The Mitigation of Reputational Risk via Responsive CSR: Evidence from Securities Class Action Lawsuits[*]

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Abstract

We examine the effect of securities class action litigation on the strategic production of CSR as an ex-post damage control instrument (responsive CSR). Net CSR scores increase by 53% on average after a filing and are primarily driven by greater community and diversity strengths. Our study is the first to provide evidence of a strategic duration for responsive CSR. Using hand-collected data to supplement our main dataset, we show that positive CSR increases in two distinct periods – first, immediately around the trigger event to maintain ESG scores and reduce media bias, and then beginning several months later where it rises, remains elevated until stakeholders determine penalties, and then afterwards significantly declines. The use of responsive CSR is concentrated in urban or liberal-leaning states and in firms with higher ESG and director reputational risks.

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Abstract

We examine the effect of securities class action litigation on the strategic production of CSR as an ex-post damage control instrument (responsive CSR). Net CSR scores increase by 53% on average after a filing and are primarily driven by greater community and diversity strengths. Our study is the first to provide evidence of a strategic duration for responsive CSR. Using hand-collected data to supplement our main dataset, we show that positive CSR increases in two distinct periods – first, immediately around the trigger event to maintain ESG scores and reduce media bias, and then beginning several months later where it rises, remains elevated until stakeholders determine penalties, and then afterwards significantly declines. The use of responsive CSR is concentrated in urban or liberal-leaning states and in firms with higher ESG and director reputational risks.

1   Introduction

Firm reputation is vitally important in establishing a firm's relationship with its stakeholders (Fombrun and Shanley (1990)). Negative firm-specific events can have a strong adverse effect on both firm reputational capital (Barnett and Pollock (2012)) and manager/director career concerns (Gibbons and Murphy (1992); Holmström (1999)). Reputational penalties have been shown to be 7.5 times the amount of total legal and regulatory penalties, as reputational damage increases contracting and financing costs, expands loan spreads, and lowers future sales (Karpoff, Lee, and Martin (2008); Deng, Willis, and Xu (2014)). Although quick reputation repair after a negative firm event has been shown to reduce total reputational losses (Wilson (2008)), prior literature is unclear on precisely how firms should restore a damaged reputation. Countering the effects of negative firm-specific events can be costly and exhibit varying degrees of success. "How firms repair damaged reputations remains one of the literature's important unanswered questions," notes Chakravarthy, deHaan, and Rajgopal (2014) citing Jonathan Karpoff.

In this study, we address the reputation repair issue by examining firms' investment in corporate social responsibility (CSR) as a response to lawsuits. We find causality between the filing of lawsuits and the use of responsive CSR. We hand-collect supplemental CSR data and are the first to show the nuance of CSR timing in the year surrounding a trigger event. We show that positive CSR increases in two distinct periods – first, immediately around the trigger event to maintain environmental, social, and governance (ESG) scores and reduce media bias, and second beginning several months later where CSR increases, remains elevated until penalties are established, and then significantly declines.

CSR represents an action on the corporate side and falls under the umbrella of ESG along with sustainable, responsible, and impact investing (SRI) on the shareholder side. CSR initiatives have been growing rapidly in the last few decades. For example, CSR reporting by firms increased from 24% to 80% for the top 100 global firms and 35% to 96%

for the top 250 Fortune Global 500 firms between 1999 and 2020 (KPMG Survey of Sustainability Reporting 2020). This parallels the dramatic growth in SRI investing in the last two decades as institutional investors have simultaneously become the dominant holders of equities. The US SIF Foundation reports that SRI investment increased from $639 billion to $17.1 trillion for US-domiciled assets under management between 1995 and 2019, representing 33% of managed assets. This enhanced shareholder demand highlights a growing motivation for firm engagement in CSR activities.

Our work revolves around the two main opposing views on CSR engagement as a risk management tool. The view we explicitly test regards CSR as a targeted and strategic investment in stakeholders that can enhance firm reputation (Barney (1991)) after a negative event, while the "shareholder expense hypothesis" views CSR as a managerial agency cost benefiting certain stakeholders at the expense of stockholders.[1] It is important to first note, however, that it is not necessary for the firm to wait until after a negative shock occurs to mitigate reputational harm. Within the context of CSR as a strategic tool (Prakash, Ravi, and Zhao (2017)), CSR spending could potentially protect against reputation-damaging events when used 1) ex-ante as an insurance mechanism or 2) ex-post as a damage alleviation instrument. We focus on the ex-post view. The ex-ante insurance role has been studied extensively and many studies find that CSR as insurance can protect a firm from litigation risk (Barnett, Hartmann, and Salomon (2017), Boyer and Kordonsky (2020)), negative consumer sentiment (Wagner, Lutz, and Weitz (2009)), and other stakeholder perceptions which could adversely impact firm value (Godfrey, Merrill, and Hansen (2009); Koh, Qian, and Wang (2014); Shiu and Yang (2017)). However, maintaining a constant level of CSR spending as a form of insurance can be costly. Fortune Global 500

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[1] Deng, Kang, and Low (2013) introduce these classic CSR hypotheses as the stakeholder value maximization hypothesis on the investment side and the shareholder expense hypothesis on the agency side. They evaluate these two views in detail as they examine merger announcement returns. For brevity we refer the reader to their detailed discussion for more background on these hypotheses.

companies now spend $20 billion annually on CSR, and CSR spending can be particularly high for firms facing heightened reputational risks. For example, Barnea and Rubin (2010) note that GE spent 15% of its profits on CSR in 2007 (as described in "Responsibility Pays," Forbes, November 11, 2007). In contrast, CSR used sparingly as a strategic response tool could be more cost effective and fit the resource view of strategic CSR (McWilliams and Siegel (2001); Barney and Clark (2007); Prakash, Ravi, and Zhao (2017)). Ex-post CSR as a damage control tool is currently a small, nascent, and unconnected field scattered across multiple academic disciplines with varying nomenclature.

Because of the scattered nature of ex-post CSR literature, our first contribution is to review and identify ex-post CSR research in a wide variety of business fields and attempt to connect these disjointed literature streams. In the marketing literature, both Ricks (2005) and Wagner, Lutz, and Weitz (2009) term this ex-post strategic CSR as "reactive CSR," while the economics literature Kotchen and Moon (2012) labels it as "offsetting CSR." In the accounting literature, Chakravarthy, deHaan, and Rajgopal (2014) find that firms undertake community building actions after a restatement in what they term "reputation repair." Krüger (2015), Prakash, Ravi, and Zhao (2017), and Bae, Choi, and Lim (2020) are the finance studies in this area and classify this type of CSR as "offsetting CSR," "responsive CSR," and "post-crisis CSR," respectively. We adopt the term responsive CSR from Prakash, Ravi, and Zhao (2017) and Liang and Renneboog (2017) as it implies a strategic firm effort. The lack of cohesion among these literature streams is particularly surprising, since ex-post CSR (responsive CSR) is three times as common as ex-ante CSR used as pro-active insurance (Prakash, Ravi, and Zhao (2017)) and may have historical foundations dating back to a country's legal origin (Liang and Renneboog (2017)).

We test two main hypotheses that involve the strategic use of CSR after a reputational shock. Our first hypothesis, which we term the "strategic response hypothesis", examines the effect of firms' securities class action (SCA) lawsuit filings and settlements on CSR. Prior studies have focused on CSR use only after a rise in related CSR concerns,

while we test a more general reputational shock. We find that net CSR scores increase by 53% on average after a securities lawsuit filing, with the increase concentrated in CSR strengths rather than in reductions in CSR concerns. We also find that these firms focus on increasing strengths in specific areas; i.e., community and diversity.

Our second hypothesis, which we term the "strategic duration hypothesis" representing our primary contribution, examines the timing and specific length of time that CSR remains elevated after an SCA trigger event. The timing of responsive CSR is important since a delay in repair efforts would increase total reputational losses (Wilson (2008); Ferrés and Marcet (2021)). Varela-Neira, Vázquez-Casielles, and Iglesias (2010) argue that a quick response after a service failure in the banking sector will increase the positive effects of apologies and monetary compensation strategies. In terms of CSR duration, we hypothesize that positive CSR would increase in two separate periods after the trigger event, suggesting distinct short-term and long-term CSR responses. We contribute to the literature by being the first to examine responsive CSR in the seven-month period before and after an SCA filing. Prior CSR studies either focus on the immediate response to a trigger event within 5-10 days (Krüger (2015)) or they study annual effects using KLD data; however, these studies do not fully capture the intermediate-term sequence of responses during the first year following an SCA trigger event. Using a hand collected dataset to supplement KLD data, we find support for two distinct phases of CSR production post-trigger event. The first phase is immediate and helps to maintain minimum ESG scores required by some institutional owners and counter media "agenda-setting." The second phase begins within months and is used to influence the litany of investigations and lawsuits spawned from the SCA trigger event. We also find that responsive CSR production significantly declines two to three years after the trigger event, when the termination of SCAs, related suits, and SEC investigations occur within a close time proximity to each other and after penalties have been determined.

We address endogeneity concerns and perform robustness checks in several ways. Empirically it is difficult to determine causality of the effect of lawsuits on CSR activities due to joint determination. The events that lead to the class action lawsuits usually have a detrimental impact on firm sales and operating performance, and both can affect CSR spending and manager and director reputation. In addition, unobservable factors (the level of media outrage, political pressure, competitive pressures, etc.) may intensify a decline in firm performance after the event precipitating the lawsuit, leading to an omitted variable bias. We attempt to mitigate endogeneity problems in four ways. First, we employ a change-on-change regression to address reverse causality concerns and the possible endogenous relationship between negative firm events and prior CSR spending.[2] Second, we use propensity score matching to match our litigation sample to a similar cohort of firms not facing class action lawsuits. Third, we use indices of federal district court level lawsuit ease and experience in a two-stage least squares model to establish the causality of securities lawsuits and related litigation on responsive CSR activities. Finally, we employ a natural experiment affecting the propensity for shareholders to file SCAs in the Ninth Circuit in 1999 as a further justification for our district-level measures. We apply an array of control variables pertinent to the CSR and litigation literature in all models.

For robustness we examine responsive advertising after SCA filings based on prior literature pertaining to negative firm-specific shocks (Wies et al. (2019)). Along with anecdotal evidence documented in Appendix A, we find that firms increase advertising in response to an SCA filing, suggesting a synergistic relationship with responsive CSR. In untabulated results we follow Servaes and Tamayo (2013) and scale our CSR measures to adjust for time variance bias from KLD data, and we additionally address concerns that our results might be driven by replacement CEOs and directors.

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[2] Krüger (2015) partially motivates these tests, stating "Because this paper examines short-run changes in shareholder value in response to high-frequency changes in CSR, I can plausibly mitigate these reverse causality concerns."

We then explore reputational risk channels through which responsive CSR is more likely to occur. We find higher responsive CSR when a firm has experienced a negative news event related to ESG issues. We also find that responsive CSR takes place more frequently when firms have higher director reputational risks. While reducing director reputational risks suggests that responsive CSR is intended for director benefit and represents an agency cost, responsive CSR also aligns the interests of management and the firm after a negative event such as an SCA filing. Krüger (2015) argues that offsetting CSR after a negative event is meant to improve firm reputation. Dimson, Karakaş, and Li (2015) also find that CSR success is more probable if the firm first has reputational concerns.

