(5)
Fidelity Bond Claim	2.34 (0.88)***	1.54 (0.78)**	1.80 (0.73)***	1.13 (0.68)*	9.10 (3.78)**

Table 4: SRI Regressions – Mutual Fund Trading Scandal

This table reports results from regressions of the SRI score on a variable indicating a fund implicated in the 2003-2004 mutual fund trading scandal, with controls. The dependent variable, *SRI Score*, is the percentage of a fund's portfolio that is invested in a socially-responsible manner as of the date of its annual shareholder report (in percent). *Scandal* is an indicator variable equal to 1 for a fund implicated in the mutual fund trading scandal (and that did not file a claim under a fidelity bond), and 0 for a fund that is not implicated. Control variables are the following: *Institutional*, the percentage of a fund's total net assets that is from institutional investor share classes (in percent); *Fund size,* the TNA of the fund (in log form); *Fund age,* the age (in years) of the fund (in log form); *Index fund,* a dummy variable equal to 1 for an index fund and 0 otherwise; *Expense ratio,* the fund's expense ratio (in percent); *Turnover ratio,* the fund's annual portfolio turnover ratio (in percent); *Performance*, the fund's annual net return (in percent); *Family size,* the total TNA of all funds in the fund family (in log form). All control variables are lagged by one year. Regressions include style fixed effects and fund fixed effects. Standard errors shown in parentheses and the notation *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	SRI Score t-1	*SRI Score* t	*SRI Score* t+1
Scandal	0.52	1.31	0.52
	(0.63)	(0.37)***	(0.40)
Controls	Y	Y	Y
Fund fixed effects	Y	Y	Y
Style fixed effects	Y	Y	Y
R^2	0.69	0.69	0.72
Observations	7,243	9,784	7,182

Table 5: Mean Statistics for Flows

This table reports the mean figure in each category for *Net Flow*, the average monthly net flow (relative to the beginning-period fund size) over the semi-annual period following a fund's shareholder report (in percent). The table reports figures for funds that disclose on their annual shareholder report having filed no claims under insurance policies (either E&O policies or fidelity bonds) (*No Claim*), having filed claims under E&O policies (*E&O Claim*), and having filed claims under fidelity bonds (*Fidelity Bond Claim*). *Diff* shows the difference between the indicated columns. The notation *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	No Claim	E&O Claim		Fidelity Bond Claim	
	(1)	(2)	*Diff 2-1*	(3)	*Diff 3-1*
Net Flow	3.79	− 7.44	*− 11.23***	4.36	*0.57*

Table 6: Flows Regressions

This table reports results from regressions of net flows on an indicator variable for insurance claims, with controls. The dependent variable, *Net Flow*, is the average monthly net flow (relative to the beginning-period size of the fund) over the semi-annual period following a fund's shareholder report (in percent). *Fidelity Bond Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under a fidelity bond, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. *E&O Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under an E&O policy, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. *SRI Score* is the percentage of a fund's portfolio that is invested in a socially-responsible manner as of the date of its annual shareholder report (in percent). Control variables are the following: *Institutional*, the percentage of a fund's total net assets that is from institutional investor share classes (in percent); *Fund size*, the TNA of the fund (in log form); *Fund age*, the age (in years) of the fund (in log form); *Index fund*, a dummy variable equal to 1 for an index fund and 0 otherwise; *Expense ratio*, the fund's expense ratio (in percent); *Turnover ratio*, the fund's annual portfolio turnover ratio (in percent); *Performance*, the risk-adjusted return (*Alpha*) during the 12-month period of the annual shareholder report (in percent); *Family size*, the total TNA of all funds in the fund family (in log form). All control variables are lagged by one year. Regressions include style fixed effects and year fixed effects. Standard errors shown in parentheses and the notation *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: *Net Flow*		
	(1)	(2)	(3)
Fidelity Bond Claim	− 1.13	− 1.16	− 1.43
	(0.54)**	(0.52)**	(10.30)
SRI Score		− 0.02	− 0.02
		(0.03)	(0.03)
SRI Score × Fidelity Bond Claim			0.00
			(0.10)
Controls	Y	Y	Y
Year fixed effects	Y	Y	Y
Style fixed effects	Y	Y	Y
R^2	0.02	0.01	0.01
Observations	10,234	7,409	7,409
E&O Claim	0.05	0.06	1.48
	(0.31)	(0.41)	(5.54)
SRI Score		− 0.02	− 0.02
		(0.03)	(0.03)
SRI Score × E&O Claim			− 0.02
			(0.06)
Controls	Y	Y	Y
Year fixed effects	Y	Y	Y
Style fixed effects	Y	Y	Y
R^2	0.02	0.01	0.01
Observations	10,642	7,664	7,664