Our study is closely related to Kotchen and Moon (2012) and Krüger (2015), who find that firms with high CSR concerns offset them by improving CSR strengths. However, our study advances their work by 1) examining the broader impact of a reputational shock from SCAs, 2) studying intermediate-term effects in the seven months surrounding the trigger event, and 3) examining the duration of litigation on responsive CSR production. Our study also relates to Bae, Choi, and Lim (2020), who study the impact of SEC AAER's on post-crisis CSR. However, they do not find a causal relationship, noting only that firms with higher post-crisis CSR have a lower delisting probability. Finally, Boyer and Kordonsky (2020) examine the CSR ex-ante impact on securities litigation, whereas we look at ex-post effects.

The remainder of the paper is organized as follows. Section 2 discusses the existing literature and our use of SCAs. Section 3 describes the data and presents summary statistics. Section 4 introduces the baseline results and addresses endogeneity issues and our identification strategies. Section 5 discusses strategic duration and reputational risk channels of influence. Section 6 concludes the paper.

2   Motivation

2.1 Use of Securities Class Action Litigation as a Reputational Shock

Our study broadens the scope of prior responsive CSR studies by using securities class action litigation as a more general reputational shock proxy. Previous responsive CSR research focuses primarily on CSR engagement in reaction to increases in CSR concerns, presumably to balance and offset the shock in the same or a related CSR area. However, it is not clear how the process should be implemented effectively. Furthermore, whether the use of CSR is beneficial to the firm's general reputation after a negative firm event is unclear. Some studies suggest that reputational concerns and corresponding responsive CSR usage differ according to the negative event. For example, Aharony, Liu, and Yawson (2015) find that contractual lawsuits impose reputational penalties, but environmental lawsuits may not.[3] More importantly, it is possible that responsive CSR may be ineffective to counter some negative events or would even generate the opposite response. Marketing literature argues that stakeholders (e.g., consumers) often consider responsive CSR spending as hypocritical window dressing (especially when addressing product concerns), rendering its use unproductive (Ricks (2005); Becker-Olsen, Cudmore, and Hill (2006); Wagner, Lutz, and Weitz (2009); Groza, Pronschinske, and Walker (2011)).[4]

We conjecture that firms use CSR to alleviate the significant reputational damage inflicted by a general reputational shock. We argue that SCAs are an ideal proxy for a reputational shock for several reasons. First, SCAs can broadly affect any public firm (Arena and Julio (2015)) and not just those exposed to specific CSR or other risks. Second, an SCA filing essentially filters out more frivolous firm legal proceedings and investigations, as

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[3] Similarly, Barnett and Pollock (2012) state in reference to the chapter by J.M. Karpoff, "He finds that penalties are imposed if the misconduct affects those with whom the offending firm has a business relationship, but not if the misconduct affects parties with whom the firm has no business relationship. For example, instances of financial misconduct tend to incur significant reputational penalties, whereas, "on average, the reputational loss from harming the environment is negligible.""

[4] In addition, a product failure may not reflect as negatively on manager or director reputation as a decision they make directly, such as a bad acquisition, excessive executive compensation, or fraudulent behavior. Thus, product failures may lead to different manager responses and outcomes.

securities class action litigation is only filed if the triggering event is significant enough to negatively impact the stock price. Third, SCA's usually involve manager or director malfeasance, suggesting serious firm reputational damage such as resulting from fraudulent behavior. For example, Brochet and Srinivasan (2014) find that 11% of independent directors in their sample from 1996 to 2010 are directly named in an SCA lawsuit. In addition, securities class action litigation negatively impacts firm reputation by harming multiple firm financial relationships simultaneously (Barnett and Pollock (2012)). Haslem, Hutton, and Smith (2017) claim that SCAs have the largest destructive impact on firm reputation among the nine types of corporate litigation they study. We therefore present the following strategic response hypothesis:

H1: The filing of SCA litigation is positively related to responsive CSR.

2.2 CSR Duration as a Strategic Firm Response

Our study of SCAs ultimately serves as a well-defined proxy for the cascading variety and timeframe of negative stakeholder reactions stemming from the trigger event. In this way, our measure casts a much wider net than studies focusing solely on CSR-related trigger events and stakeholder actions. SCAs are usually filed within weeks of the triggering event and are often filed simultaneously with a wide variety of other legal proceedings. SCA lawsuits usually last several years and endure longer than other forms of event-related corporate litigation (Haslem, Hutton, and Smith (2017)), thus capturing the entire length of time during which the various legal proceedings, government inquiries, and shareholder actions affect the firm. SCAs thus proxy for the impact of all these actions, and for that reason we are less concerned about the financial penalties incurred at settlement specifically from SCAs alone (which may be less than other litigation costs related to the shock).

We ask a key question unanswered in prior literature – how quickly and for how long should a firm respond to a reputational shock? Wilson (2008) suggests that a quick response

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is necessary to reduce total reputational losses, but it is unclear as to exactly how soon that should be. Krüger (2015) examines the market response in the days following a trigger event but does not examine the occurrence or timing of any contemporaneous positive CSR production. Three conjectures seem most likely: 1) a brief increase in CSR, 2) a CSR increase while the impact of the negative firm shock persists, or 3) a permanent shift to higher CSR. CSR spending can be a significant proportion of firm costs as noted in the introduction. Therefore, we do not expect a permanent shift to higher CSR after the effects of a trigger event have ended. Instead, we expect two distinct periods of CSR production.

We offer support for the first conjecture above and argue that positive and strategic CSR news releases will occur as quickly as a company can produce a press release; i.e., within days of a trigger event. We believe there are at least two reasons for this. First, because ESG investments have become important to a firm's investor base as discussed in the introduction, managers have to pay particular attention to their ESG ratings. For example, the Dow Jones Sustainability Index (established in 1999) conducts daily assessments of firms for arising non-compliance issues. Serious violations can lead to expulsion from the index and the subsequent exit of institutional investors requiring certain levels of ESG ratings. Due to daily ESG indices reviews and quick response times, firms must respond rapidly to shore up their CSR standing. Second, media outlets are efficient at rapidly disseminating information and will disburse news of a trigger event within days (or even hours) of its public revelation. Media has a powerful effect through "agenda-setting"; i.e., any bias they have in the way they report an event can have an immediate impact on the entire stakeholder network in a community (who all receive the same news) and can generate a coordinating force in their response (Kölbel, Busch, and Jancso (2017)). Kölbel et al. (2017) further note that firms need to respond with their own tailored press releases to counter a media environment that could produce a significant post-trigger financial risk.

We also offer support for the second conjecture that CSR will only increase while the impact of the trigger event persists. This period is likely separate from the first CSR

period, as Rogers and Van Buskirk (2009) find that managers need about three months to enact long-term systematic policy responses to an SCA filing (CSR in our case). This period is about two to three years, and there are two main reasons for this process to be drawn out. First, Haslem (2005) states that SCA litigation usually sustains for two to three years until a settlement is reached and represents a steady stream of negative firm publicity (our median securities lawsuit lasts for 1.99 years). Karpoff et al. (2017) discuss the complex timeline of legal requests and disclosures occurring throughout the SCA litigation enforcement period, as we adapt into Figure 1. As mentioned earlier, this occurs in tandem with other legal proceedings and shareholder proposals related to the triggering event. In addition, auditor requests for disclosure of contingent liabilities and loss provisions need to be updated during this time based on the multiple legal actions. Together these suggest the need for more than just a singular CSR response to the triggering event, as the public revelation of each new stakeholder response will generate additional negative media attention and potentially affect later stakeholder responses to the firm. Prior literature suggests that positive firm responses can affect stakeholder judgments. For example, Hong et al. (2019) argue that CSR can produce a "halo" effect reducing future fines, while Cohen and Gurun (2018) find that firms increase local advertising after a lawsuit filing in order to affect that area's jury pool. Second, Figure 1 identifies a confluence of stakeholder decisions and rulings around the end of the SCA litigation period (~2.5 years) that responsive CSR preceding these decisions could positively influence (Hong et al. (2019); Cohen and Gurun (2018)). Because these rulings occur within a close time frame to each other, we expect a statistically significant firm reduction in CSR after the rulings are made.[5] We thus offer the following two strategic duration hypotheses:

H2A: Positive CSR news increases in the days surrounding an SCA trigger event.

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[5] For example, the median time until SEC investigations end after a trigger event is 27 months (Karpoff et al. (2017), while the median SCA length in our sample is 24 months. The mean SCA length in Haslem, Hutton, and Smith (2017) is 29 months.

H2B: Positive CSR news increases several months after an SCA trigger event, remains elevated until litigation / government investigation decisions are made, and then significantly declines.

3 Data and Summary Statistics

We extract information from the MSCI ESG KLD database to construct the CSR score to measure a firm's CSR activities. Kinder, Lydenburg, and Domini (KLD) employ a combination of public news events to assess a firm's social performance along various dimensions. KLD has covered S&P 500 firms since 1991 and has expanded its coverage to the largest 3,000 U.S. publicly traded companies. The KLD dataset covers seven areas since CSR is a broad and comprehensive concept: human rights, diversity, employee relations, environment, product characteristics, community relations and governance. In each area, KLD assigns a binary rating to a set of strengths and concerns and sums them for strengths and concerns in each area. Using community as an example, strengths include charitable giving, innovative giving, and support for housing, education, and volunteer programs. Concerns include investment controversies, economic impacts, and tax disputes.

Among the seven areas covered by KLD, we follow prior literature (Godfrey, Merrill, and Hansen (2009); McCarthy, Oliver, and Song (2017)) and focus on institutional CSR components (human rights, diversity, environment, and community relations) as opposed to technical components (employee relations, product characteristics, and governance). These studies argue that technical CSR builds exchange capital and the potential for mutual financial benefit, whereas institutional CSR is more focused on the building of social capital. Thus institutional components may be more related to the "soft side" of firm reputation, and they provide additional utility as a responsive CSR tool since they can be deployed rapidly. We thus exclude the technical components of CSR based on these studies and for the following reasons. First, Edmans (2011) shows direct benefits of employee satisfaction

accruing to shareholders, thus supporting the technical classification in the previously mentioned literature. He also finds that employee satisfaction is not immediately capitalized by the market, suggesting it may not be as useful as an immediate responsive CSR tool. Second, Servaes and Tamayo (2013) and Adhikari (2016) argue that product issues are closely related to a firm's product strategy and do not necessarily represent the firm's social and ethical goals.[6] In addition, the "corporate hypocrisy" marketing literature notes consumers may oppose brand enhancements after a negative event (Wagner, Lutz, and Weitz (2009)). Finally, governance represents ways for capital providers to assure their investment instead of social and ethical goals (Servaes and Tamayo (2013)).

We obtain total strengths and total concerns scores by summing the scores in each institutional CSR area, and we then compute the total CSR score as total strengths minus total concerns in the four social rating categories as follows:

$$CSR_{i,t} = \sum CSR\ Strengths_{i,t} - \sum CSR\ Concerns_{i,t} \tag{1}$$

where i and t represent firm and year, respectively. We exclude financial and utility firms (SIC codes 6000-6999, 4900-4999) due to the regulated nature of the companies. Although the KLD database starts its coverage in 1991, the dataset was expanded after 2000.[7] Thus, our main sample ranges from 2001-2013 due to data limitations from MSCI ESG KLD.[8]

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[6] Our main results are qualitatively the same when including the products area/category in calculating CSR scores. In addition, we find the lawsuit firm is negatively associated with the product component in CSR activities. The results are not tabulated but are available upon request.