Table 7: Flows Regressions: Funds that Aggressively Increase their SRI Score
This table reports results from regressions of net flows on an indicator variable for insurance claims, with controls. The dependent variable in column (1) is *Net Flow*, the average monthly net flow (relative to the beginning-period size of the fund) over the semi-annual period following a fund's shareholder report (in percent), and in column (2) is *Flow Volatility*, the average of the absolute values of such monthly net flows (in percent). *Top Quartile* is an indicator variable equal to 1 for a fund that is in the top quartile in a year with respect to change in its *SRI Score*, and 0 for a fund that is not. *Fidelity Bond Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under a fidelity bond, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. *E&O Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under an E&O policy, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. Control variables are the following: *Institutional*, the percentage of a fund's total net assets that is from institutional investor share classes (in percent); *Fund size*, the TNA of the fund (in log form); *Fund age*, the age (in years) of the fund (in log form); *Index fund*, a dummy variable equal to 1 for an index fund and 0 otherwise; *Expense ratio*, the fund's expense ratio (in percent); *Turnover ratio*, the fund's annual portfolio turnover ratio (in percent); *Performance*, the risk-adjusted return (*Alpha*) during the 12-month period of the annual shareholder report (in percent); *Family size*, the total TNA of all funds in the fund family (in log form). All control variables are lagged by one year. Regressions include style fixed effects and year fixed effects. Standard errors shown in parentheses and the notation *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Dependent variable:	Net Flow	Flow Volatility
	(1)	(2)
Fidelity Bond Claim	− 1.63	0.43
	(0.58)***	(1.06)
Top Quartile	− 0.83	0.14
	(0.50)*	(0.24)
Top Quartile × Fidelity Bond Claim	1.45	− 2.47
	(0.88)*	(1.23)**
Controls	Y	Y
Year fixed effects	Y	Y
Style fixed effects	Y	Y
R^2	0.01	0.03
Observations	6,004	6,004
E&O Claim	− 0.25	0.23
	(0.44)	(0.44)
Top Quartile	− 0.56	0.14
	(0.55)	(0.24)
Top Quartile × E&O Claim	1.21	− 0.11
	(1.36)	(0.83)
Controls	Y	Y
Year fixed effects	Y	Y
Style fixed effects	Y	Y
R^2	0.02	0.03
Observations	6,240	6,240

Table 8: Mean Statistics for Performance

This table reports the mean figure in each category for *Alpha*, the risk-adjusted monthly return (in percent) from a Carhart (1997) four-factor model computed using monthly data during the 12-month period of the annual shareholder report. The table reports figures for funds that disclose on their annual shareholder report having filed no claims under insurance policies (either E&O policies or fidelity bonds) (*No Claim*), having filed claims under E&O policies (*E&O Claim*), and having filed claims under fidelity bonds (*Fidelity Bond Claim*). *Diff* shows the difference between the indicated columns. The notation *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	No Claim	E&O Claim		Fidelity Bond Claim	
	(1)	(2)	*Diff 2-1*	(3)	*Diff 3-1*
Alpha	-0.0994***	-0.1441***	-0.0447*	-0.3575***	-0.2581***