[7] Prior to 2001, the dataset only included the 500 largest U.S. firms and the MSCI KLD 400 Social Index (~650 firms). In 2001 the dataset was expanded to include the 1,000 largest U.S. companies as well (~1100 firms total).

[8] Following several recent studies using KLD data, we end our sample period in 2013 due to the acquisition of KLD by Morgan Stanley Capital International (MSCI) RiskMetrics Group. As Derchi, Zoni, and Dossi (2020) note, "This transition implied a major restructuring of the data base architecture effective as of 2014, thus creating discontinuity, with a higher number of indicators being created, others replaced or eliminated. Reconciliation tables between the old data base architecture and the new structure have been made available. However, in our view, despite the effort of assuring comparability, the 2014 transition poses a severe methodological problem of data homogeneity."

We obtain firm financial and stock return information from Compustat and CRSP, respectively. SCA lawsuits data is from the Stanford Law School Securities Class Action Clearinghouse and restricts our sample to lawsuit firms with at least $1 million in settlement costs. In robustness tests, results remain consistent (Dyck, Morse, and Zingales (2010) p. 2117) for a $3 million restriction. Our final sample consists of 14,344 firm-year observations.

3.1 Summary Statistics and Univariate Tests

Table 1 Panel A presents summary statistics for the full sample. The mean net CSR score is about 0.214 (median = 0.00) and class action lawsuit firms account for about 13.8% of sample observations. On average, the length of the lawsuits is approximately 2.77 years with a median of 2 years. Advertising expenditures are about 1.1% of sales revenue. For board characteristics, about 74% of the board members are classified as outside directors, and the average number of board seats held by directors (outside directors) is about 3.86 (4.33). About 45% of directors on the board are also CEOs in other firms. There are 10.2% outside director-CEOs on the board. The mean directors' tenure in a firm is about 9 years.

Table 1 Panel B presents univariate comparisons on the CSR scores between lawsuit firms and firms that do not undergo SCA litigation. The mean lawsuit firms' net CSR score is significantly higher than that of non-lawsuit firms (t-stat = 28.69). We also adjust the score differentials by scaling CSR scores by the maximum possible CSR total score based on Servaes and Tamayo (2013). We find that the mean lawsuit firms' scaled CSR scores at t+1 are also significantly higher than that of non-lawsuit firms (t-stat = 21.08) but are more similar in magnitude. Building on these univariate tests of CSR activities by lawsuit firms, we conjecture that the incidence of an SCA lawsuit in a firm is a significant driving factor for that firm's CSR activities in support of the strategic response hypothesis, and we proceed to our baseline tests and various identification strategies.

4 Baseline Results and Identification

4.1 Baseline Regression Analysis

To further build upon our findings from the univariate analysis, we examine the effect of SCA lawsuits on firm corporate social performance in a multivariate regression setting. Specifically, we test whether firms engage in more CSR activities after they experience SCA lawsuits using the following model:

$$\text{CSR}_{i,t+1} = \beta_0 + \beta_1 \text{Lawsuit firm}_{i,t} + \beta_2 \ln(\text{Total assets}_{i,t}) + \beta_3 \text{M/B}_{i,t} \tag{2}$$

$$+ \beta_4 \text{Leverage}_{i,t} + \beta_5 \text{ROA}_{i,t} + \beta_6 \text{Volatility}_{i,t}$$

$$+ \beta_7 \text{Inst Holding}_{i,t} + \beta_8 \text{Capex}_{i,t} + \beta_9 \text{Cash Holding}_{i,t}$$

$$+ \beta_{10} \text{R\&D}_{i,t} + \varepsilon_{i,t}$$

where i and t represent firm and year, respectively. CSR is defined as the sum of CSR strengths minus the sum of CSR concerns for each firm in a fiscal year. *Lawsuit firm* is an indicator variable that equals one if a firm experiences an SCA lawsuit in a given year, and zero otherwise. We include control variables (defined in Appendix B) following prior CSR studies (Kotchen and Moon (2012), Krüger (2015)) and litigation studies (Gande and Lewis (2009), Kim and Skinner (2012), and Arena and Julio (2015)). In all regressions, we cluster standard errors by both firm and time (Petersen (2009); Thompson (2011)), which is considered to be more conservative than simply clustering standard errors by firm.

We present OLS regressions in Table 2. Panel A shows that a firm's involvement in lawsuits is positively associated with CSR score, consistent with the strategic response hypothesis. The coefficient estimate on *Lawsuit firm* is significant at the 1% level. The significance of the coefficient estimates on *Lawsuit firm* survives across different specifications. Table 2 Panel A model (3) includes industry and year fixed effects to control for the unobserved heterogeneity in industries and time, in addition to firm characteristics. It is worth noting that our results in models (1) to (3) may be driven in part by insurance CSR spending in the years prior to the lawsuit filing year (Godfrey, Merrill, and Hansen

(2009)). Firms that initiate responsive CSR after SCA litigation may have already used insurance CSR prior to the litigation in anticipation of potential lawsuits (Gande and Lewis (2009)). To address these concerns, we additionally include one-year and two-year lagged CSR scores in model (4). We find the significant and positive association between the litigation events and firm CSR activities survives. In addition, we observe a significantly positive coefficient on both one-year and two-year lagged CSR, suggesting the use of insurance CSR as well.[9] On average, lawsuit firms score 0.114 higher than non-lawsuit firms, which is 53% based on the sample mean net CSR score of 0.214.

Lawsuit firms can pursue CSR actions to regain shareholders' confidence in two ways: 1) by boosting CSR-strengths or 2) by reducing CSR-concerns. We determine the pathway through which lawsuit firms are more likely to achieve higher CSR scores by separately running OLS regressions of the CSR-strengths score and CSR-concerns score on *Lawsuit firm*, respectively, and report our results in Table 2 Panel B. We find that lawsuit firms raise their CSR scores primarily by enhancing CSR strengths. In Panel B models (1) and (2), the CSR-strengths scores are statistically and positively correlated with firm lawsuit involvement at the 1% level. In contrast to our expectations, we find a positive and significant relationship between the CSR-concerns score and *Lawsuit firm* as shown in Panel B models (3) and (4). This suggests that CSR concerns increase after the SCA filing (this could be related to the trigger event). In sum, our results suggest that lawsuit firms exert more effort on CSR strengths to achieve superior CSR performance when experiencing SCA litigation. Kotchen and Moon (2012) posit one explanation for this, as they argue that CSR may represent a Coasian bargain between the firm and stakeholders (e.g., stakeholders might be equally satisfied between the firm initiating low-cost CSR strengths vs. a relatively

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[9] These controls address serial correlation concerns of insurance CSR prior to the SCA filing year affecting responsive CSR scores. We do not examine CSRs during the event year, as some of it could be insurance CSR in anticipation of the SCA filing, and some may be an immediate response by the firm to blunt the SCA news. We address the issue of CSR_t in more detail in our endogeneity section when examining short-term news events around the trigger event and when applying event-time strategic duration tests.

higher cost of eliminating CSR concerns). Overall, this finding provides further support for our strategic response hypothesis.

Since we incorporate four CSR dimensions in our study, we are also interested in which dimensions lawsuit firms focus on to build up their CSR performance when involved in securities lawsuits. According to the results in Table 3 models (2) and (3), lawsuit firms specifically put more emphasis on two CSR categories: diversity and community. We observe no CSR performance improvement in the environment category and a small drop in the Human Rights category (which is likely driven by the trigger event) in lawsuit firms in Table 3 models (1) and (4). A plausible explanation is that superior performance in the environment and human rights categories may take longer to achieve at higher costs. For example, environmental concerns often involve large capital investments (solar/wind or emissions reduction equipment) with long time horizons.

4.2   Endogeneity Concerns and Identification

The results from the baseline regressions provide evidence of the significantly positive association between instances of class action lawsuits and firm responsive CSR activities. Prior studies focusing on SCA litigation find abnormal negative returns after the lawsuit filing, suggesting these events are quasi exogenous. Establishing causality between the occurrence of a lawsuit/trigger event and the implementation of responsive CSR can be challenging even though our baseline results address some endogeneity issues. There may be unobservable omitted variables that affect firm lawsuits and CSR activities simultaneously. For example, certain industries (e.g., pharmaceutical industry) are more vulnerable to SCAs than others, and firms in these industries may have higher incentives to utilize CSR. We include industry fixed effects to account for the unobservable heterogeneity across industries throughout our regression models to address this issue. In

untabulated tests, we address this potential bias in another way and limit our sample to the more litigious FPS industries of Kim and Skinner (2012), where we find similar results.

Another concern regarding endogeneity is reverse causality. As noted in the prior section, it has been established in the literature that firms with higher exposure to lawsuit risk employ CSR as an insurance policy to reduce the likelihood of lawsuits (Godfrey, Merrill, and Hansen (2009), Boyer and Kordonsky (2020)). However, if a firm relies mainly on CSR as an insurance policy and does not use responsive CSR, then we would expect CSR scores to be stable or decrease upon a lawsuit filing (as the firm would no longer utilize insurance that didn't work). To further verify our baseline results, we employ various econometric methods to address endogeneity in the next few sub-sections.

4.2.1 Change-on-Change Regressions

We use change-on-change regressions (Chava, Livdan, and Purnanandam (2008); Hutton, Jiang, and Kumar (2014); Lee, Lee, and Nagarajan (2014)) to further alleviate omitted, time-invariant variable bias. In Table 4 model (1), we regress the change in CSR scores on *Lawsuit firm* and include the control variables drawn from Table 2 model (4) except for the lagged CSR variables. In Table 4 model (2), we follow Lee, Lee, and Nagarajan (2014) and use the change of *Lawsuit firm* from year t-1 to t and repeat the model (1) regression. Similar to Chava, Livdan, and Purnanandam (2008), we apply two filters and exclude cases (a) where the firm experiences an SCA in year t-1, and (b) where an SCA remains pending from t-1 to t. We find that in both cases lawsuit filings cause a significant increase in CSR scores in the following year, supporting our baseline results.

4.2.2 Propensity Score Matching (PSM) Sample

Although our change-on-change regressions address bias from omitted time-invariant variables, it is possible that our results are driven by the differences between lawsuit firms

and non-lawsuit firms or by other omitted variables correlated with the type of firm, which would make our full sample subject to selection bias. We thus create a matched sample using the propensity score matching (PSM) method to alleviate this concern. To accomplish this, we first estimate a logit model in which *Lawsuit firm* is a dependent variable that equals one if a firm experiences an SCA lawsuit, and zero otherwise. We draw all control variables from Table 2 in the logit regression and we calculate a propensity score indicating the likelihood of each firm experiencing a class action lawsuit in a given year.[10] We then rank each firm by their propensity score to find the nearest-neighbor (no replacement, one-to-one matching with a 0.02 caliber) in the same fiscal year and same industry (2-digit SIC industry code). We match 969 lawsuit firm-years with 968 non-lawsuit firm-years.

To verify that our matching procedure helps eliminate the heterogeneity between lawsuit and non-lawsuit firms, we present the post-match covariate test in lawsuit firms (treated) and non-lawsuit firms (control) in Panel B of Table 4. Firm characteristics are not significantly different between lawsuit and non-lawsuit firms, although lawsuit firms on average have higher CSR scores compared to non-lawsuit firms as shown in Table 1 Panel B. We repeat our full sample regressions using the PSM sample to eliminate heterogeneity between lawsuit and non-lawsuit firms and overcome selection bias ((Rosenbaum and Rubin (1985); Deng, Kang, and Low (2013)). As shown in Table 4 model (2), the results based on the PSM sample further support our baseline findings. Lawsuit firms achieve significantly better CSR performance compared to the matching non-lawsuit firms.

4.2.3 Instrumental Variables and Two Stage Regressions

We next employ instrumental variables to further mitigate endogeneity concerns and establish causality. As noted earlier, many studies show that firms use CSR as an insurance

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[10] Prior returns is a well-known predictor of class action litigation, as we note earlier. Although we use an alternative performance measure (return on assets) to calculate our propensity score, our results are robust to using prior returns.

policy to prevent the occurrence of lawsuits; thus, the data might reflect reverse causality. Since our variable of interest is the incidence of a federal SCA at the firm level, we explore the variation in the likelihood of litigation at the U.S. district court level as the source of exogenous variation in our variable of interest.

Our approach is related to Liang and Renneboog (2017) who utilize a similar IV-like two stage regression model based on differences in litigation risk derived from a country's legal origin. We use two instruments to explore this variation. Our first instrument is *District lawsuit ease index* built from measures produced by the Institutes for Legal Reform of the U.S. Chamber of Commerce.[11] This measure ranks state liability systems each year by evaluating ten key areas of legal fairness in the court system. All states are ranked from 1 to 50 based on surveys with legal counsels of large U.S. corporations, where 1 indicates the most difficult state to take legal actions against a company and 50 implies the easiest state to file lawsuit against corporations. We create a district level measure for each of the eleven U.S. federal districts from the population-weighted average of each state score in the district. The second instrument variable we use is *District lawsuit experience*, which is the total number of lawsuits in each district each year. Anecdotal evidence has suggested that regional litigation experience correlates with lawsuit filings, as plaintiffs, defendants, and courts are reluctant to consider SCA litigation in regions with less experience.[12] Several academic studies have corroborated this view (Mulligan and Shleifer (2005) section III.B;

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[11] Detailed information about the construction of the index can be found at the website: https://www.instituteforlegalreform.com/states. We use the 2019 ranking in this paper. This measure has been used by Colonnello and Herpfer (2018), who note that some corporate legal groups have shown bias against this measure calling it pro-business and criticizing its construction. However, a pro- or anti- business bias should not affect its purpose as an IV in our study.

[12] "Ruling allowing securities litigation in state courts could spur additional lawsuits" by Judy Greenwald, www.businessinsurance.com on March 27, 2018, makes the following statements about the importance of experience in SCA litigation, "There is some sentiment, also, that state court judges, which consider a wide variety of issues, are less knowledgeable than federal judges, said Mr. LaCroix. In some states "you don't want to be" in state court, "just because in some cases there's not as much experience for these kinds of issues," Ms. Nussbaum said. "There may be less predictability and less emphasis on issues such as e-discovery and class certification, which are traditionally handled by federal courts," she said."

Dammann (2017)) and noted that many states have begun setting up special business courts to better attract and handle business cases.[13] As our IVs are built from state-level measures, for robustness we also build both IVs at the state level and find similar results.

We next consider the relevance criteria and the exclusion restriction for our IVs in a two-stage regression model. To verify the validity of the two instruments, we run first stage regressions using 1) *Lawsuit firm* as the dependent variable, 2) our two instruments and 3) other control variables as independent variables. As shown in Table 4 model (3), each of the two IVs is significantly and positively associated with the occurrence of a lawsuit, indicating each instrumental variable is not individually weak. Furthermore, the F-statistics in the first stage (LPM) regression is 16.25, indicating the two IVs are not jointly weak. We believe that the exclusion restriction is satisfied for the following reasons. While a firm headquartered in a district with a higher probability of litigation may produce more insurance CSR, we control for insurance CSR in our regressions. Also, the propensity for litigation should not be correlated with the ex-post reaction to a suit that has already been filed (SCA filings typically group all related suits together into one suit). The significant and positive results in the 2SLS regressions provide further evidence of the strategic employment of CSR after an SCA litigation filing.

4.2.4 DiD Estimation Around the 9ᵗʰ Circuit Court Ruling in 1999

Although we use several methods to address endogeneity concerns, there may be some concern that our IVs do not provide the best representation of the impact of SCAs on CSR. To alleviate these concerns, we employ a natural experiment affecting the propensity for shareholders to file SCA litigation in the Ninth Circuit. To protect corporations from

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[13] Although this strand of research often refers to state court levels of experience, we believe our experience IV is relevant for our study at the federal district level. As discussed in Section 2, our SCA litigation measure is a proxy that captures a large variety of other legal filings (including CSR-related), government inquiries, or media investigations and press releases related to the shock. Some of these are filed in state courts.

frivolous lawsuits, congress enacted the Private Securities Litigation Reform Act (PSLRA) in December 1995. Although the PSLRA affects all U.S. firms, the Ninth Circuit's ruling in the Silicon Graphics case in 1999 is considered even more restrictive on the ability of shareholders to sue management. The ruling required that plaintiffs must show that defendants were "deliberately reckless" in making the misrepresentation that gives rise to the fraud claim. The ruling, which became effective on July 2, 1999, lowered litigation risk for firms headquartered in the Ninth Circuit states (Johnson, Nelson, and Pritchard (2000); Pritchard and Sale (2005); Crane and Koch (2016)).

While other districts allow shareholders to form a class based on mere recklessness, the Ninth Circuit's requirement of deliberate recklessness necessitates managerial intent in causing the harm, which typically can only be established in the discovery stage of the SCA. However, discovery can only begin after a class of harmed shareholders has been established, and in the Ninth a class cannot be established unless there is already evidence of managerial deliberate recklessness (Crane and Koch (2016)). This creates a difficult barrier for cases to survive the motion for dismissal, which typically occurs 1½ or 2 years after a filing and just prior to discovery. Managers of sued firms would not likely begin a CSR campaign to blunt reputational damage if they felt the case could not proceed to discovery, suggesting less responsive CSR in the Ninth post-Silicon Graphics compared to other districts.

We employ the ruling in the Ninth Circuit as a natural experiment evaluating a quasi-exogenous reduction in federal SCA litigation risk and use a difference-in-differences (DiD) framework to further establish causality. To ensure data availability before and after the ruling, we expand our sample back to 1997 and require firms to have at least one year of data in both the pre-ruling period and the after-ruling period. Although SCA litigation can be brought in any of the federal circuit courts, Cox, Thomas, and Bai (2009) find that 85% of securities fraud class actions are filed in the home circuit of the defendant firm. We define the treatment group as firms headquartered in the Ninth Circuit and the control group as firms headquartered in other circuits. We use 2- or 3-year windows to avoid the

effects of Reg-FD which became effective on October 23, 2000. Our main variable of interest in this setting is the interaction term, *Circuit 9 × Post 2 (3) years.* In the two or three years post-ruling, we find that firms located in the Ninth exhibit lower CSR strengths and higher CSR concerns versus other districts, suggesting reduced reputational concerns, lower insurance and responsive CSR, and further support for our baseline findings.

4.3 Robustness Checks

The strategic response hypothesis also implies that firms might utilize advertising after a negative shock to raise awareness among stakeholders (stakeholder awareness argument) of the firm's engagement in responsive CSR. McWilliams and Siegel (2001) theorize that advertising and CSR should be highly correlated and that advertising can emphasize positive CSR information to help build corporate reputation. Servaes and Tamayo (2013) provide evidence that CSR activity is positively related to firm value only in firms with high customer awareness (proxied by advertising intensity).

We examine the effect of SCA litigation filings on advertising in Table 6 using the advertising intensity proxy in Servaes and Tamayo (2013). We address endogeneity similarly to the CSR models using OLS regressions and 2SLS instrumental variables in the full sample and PSM sample. In model (1) of Panel A, the filing of an SCA is positively associated with a firm's advertising intensity, lending support to the stakeholder awareness argument. We use the predicted probability of the incidence of a lawsuit in models (2) and (3), finding consistent results in both samples using the instrumented variables. This suggests lawsuit firms consider CSR spending and advertising (which promotes stakeholder awareness of CSR activities) as complementary responses to class action litigation, and it provides further robustness to our strategic response hypothesis of CSR usage.

We also examine the change in CSR reporting from KLD over time. Servaes and Tamayo (2013) note that the number of CSR category strengths and concerns has evolved

as KLD has refined its database over time. For example, there were four possible community strengths as well as four concerns in 1990, but that increased to seven possible strengths and four possible concerns in the community category in 2005. It could be problematic to directly compare strengths or concerns within a category across years, as an increase in CSR strength scores within a firm over time may simply capture the expanded data coverage. We find that our results are robust to scaling CSR over time to adjust for these changes.[14]

5   Strategic Duration and Reputational Risk Channels

5.1   Short-Term CSR Timing Around an SCA Trigger Event

We next test our hypotheses relating to the strategic duration of responsive CSR. We begin with the timing of CSR in the months surrounding an SCA trigger event. Prior studies examining the timing of CSR around a negative shock (insurance CSR vs. responsive CSR) tend to utilize a longer time frame because the main source of CSR consists of annual data from KLD. However, several studies suggest that the immediate timing of CSR around a reputational shock may be critically important (Wilson (2008)) and ESG investors may demand a response within days. This creates a problem using annual KLD data, because firms responding very quickly to a reputational shock will raise concerns of reverse causality if examining total CSR production during the event year (i.e., was the CSR increased before or after the shock?). In addition, examining the use of responsive CSR solely after the event-year would miss the most critical period of firm CSR usage around the event. The nuance of short-term CSR timing around the trigger event has not been studied except in Krüger (2015), who obtain a unique dataset on short-term news events from KLD newsletters and utilize an event study extending up to 10 days after a negative event. However, Krüger (2015) only looks at market reactions around these CSR events. Motivated by this and

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[14] Results of these tests are available from the authors upon request.

noting that KLD bases their CSR scores mostly off of public news surrounding firms, we manually collect positive CSR news from Factiva in firm-years experiencing an SCA filing. This is similar to the Krüger (2015) method of checking their newsletter data with Factiva.

Our strategic duration hypothesis suggests 1) an immediate reactive CSR response as presented in H2A, and 2) a delayed strategic CSR response as presented in H2B that lasts for several years and begins months after the trigger event. We test for these two scenarios similar to the method of Krüger (2015). We first reduce our main sample to firm-years facing an SCA filing that also experienced a CSR score increase in the KLD database. Next, we estimate the trigger event date from the median lead time of 1.54 months that trigger events precede SCA litigation between 1978 and 2015 following Karpoff et al. (2017); however, to be conservative we estimate the lead time to be only 30 days. We then manually search Factiva for positive CSR news events in each category that KLD shows has an increase for that firm during the year. To fully cover the year, we search for news items in the 210 days (7 months) both preceding and following our estimated trigger event date. We search Factiva using approximately 10 keywords per CSR category based on the definitions of positive CSR events from the KLD manual. We begin with 151 firm-year SCA events exhibiting positive CSR increases before adding news events. We then eliminate firm-year observations with no positive CSR news in that category during the year, and in cases where another SCA filing occurred for that firm within one year prior. After expanding our sample with news events, our final sample has 265 firm-year observations covering 50 firms.