Table 9: Performance Regressions

This table reports results from regressions of risk-adjusted returns on an indicator variable for insurance claims, with controls. The dependent variable, *Alpha*, is the risk-adjusted monthly return (in percent) from a Carhart (1997) four-factor model computed using monthly data during the 12-month period of the annual shareholder report. *Fidelity Bond Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under a fidelity bond, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. *E&O Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under an E&O policy, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. *SRI Score* is the percentage of a fund's portfolio that is invested in a socially-responsible manner as of the date of its annual shareholder report (in percent). Control variables are the following: *Institutional*, the percentage of a fund's total net assets that is from institutional investor share classes (in percent); *Fund size,* the TNA of the fund (in log form); *Fund age,* the age (in years) of the fund (in log form); *Index fund,* a dummy variable equal to 1 for an index fund and 0 otherwise; *Expense ratio,* the fund's expense ratio (in percent); *Turnover ratio,* the fund's annual portfolio turnover ratio (in percent); *Family size,* the total TNA of all funds in the fund family (in log form). All control variables are lagged by one year. Regressions include style fixed effects and year fixed effects. Standard errors shown in parentheses and the notation *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: *Alpha*		
	(1)	(2)	(3)
Fidelity Bond Claim	− 0.2329	− 0.3122	2.1728
	(0.1084)**	(0.1387)**	(3.0864)
SRI Score		0.0010	0.0010
		(0.0012)	(0.0012)
SRI Score × Fidelity Bond Claim			− 0.0266
			(0.0339)
Controls	Y	Y	Y
Year fixed effects	Y	Y	Y
Style fixed effects	Y	Y	Y
R^2	0.03	0.04	0.04
Observations	12,835	9,319	9,319
E&O Claim	0.0265	0.0038	− 0.7433
	(0.0238)	(0.0294)	(0.4176)*
SRI Score		0.0016	0.0013
		(0.0011)	(0.0012)
SRI Score × E&O Claim			0.0081
			(0.0046)*
Controls	Y	Y	Y
Year fixed effects	Y	Y	Y
Style fixed effects	Y	Y	Y
R^2	0.04	0.04	0.05
Observations	13,370	9,652	9,652

Table 10: Performance Regressions: Funds that Aggressively Increase their SRI Score

This table reports results from regressions of risk-adjusted returns on an indicator variable for insurance claims, with controls. The dependent variable, *Alpha*, is the risk-adjusted monthly return (in percent) from a Carhart (1997) four-factor model computed using monthly data during the 12-month period of the annual shareholder report. *Top Quartile* is an indicator variable equal to 1 for a fund that is in the top quartile in a year with respect to change in its *SRI Score*, and 0 for a fund that is not. *Fidelity Bond Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under a fidelity bond, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. *E&O Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under an E&O policy, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. Control variables are the following: *Institutional*, the percentage of a fund's total net assets that is from institutional investor share classes (in percent); *Fund size*, the TNA of the fund (in log form); *Fund age*, the age (in years) of the fund (in log form); *Index fund*, a dummy variable equal to 1 for an index fund and 0 otherwise; *Expense ratio*, the fund's expense ratio (in percent); *Turnover ratio*, the fund's annual portfolio turnover ratio (in percent); *Family size*, the total TNA of all funds in the fund family (in log form). All control variables are lagged by one year. Regressions include style fixed effects and year fixed effects. Standard errors shown in parentheses and the notation *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: *Alpha*
Fidelity Bond Claim	− 0.0346
	(0.0755)
Top Quartile	0.0060
	(0.0130)
Top Quartile × Fidelity Bond Claim	− 0.6773
	(0.2715)**
Controls	Y
Year fixed effects	Y
Style fixed effects	Y
R^2	0.04
Observations	7,631
E&O Claim	0.0229
	(0.0339)
Top Quartile	0.0059
	(0.0130)
Top Quartile × E&O Claim	− 0.0573
	(0.0751)
Controls	Y
Year fixed effects	Y
Style fixed effects	Y
R^2	0.04
Observations	7,924

Table 11: Subsequent Change in SRI Score by Quartiles

This table shows the average change (from year t to year t+1) in *SRI Score* during the 12-month period following a fund's shareholder report for year t (in percent), by quartiles. Funds are sorted into quartiles each year according to the change in *SRI Score* during year t. Figures are shown for funds with *No Claims* and *Fidelity Bond Claims*, respectively. *Diff* shows the difference between the indicated columns. The notation *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

| | | No Claim | Fidelity Bond Claim | |
		(1)	(2)	Diff 2-1
ΔSRI Score	Low	1.52	0.85	− 0.67
	2	0.25	0.32	0.07
	3	0.27	0.33	0.06
	High	− 0.13	− 2.63	− 2.50***