Figure 2 illustrates the univariate tests on this sample where we subdivide observations into strategic firm responses (company-paid press releases from AP Newswire, Business Wire, etc.) and non-strategic responses (news releases from independent media outlets). Our method follows Cahan et al. (2015), who find that firms can actively manage their media image via CSR. In all three cases (full sample, strategic release sample, and sample excluding strategic release) we significantly reject the null hypothesis that these CSR news event dates are insignificantly different from the trigger date (or occur before),

even with our conservative trigger date estimate of 30 days that biases against us finding positive significance. We also plot histograms of these news filings around the event date. In both the full sample and the strategic press release sample, we observe a bimodal distribution both visually from the histograms and by using kernel density estimation. This first peak is exactly centered on the trigger event, supporting H2A and suggesting an immediate offsetting CSR response. The second peak begins its rise about 3 months after the SCA filing. This provides empirical support for the Rogers and Van Buskirk (2009) suggestion that managers need about 90 days to enact long-term systematic policy responses to an SCA filing (which in our case is the steady production of new CSR they can publicly report). This would also imply that firms are gearing up for a long and strategic CSR response to blunt the litany of reputational shocks expected in the years after the trigger event. It additionally lays the framework for H2B of our strategic duration hypothesis, which we examine in more detail in the next section. Finally, Figure 2 addresses causality resulting from the contemporaneous nature of our SCA filing and our CSR dependent variable by showing CSR occurs to a significant degree after the trigger event.

5.2   Event Time Effects of Litigation on CSR and Stakeholder Awareness

Our short-term event study displayed in Figure 2 supports H2A of our strategic response hypothesis and lays the framework for H2B that suggests CSR spending continues past an initial reactionary move by the lawsuit firm. SCA litigation provides a unique test of the strategic reaction of management, as it usually takes years for cases to settle and includes a litany of parallel investigations and legal actions. In addition, SCAs typically last longer than other cases related to the triggering event, thus allowing them to serve as a proxy for all negative firm news stemming from the litigation cause. As discussed in prior sections, these cases (and similar cases launched from the trigger event) would likely lead to further criticism by stakeholders that would need to be ameliorated (until a settlement

is reached) to reduce more punitive measures. Stakeholders are uncertain of the guilt of the firm until the settlement and could potentially demand signals of remorse, atonement, or nonpecuniary relief to be comfortable maintaining a business relationship. Furthermore, judicial authorities responsible for the settlement might take note of the firm's response and show leniency when deciding settlement amounts (Cohen and Gurun (2018); Hong et al. (2019)). We next examine strategic duration via the length of CSR after the lawsuit filing, CSR changes around settlement, and alternative measures using advertising.

We first consider average CSR scores within a four-year window around the occurrence of a class action lawsuit filing in Panel A of Figure 3, and a four-year window around the occurrence of a class action lawsuit settlement in Figure 3 Panel B. In Panel A we find that CSR scores are steady in the two years before the lawsuit filing and increase during the filing year t and year t+1. Similarly, in Panel B we find that CSR scores are steady before and during the settlement year, drop significantly after the settlement year, and remain at a steady level after that. Together these results support the strategic duration argument. They suggest firms increase CSR during the filing year, maintain it at a high level while the lawsuit is pending, and then drop CSR significantly in the settlement year as issues with stakeholders are resolved and responsive CSR is no longer needed.

We further address this question using OLS regressions in event time around both the filing year and the settlement year. In Panel A of Table 7, we examine the effect of a lawsuit filing on CSR during the filing year and for four years after. Control variables are from Table 2 Panel A model (4) and are maintained at the same time period relative to the filing year. The positive results in models (1) and (2) confirm our previous findings from Figure 3 Panel A that lawsuit firms show CSR increases around the initiation of the lawsuit. We then find that two years after the filing year, the CSR score is not affected by whether a firm is involved in a lawsuit, and three years after the lawsuit the CSR score actually decreases in lawsuit firms. These results suggest that lawsuit firms may reduce their CSR to pre-trigger event levels (and even temporarily below) two to three years post-SCA filing.

This corresponds to both the SCA settlement date (the mean settlement period in our sample is 2.77 years) and SEC enforcement decisions (see Figure 1), suggesting the post-filing CSR increase is strategically adjusted downward by the lawsuit firm after SCA decisions and enforcement decisions are complete.

While Panel A suggests a negative reaction around the settlement date, we examine this further by evaluating CSR activities in the five-year window around the settlement date. To better measure the impact of settlement, we limit our lawsuit sample to firms requiring exactly three years for lawsuit settlement. We again use control variables from Table 2 Panel A model (4) and maintain them at the same level relative to the filing year (which in this case was exactly three years before the settlement year). This ensures our CSR controls are measured before the SCA filing. As shown in Table 7 Panel B, CSR engagements by lawsuit firms begin declining significantly towards pre-lawsuit levels in the settlement year. CSR is slightly weaker in the year prior to settlement most likely based on our rounding of the settlement date to the nearest year. The mean time from filing to settlement is 2.77 years (which would round up to 3 years), suggesting some of the cases in our sample are settled during settlement year t-1. These results again suggest a strategic deployment of CSR by lawsuit firms. By investigating the event time effect of litigation on CSR, we provide further evidence on the lawsuit firms' strategic CSR engagement.

For the purpose of robustness, we next examine the effects of an SCA filing on stakeholder awareness (advertising intensity) because advertising is often considered complementary with CSR (McWilliams and Siegel (2001); Servaes and Tamayo (2013)). In Panel A of Table 8 we examine the five-year window around the filing date and note that advertising significantly increases during the filing year and the year after, further supporting the strategic duration hypothesis findings for CSR. While results remain positive for two additional years after this, the results are weaker with marginal statistical significance. However, this may suggest some additional product market benefits from

advertising after the litigation period about prior CSR. In Panel B of Table 8 we examine advertising expenditures around settlement and find similar results to Table 7 Panel B.

5.3   Duration of Responsive CSR – Subsample Tests

Our results thus far suggest that firms employ responsive CSR in a strategic way to counter reputational harm that may lead stakeholders to impose greater penalties. However, it is possible that the CSR increases subsequent to the trigger event are simply due to a "change of heart" by management and are not being utilized for a strategic purpose. We address this question and provide evidence that our duration findings are due to varying stakeholder pressure. As CSR is costly, firms are only likely to deploy responsive CSR strategically if the risk of retaliation from stakeholders is high. We thus employ two proxies for stakeholder retaliation risk and divide our sample based on these. First, we divide our sample into quantiles based on whether the firm's headquarter state is more liberal or conservative using the Citizen Ideology measure of Berry et al. (1998). Di Giuli and Kostovetsky (2014) note that the Democratic party platform places greater support behind CSR-related issues, and they find that CSR is more prevalent for firms headquartered in liberal states (which proxies for a higher degree of liberal firm stakeholders). We test for this in Table 9 Panel A and C and find similar results to Table 7 for the liberal states, but no significance in conservative states. Wald tests suggest that the coefficient differences between the subsamples are statistically significant.

Second, we divide our sample into quantiles based on whether a state is more urban or rural. A large literature notes the steep political divide between urban (more liberal) and rural (more conservative) areas (Gimpel et al. (2020)); thus this test serves as an alternative measure of liberal vs. conservative stakeholder bias. In addition, there are significant differences in community influences between urban and rural areas (Lyons and Utych (2021)), suggesting support for community-based CSR (as Table 3 shows). We use

census data and classify the top 25 states by the urban vs. rural ranking as urban, and the bottom 25 as rural. We test this proxy in Table 9 Panel B and D and again find similar results to Table 7 for the urban states, but no significance in the rural states. Wald tests suggest that the subsample coefficient differences are statistically significant. Both of these results provide further support for H2B.

5.4   Reputational Risk Channels

Up to this point, we have established that firms facing SCA litigation boost their CSR activities as a strategic response and maintain CSR spending until settlement (coinciding with legal / governmental decisions regarding the trigger event). In this section we explore two reputational risk channels and conjecture that responsive CSR deployment is more prevalent when firms, managers, and directors face higher reputational risks.[15]

5.4.1 ESG Reputational Risk

Our first reputational risk channel examines an alternative source of CSR data to our main dataset from MSCI ESG KLD, which also provides additional confirming evidence of the validity of the KLD dataset. RepRisk provides coverage on 55,000+ public and private companies since 2007, and the dataset has been used in several academic studies. RepRisk covers 28 ESG-related and sustainability issues per firm and tracks each issue through media, NGOs, government bodies, regulators, newsletters, social media, and other online sources. The 28 ESG-related issues consist of 6 environmental issues, 10 social issues, 7 governance issues, and 5 supplementary issues.

In Table 10 we examine the impact of our *Instrumented Lawsuit Firm* variable on net CSR scores (from KLD) between 2007 and 2013 after partitioning the sample into high

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[15] We find further support for the reputational risk channels in firms with varying governance levels, as board members of strong governance firms (and thus better reputations) favor responsive CSR to preserve their reputations (Fich and Shivdasani (2007)). Results are available from the authors upon request.

and low groups for each of the three main RepRisk ESG categories. Negative ESG events should increase the likelihood for responsive CSR because 1) prior studies have shown that firms will often offset negative CSR events with positive CSR in the same or a related CSR category (Kotchen and Moon (2012); (Krüger (2015)) and 2) the negative ESG news might be related to the SCA litigation event. We find that our coefficient estimates are larger and more significant in the High (negative ESG news) group for all three categories.

5.4.2 Director Reputational Risk

Reputational concerns may be particularly important for directors who hold multiple directorships. Boards are often formally responsible for CSR and sustainability activities (Eccles, Ioannou, and Serafeim (2014)), providing directors a powerful means to enhance their reputations. A recent study finds that 42% of boards are at least moderately engaged in sustainability and 86% of firms would like their boards to be more actively involved in these activities (Kiron et al. (2015)). Reputational effects are powerful incentives in the labor markets for directorships (Fama and Jensen (1983); Yermack (2004); Adams and Ferreira (2009); Masulis and Mobbs (2014)). Destructive firm events, e.g., the filing of SCA litigation, tend to adversely affect manager and director reputation and lead to increased turnover (Aharony, Liu, and Yawson (2015)). However, Fich and Shivdasani (2007) and Dou (2017) find that directors don't even have the option to exit firms to avoid labor market penalties and, instead, other board seats decline. If an exit strategy is not an option, we would expect directors to be more likely to employ various means within the firm to repair their damaged reputations. SCA litigation is a useful proxy in this regard as it inflicts serious damage on reputation and often specifically names managers / directors in the suits (Fich and Shivdasani (2007); Brochet and Srinivasan (2014); Marcel and Cowen (2014)).[16]

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[16] Legendary financial analyst John Olson once noted about litigation risk, "None of [the defenses against actual liability] offers effective protection against the embarrassment, potential damage to reputation, and

We use various measures to capture director reputational concerns following prior literature (Fama and Jensen (1983); Fich and Shivdasani (2007); Brochet and Srinivasan (2014); Masulis and Mobbs (2014)) and present the results in Table 10 Panel B. Outside directors are presumably in a superior position to monitor CEOs compared to insiders, and more outside directors on the board could indicate better corporate governance practices. In addition, outside directors take their names more seriously, as they are supposed to better represent shareholders' interests without close ties to senior management. The rationale is that the more board seats held by (outside) directors at the firm level, the higher the incentives directors have in restoring lawsuit firm reputations. This helps avoid any spillover to other firms in which they hold directorships. Moreover, if a director on the board is another company's CEO, then his/her individual reputational concerns should be intensified. For the firms in the top quartile/indicator of these measures, the coefficient estimates are positive and significant at least at the 5% level in models (1) to (5). On the other hand, the coefficient estimates in the bottom quartiles show either no significance or a smaller magnitude in all models. Wald tests suggest that the coefficient differences between the high and low subsamples are statistically significant in every case.

We use director tenure as another proxy for director reputational concerns. Jiang, Wan, and Zhao (2015) suggest that shorter tenured directors are more motivated to establish their own names in the industry and/or in the director labor markets compared to longer tenured directors. Similarly, Cai, Garner, and Walkling (2009) associate older and longer tenured directors with entrenchment and thus lower career concerns. Given this background, we expect boards with short tenured directors to be more likely to deploy responsive CSR after SCA litigation, which we find in model (6). However, the Sarbanes-Oxley Act (2002) had a significant impact on director labor markets and greatly increased

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just plain distraction and harassment that come when directors are sued and forced to defend themselves"
From *How to Really Make Audit Committees More Effective*, 54 BUSINESS LAWYER
1097-1111 (1999), at 1104, as quoted in Black, Cheffins, and Klausner (2006).

the number of outside directors in the firm, so it is possible that our results are driven by director effects during this transition. We thus restrict our attention to 2003-2013 in model (7) and find similar and stronger results in the post-SOX period.

6   Conclusion

Krüger (2015) argues that firms employ positive CSR as a strategic response mechanism (offsetting CSR in his words) after negative CSR events for reputational purposes, while in good times firms use CSR for agency reasons. We further explore this strategic response hypothesis by examining whether firms use CSR as damage control (which we call responsive CSR) after a more general shock to firm reputation as proxied by an SCA lawsuit. Limiting our focus to institutional CSR measures more closely related to social capital, we find that firms experiencing SCA litigation obtain higher post-event CSR scores, mainly driven by increasing community and diversity strengths. We find similar results for advertising intensity, which serves as a complementary measure increasing stakeholder awareness of CSR. Anecdotal evidence provided in Appendix A further supports our findings. We establish causality using change on change regressions, propensity score matching, two stage least squares tests using indexes on the ease of federal district lawsuits and litigation experience within districts, and Ninth Circuit court law changes in 1999 affecting litigation risk.

We also examine dynamic effects of SCA litigation on CSR to ascertain whether firms employ responsive CSR in a finite and cost-effective manner, which we term the strategic duration hypothesis. Using a hand-collected dataset of CSR news events from Factiva along with our main dataset from KLD, we are the first to show that responsive CSR increases in two distinct periods after the SCA filing trigger event and represents both 1) an immediate response to blunt media "agenda-setting" and offset ESG index declines that could trigger institutional investor exits, and 2) a more extended effort to counter the

litany of investigations and lawsuits following the trigger event. In addition, we identify a confluence of legal and government decisions all occurring close together around two to three years post-trigger event that induce a statistically significant decline in CSR after that time (instead of a more gradual decline). We also show that responsive CSR is due to stakeholder pressure, as the results are concentrated in more liberal and urban states where stakeholders show more concern for CSR (Di Giuli and Kostovetsky (2014)) and where community effects on stakeholders are stronger. Finally, we find that firms facing high reputational risks (recent ESG negative news and director reputational sensitivity) are more likely to implement responsive CSR after securities lawsuits. In a related way, we determine that boards with more short-tenured directors (who have burgeoning reputations with significant career concern risk) are more likely to use responsive CSR.

Our findings do not necessarily suggest that a limited duration of responsive CSR is simply a short-term strategic tool being used to covertly shift stakeholder perceptions without the intent of long-term stakeholder benefit (e.g., Cohen and Gurun (2018)). Numerous prior studies indicate that CSR can mutually benefit both firms and stakeholders. As all firms operate within finite budgetary constraints, it is possible that firms are dynamically allocating CSR in a value-maximizing optimization to satisfy expected changes in the demands of stakeholders. It could be that stakeholders are satisfied with the limited duration of CSR after a negative event and prior to settlement. For example, during the period of uncertainty while the case remains pending before a settlement is reached, CSR could provide a bridge and represent proof of trustworthiness (if management is innocent) or a sign of remorse and atonement (if management is guilty). Responsive CSR would serve as a bonding agent, preserving contracts between the firm and stakeholders and thus sustaining the efficacy of long-term investments, and ultimately contributing to long-term firm value. In this scenario, stakeholders would not perceive the CSR as manipulation. Future research will be beneficial in better understanding the intent behind the finite use of responsive CSR by firms and its impact on both firms and stakeholders.

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Appendix A: Examples of Responsive CSR Actions Taken by Firms Facing Litigation and Regulatory Discipline[17]

General Scandal Response

- Two days after revealing internal control weaknesses, Chiron Corporation detailed contributions to community math and science programs. "This started a *systematic pattern* whereby one *Community* press release was released two, four, eight, and 13 weeks subsequent to the restatement press release. There were no *Community* press releases in the five weeks prior to the restatement press release, and no more such press releases for five months after the last one in the pattern described above." (Chakravarthy, deHaan, and Rajgopal (2014)).

- In response to a flurry of scandals in late 2002 and SCA lawsuits filed in 2003, Tyco increased advertising spending by 40.7% in 2004 and launched an advertising campaign titled "Tyco, a vital part of your world". The campaign emphasized the *social importance of Tyco's products*, showing their pediatric monitoring equipment examining a baby's health, and showing a firefighter using their fire and security products. "Some observers believe that Tyco should have taken the scandal as an opportunity to change its name…Tyco did consider changing the name but, in large part *because of the expense involved*, the company decided against it." (Source: "Tyco Revitalizes Brand", Sean Callahan, <u>AdAge</u>, November 8, 2004).

- "Volkswagen will launch a "Green City" initiative in a yet-to-be-identified California city to pilot future concepts, including potentially a shuttle service composed of zero emission vehicles, an electric car-sharing program, or a zero emissions transit program …Volkswagen is set to plead guilty on Feb. 24 to three felony counts as part of a plea agreement with the U.S. Justice Department (in regards to the emissions scandal revealed on September 18, 2015)." (Source: "Volkswagen is investing $2 billion to push into electric vehicles", David Shepardson, <u>Business Insider</u>, February 8, 2017).

- In response to the food safety scandals of 2015-2016, Chipotle stated the following in its 2016 annual report, "While *we still have work to do to fully restore our reputation* and our economic model, we are well on our way to dramatically simplifying our business and perfecting the customer experience in our restaurants…. In all our Chipotle restaurants, we endeavor to serve only meats that were raised in accordance with *criteria we've established in an effort to improve sustainability* and promote animal welfare… *We also seek to use* more responsibly grown produce, by which we mean produce grown by suppliers whose practices conform to our priorities with respect to environmental considerations and employee welfare… Our *advertising…demonstrate our commitment* to our Food With Integrity philosophy."

- British Petroleum, in response to the 2010 Deepwater Horizon oil spill, stated in their end of year 2010 Sustainability Review: "Our presence can have a significant impact on communities in which we operate, including affecting the livelihoods of local residents. For this reason, *we require certain new projects to consider community impacts in their early screening for social and environmental impacts* and to further examine this issue in the detailed impact assessments they carry out before any work begins. We recognize that the Gulf of Mexico oil spill affected the livelihoods and local business sectors in Gulf Coast communities. Having worked among these communities for many years, we understood the economic impacts of the oil spill. *We have made investments to help the region recover and have committed to meet all legitimate claims from individuals and businesses.*

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[17] Italics added for emphasis.

Appendix B: Variable Descriptions

KLD CSR Score Measures	
Net CSR	∑CSR Strengths - ∑CSR Concerns. *From MSCI ESG KLD.*
CSR Strengths (Concerns)	The sum of strength (concern) scores for community, diversity, environment, and human rights components (*From MSCI ESG KLD*):
Community	Community: Number of Strengths - Number of Concerns (*From MSCI ESG KLD*): (com_str_num – com_con_num)
Diversity	Diversity: Number of Strengths - Number of Concerns (*From MSCI ESG KLD*): (div_str_num – div_con_num)
Environment	Environment: Number of Strengths - Number of Concerns (*From MSCI ESG KLD*): (env_str_num – env_con_num)
Human Rights	Human Rights: Number of Strengths - Number of Concerns (*From MSCI ESG KLD*): (hum_str_num – hum_con_num)

Additional Variables	
Lawsuit Firm	Indicator variable that equals one if a firm experiences any securities class action lawsuits where the settlement is at least $1 million during the fiscal year. *From Stanford Securities Class Action Lawsuit Clearinghouse.*
Instrumented Lawsuit Firm	The predicted probability of a firm being involved in securities class action litigation using two instrument variables.
Lawsuit Settlement Year	Indicator variable that equals one if a firm settles a lawsuit during the fiscal year, where the settlement is 3 years post-filing and is at least $1 million. *From Stanford Securities Class Action Lawsuit Clearinghouse.*
Log(Total Assets)	Natural log of total assets: log (at). *From Compustat.*
Leverage	Book leverage: (dltt+dlc)/at. *From Compustat.*
ROA	Net Income/Book Assets: ni/at. *From Compustat.*
Stock Volatility	Standard deviation of daily stock returns for 12 months. *From CSRP.*
Market to Book	(Market value of common stock + total debt + preferred stock – deferred taxes and investment tax credit) / total assets: (prcc_f×csho +dlc + dltt +pstkl –txditc)/at. *From CSRP and Compustat.*
Independent Directors (%)	Percent independent directors: (number of independent directors/total number of directors on board). *From ISS (formerly RiskMetrics).*
Inst. Holdings (%)	Percent ownership from institutions. *From Thompson Financial.*
Capital Exp. (%)	Ratio of year-end capital expenditure over year-end total assets: (capex/at). *From Compustat.*
Cash Holdings (%)	Ratio of year-end cash and cash equivalent over total assets: che/at. *From Compustat.*
R&D Exp. (%)	Ratio of year-end R&D expenditures over total assets: (max(0, xrd)/at). *From Compustat.*
Circuit 9	Indicator variable which equals one if a firm's headquarters is located within the jurisdiction of the Ninth Circuit U.S. Court of Appeals, and zero otherwise. *From U.S. Courts (http://www.uscourts.gov).*