Table 12: SRI Regressions: Funds that Aggressively Increase their SRI Score

This table reports results from regressions of the SRI score on an indicator variable for insurance claims, with controls. The dependent variable, *SRI Score*, is the percentage of a fund's portfolio that is invested in a socially-responsible manner one year after its annual shareholder report (in percent). *Top Quartile* is an indicator variable equal to 1 for a fund that is in the top quartile in a year with respect to change in its *SRI Score*, and 0 for a fund that is not. *Fidelity Bond Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under a fidelity bond, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. *E&O Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under an E&O policy, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. Control variables are: *Institutional*, the percentage of a fund's total net assets that is from institutional investor share classes (in percent); *Fund size*, the TNA of the fund (in log form); *Fund age*, the age (in years) of the fund (in log form); *Index fund*, a dummy variable equal to 1 for an index fund and 0 otherwise; *Expense ratio*, the fund's expense ratio (in percent); *Turnover ratio*, the fund's annual portfolio turnover ratio (in percent); *Performance*, the fund's annual net return (in percent); *Family size*, the total TNA of all funds in the fund family (in log form). All control variables are lagged by one year. Regressions include style fixed effects and fund fixed effects. Standard errors shown in parentheses and the notation *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: *SRI Score*
	t+1
Fidelity Bond Claim$_t$	1.59
	(0.52)***
Top Quartile$_t$	0.76
	(0.11)***
Top Quartile$_t$ ×*Fidelity Bond Claim*$_t$	−4.26
	(2.01)**
Controls	Y
Fund fixed effects	Y
Style fixed effects	Y
R^2	0.76
Observations	5,552
E&O Claim$_t$	−0.69
	(0.32)**
Top Quartile$_t$	0.79
	(0.11)***
Top Quartile$_t$ ×*E&O Claim*$_t$	−0.09
	(0.79)
Controls	Y
Fund fixed effects	Y
Style fixed effects	Y
R^2	0.75
Observations	5,550

Table 13: Managerial Changes at the Fund

This table reports results from probit regressions of an indicator variable for managerial changes at the fund on an indicator variable for insurance claims, with controls. The dependent variable, *Managerial Change*, is an indicator variable equal to 1 for a fund that makes a managerial change and 0 for fund that does not. *Fidelity Bond Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under a fidelity bond, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. *E&O Claim* is an indicator variable equal to 1 for a fund that reports on its annual shareholder report having filed a claim under an E&O policy, and 0 for a fund that reports having filed no claims under E&O policies or fidelity bonds. *Top Quartile* is an indicator variable equal to 1 for a fund that is in the top quartile in a year with respect to change in its *SRI Score*, and 0 for a fund that is not. Control variables are: *Institutional*, the percentage of a fund's total net assets that is from institutional investor share classes (in percent); *Fund size,* the TNA of the fund (in log form); *Fund age,* the age (in years) of the fund (in log form); *Index fund,* a dummy variable equal to 1 for an index fund and 0 otherwise; *Expense ratio,* the fund's expense ratio (in percent); *Turnover ratio,* the fund's annual portfolio turnover ratio (in percent); *Performance*, the risk-adjusted return (*alpha*) during the 12-month period of the annual shareholder report (in percent); *Family size,* the total TNA of all funds in the fund family (in log form). All control variables are lagged by one year. Regressions include style fixed effects and year fixed effects. Standard errors shown in parentheses and the notation *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: *Managerial Change*
Fidelity Bond Claim$_t$	0.65
	(0.57)
Top Quartile$_t$	0.01
	(0.04)
Top Quartile$_t$×Fidelity Bond Claim$_t$	− 1.70
	(0.86)**
Controls	Y
Year fixed effects	Y
Style fixed effects	Y
R^2	0.07
Observations	7,400
E&O Claim$_t$	− 0.20
	(0.10)*
Top Quartile$_t$	0.01
	(0.04)
Top Quartile$_t$×E&O Claim$_t$	− 0.35
	(0.21)*
Controls	Y
Year fixed effects	Y
Style fixed effects	Y
R^2	0.07
Observations	7,689