Post 2 (3) years	Indicator variable that equals one if the observation occurs two (three) years after the Ninth Circuit U.S. Court of Appeals ruling in 1999, and zero if the observation occurs in the two (three) years prior to the Ninth Circuit U.S. Court of Appeals ruling in 1999.
District Lawsuit Ease	Population weighted average per U.S. federal district of state scores from 1 to 50, where 1 indicates the most difficult state to sue a company and 50 indicates the easiest state to sue a firm. *The Institute for Legal Reform of the U.S. Chamber of Commerce provides the overall ranking of state liability systems.*
District Lawsuit Experience	Total number of corporate lawsuits occurring in each U.S. federal district in a given year. *From Audit Analytics.*
Advertising Intensity	The ratio of advertising expenditures to the total revenue in a given year: (xad/revt). *From Compustat.*
Liberal vs. Conservative	Indicator variable equal to 1 (more liberal) if the firm is headquartered in the top 25 states ranked by the Citizen Ideology measure of Berry, Ringquist, Fording, and Hansen (1998); 0 otherwise. *From Richard Fording's website.*
Urban vs. Rural	Indicator variable equal to 1 (more urban) if the firm is headquartered in the top 25 states ranked by the urban vs. rural state measure of the U.S. decennial census; 0 otherwise. *From the U.S. Census Bureau.*
Env Risk Issues	Sum of the 6 environmental risk categories of the total 28 ESG measures. *From Reprisk.*
Soc Risk Issues	Sum of the 10 social risk categories of the total 28 ESG measures. *From Reprisk.*
Gov Risk Issues	Sum of the 7 governance risk categories of the total 28 ESG measures. *From Reprisk.*
% of Outside Directors	Total number of outside directors on the board divided by board size. *From ISS (formerly RiskMetrics).*
Avg # of Board Seats Held by Directors	Total number of board seats held by all directors on the board divided by board size. *From ISS (formerly RiskMetrics).*
Avg # of Board Seats Held by Outside Dirs	Total number of board seats held by all outside directors on the board divided by the number of outside directors. *From ISS (formerly RiskMetrics).*
Director-CEO (0/1)	Dummy variable which takes on a value of one if any director on the board is another firm's CEO (director-CEO), and zero otherwise. *From ISS (formerly RiskMetrics).*
% of Outside Director- CEOs	The number of outside director-CEOs divided by the total number of outside directors on the board. *From ISS (formerly RiskMetrics).*
Avg Director Tenure	The average tenure of all directors on the board in a given year. *From ISS (formerly RiskMetrics).*

Figure 1. Timeline of Hypothetical Disciplinary Actions Around a Trigger Event
This figure is mostly adapted from Karpoff et al. (2017) and details the sequence of a wide variety of disciplinary actions following a "trigger event" (2) in which corporate misconduct (1) is revealed. The trigger event represents the official date of exposure to the public of the misconduct that took place during the violation period. SCA litigation (3) is typically the first disciplinary action taken against the firm, with the median filing date occurring 1-2 months after the trigger. Other corporate lawsuits (4) related to the trigger event (environmental, product liability, etc.) are typically filed after the first SCA filing and are resolved before the SCA's are resolved (7), although their lengths can vary significantly (Haslem, Hutton, and Smith (2017)). SEC informal inquiries (4) and formal investigations also begin at a median of ~2.5 months and 5 months, respectively, after the trigger event. Rogers and Van Buskirk (2009) note that it can take three months for firms to make policy adjustments in response to an SCA filing (6). The median time that SEC regulatory proceedings begin for a firm (8) is 27 months (Karpoff et al. (2017) Fig. 1), while the mean time for an SCA to reach settlement (9) is 29 months (Haslem, Hutton, and Smith (2017)). SEC enforcement ends a median of 4.5 years (10) after the trigger event.
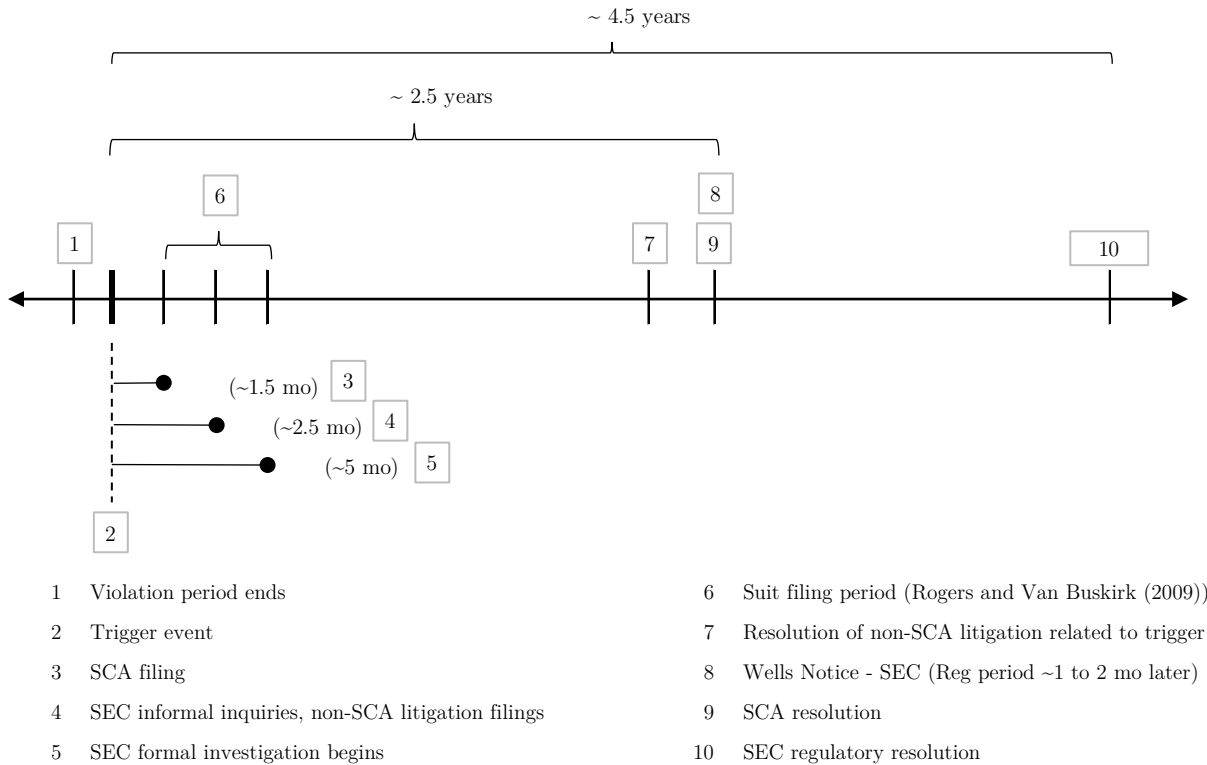

1	Violation period ends	6	Suit filing period (Rogers and Van Buskirk (2009))
2	Trigger event	7	Resolution of non-SCA litigation related to trigger
3	SCA filing	8	Wells Notice - SEC (Reg period ~1 to 2 mo later)
4	SEC informal inquiries, non-SCA litigation filings	9	SCA resolution
5	SEC formal investigation begins	10	SEC regulatory resolution

Figure 2. Positive CSR News Releases Around an SCA Trigger Event

This figure shows releases of positive CSR news in Factiva in the 7 months (210 days) before and after a trigger event for an SCA filing, conditional upon years in KLD that show a positive CSR increase for our main sample. The trigger event date is conservatively estimated from the median SCA filing delay in Karpoff et al. (2017).   Panel A presents histograms, parametric density estimations assuming a normal distribution, and nonparametric density estimations applying kernel smoothing. Graphs are generated for 1) the full sample, 2) a sample of strategic press releases controlled by the firm (news wires, etc.), and 3) news releases by independent media outlets (excluding press releases). Panel B presents statistics and univariate tests for the three subsamples in Panel A as follows: number of observations, distribution average (days from trigger event), probability of rejection of the null hypothesis (zero mean), 5% and 95% means of the confidence interval, and sample standard deviation. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

*Panel A: Distribution of Positive CSR News Releases*
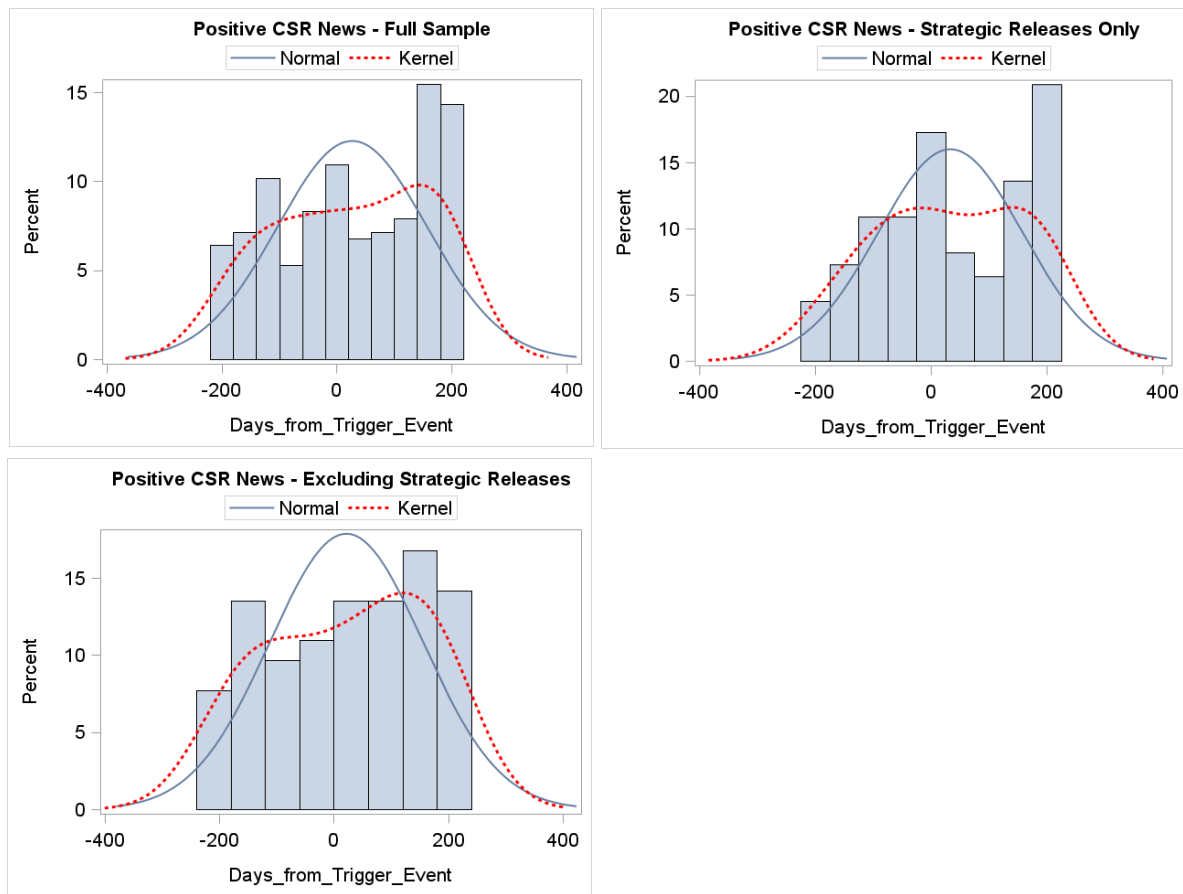
Panel B: Distribution Statistics and Univariate Tests

	N	Mean	P value	95% CL Mean		Std. Dev
Full Sample	265	27.05***	0.0008	11.3039	42.7867	130.1
Strategic Releases Only	110	33.95***	0.0052	10.3762	57.5329	124.8
Excluding Strategic Releases	155	22.14**	0.0414	0.8780	43.4058	134.0

Figure 3. Average Net CSR Around the Lawsuit Period

This figure exhibits the average CSR scores in event time around the occurrence of class action lawsuits and the settlement of the lawsuits for the sample period 2001-2013. Panel A presents net CSR scores ranging from two years before to one year after the lawsuit filing. Panel B presents net CSR scores ranging from one year before to two years after the settlement of the lawsuit.

Panel A: Beginning of Lawsuit
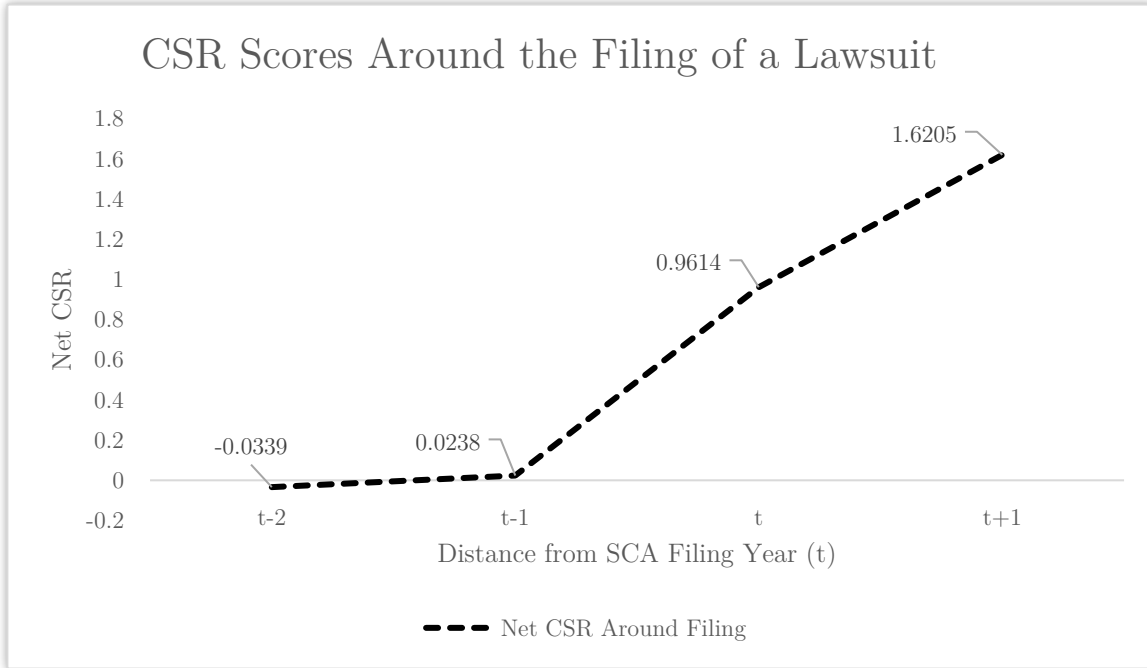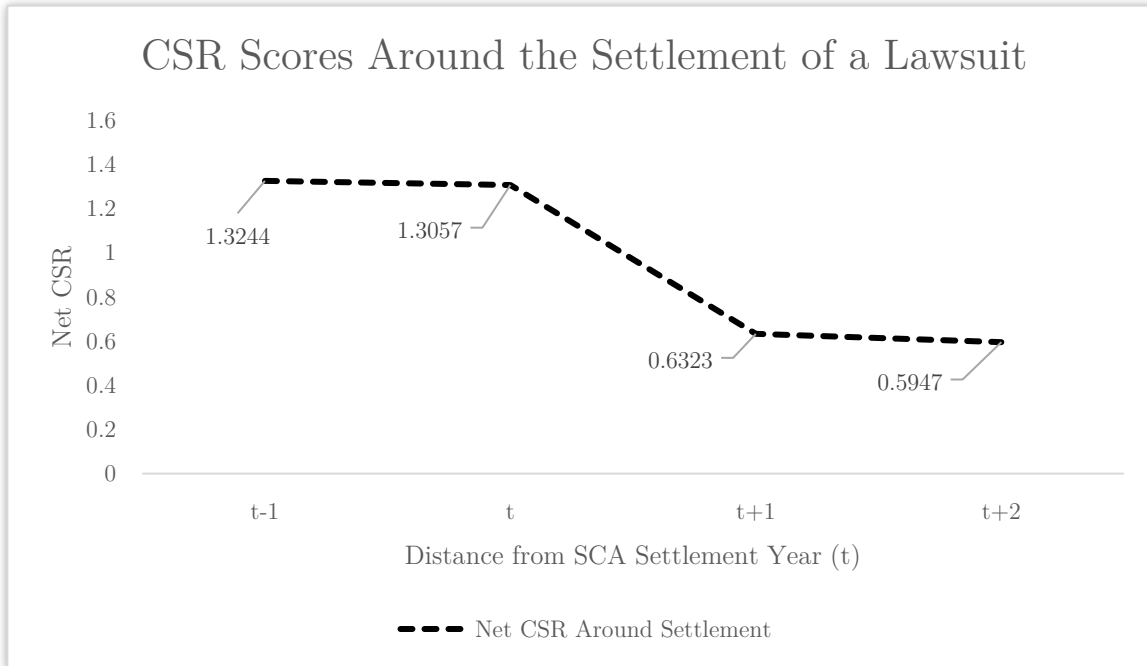

Panel B: End of Lawsuit

Table 1. Summary Statistics and Univariate Tests

This table presents summary statistics and univariate comparisons between firms with SCA lawsuits and those with no class action lawsuits in the full samples. Panel A reports the summary statistics for the full sample which consists of U.S. firms from 2001 to 2013. Panel B presents comparisons of firm characteristics between the treatment and control groups in the full sample. All continuous variables are winsorized at the 1% and 99% levels, and t-tests are used for the difference in the means of the two groups. All variables are described in Appendix B. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

Panel A: Summary Statistics

Variables	N	Mean	Std. Dev	5%	25%	Median	75%	95%
Net CSR $_{t+1}$	14,344	0.214	2.000	-2	-1	0	1	4
CSR strengths $_{t+1}$	14,344	1.075	1.891	0	0	0	1	5
CSR concerns $_{t+1}$	14,344	0.861	1.107	0	0	1	1	3
CSR environment $_{t+1}$	14,344	0.056	0.828	-1	0	0	0	1
CSR community $_{t+1}$	14,344	0.098	0.528	0	0	0	0	1
CSR diversity $_{t+1}$	14,344	0.099	1.379	-2	-1	0	1	3
CSR human rights $_{t+1}$	14,344	-0.040	0.282	0	0	0	0	0
Lawsuit firm $_t$	14,344	0.135	0.341	0	0	0	0	1
Avg. Length of Lawsuit (Years)	14,344	2.767	2.557	0.214	0.929	1.991	3.701	8.292
Total Assets $_t$ ($ mil)	14,344	7,039	13,598	195.1	647.9	1,794	5,634	39,763
Market-to-book $_t$	14,344	1.609	1.273	0.456	0.865	1.249	1.933	3.933
Leverage $_t$	14,344	0.530	0.231	0.158	0.369	0.529	0.676	0.910
ROA $_t$	14,344	0.045	0.097	-0.093	0.018	0.050	0.0893	0.169
Volatility $_t$	14,344	0.372	0.450	0.057	0.149	0.259	0.428	0.973
Inst. Holdings $_t$	14,344	0.731	0.283	0	0.638	0.799	0.911	1.050
Capital Exp. $_t$	14,344	0.045	0.049	0	0.014	0.030	0.057	0.147
Cash Holdings $_t$	14,344	0.160	0.171	0.005	0.033	0.097	0.230	0.531
R&D Exp. $_t$	14,344	0.026	0.055	0	0	0	0.028	0.131
Advertising intensity $_{t+1}$	13,552	0.011	0.028	0	0	0	0.009	0.060
District lawsuit ease index $_t$	13,854	19.83	8.924	7	12	20	27	34
District lawsuit experience $_t$	13,854	10.00	5.414	3	6	9	12	20
% outside director $_t$	9,367	0.741	0.136	0.500	0.666	0.769	0.857	0.909
Avg # board seats directors hold $_t$	9,367	3.858	12.378	1	1.143	1.400	1.714	2.800
Avg # board seats outside directors hold $_t$	9,367	4.333	33.852	1	1	1	1.5	3
Director-CEO $_t$	9,367	0.448	0.497	0	0	0	1	1
% outside director-CEO $_t$	9,367	0.102	0.139	0	0	0	0.1666	0.400
Avg director tenure $_t$	9,367	9.017	14.723	3.600	6.142	8.272	10.909	16.00

Panel B: Univariate Test	Lawsuit Firms $_t$		Non-Lawsuit Firms $_t$			
Variable	N	Mean	N	Mean	Difference	*t*-stat
Net CSR $_{t+1}$	1,976	1.398	12,368	0.032	1.366***	(28.69)
Scaled CSR $_{t+1}$		0.063		-0.027	0.090***	(21.08)

Table 2. CSR Scores and Lawsuit Firms

Panel A presents coefficient estimates from OLS regressions. The dependent variable in all models is the total net CSR score. *Lawsuit firm* is an indicator variable that equals one if a firm experiences an SCA lawsuit in the fiscal year, and zero otherwise. Model (1) includes industry fixed effects, and model (2) includes year fixed effects. Models (3) and (4) include both industry and year fixed effects. Panel B reports OLS regression results of CSR strengths and concerns subsets on firms with lawsuits. All models include industry and year fixed effects where specified. All control variables are described in Appendix B. Standard errors are robust and clustered by both firm and time while *t*-statistics are reported in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

Panel A: Total Net CSR

Explanatory Variable	Dependent Var: Net CSR $_{t+1}$			
	(1)	(2)	(3)	(4)
Lawsuit firm $_t$	0.345***	0.552***	0.331***	0.114**
	(6.04)	(9.18)	(5.77)	(2.28)
Log (total assets) $_t$	0.644***	0.563***	0.655***	0.399***
	(42.50)	(35.99)	(42.58)	(26.04)
Market-to-book $_t$	0.134***	0.194***	0.142***	0.085***
	(10.12)	(12.90)	(10.44)	(5.84)
Book leverage $_t$	-0.034	-0.079	-0.037	-0.139*
	(-0.42)	(-0.98)	(-0.46)	(-1.83)
ROA $_t$	0.495***	0.771***	0.531***	0.312*
	(3.11)	(4.48)	(3.31)	(1.93)
Volatility $_t$	-0.147***	-0.174***	-0.150***	-0.158***
	(-5.53)	(-6.43)	(-5.58)	(-4.02)
Inst. Holdings $_t$	-0.085*	0.028	-0.074	-0.052
	(-1.66)	(0.53)	(-1.41)	(-0.99)
Capital Exp. $_t$	1.861***	-1.473***	1.909***	1.052***
	(5.12)	(-5.28)	(5.22)	(3.08)
Cash Holdings $_t$	0.697***	0.772***	0.696***	0.204*
	(6.77)	(7.72)	(6.78)	(1.91)
R&D Exp. $_t$	1.674***	2.305***	1.661***	0.750**
	(5.21)	(7.56)	(5.22)	(2.46)
Net CSR $_{t-1}$				0.381***
				(21.30)
Net CSR $_{t-2}$				0.276***
				(13.97)
Constant	-5.664***	-4.640***	-6.049***	-3.704***
	(-14.71)	(-31.09)	(-15.34)	(-6.04)
Industry fixed effects	Yes	No	Yes	Yes
Year fixed effects	No	Yes	Yes	Yes
Observations	14,344	14,344	14,344	10,307
R-squared	0.2939	0.2012	0.2968	0.5988

Panel B: Total strengths and concerns of CSR

Explanatory Variable	Dependent Var: CSR-strengths $_{t+1}$		Dependent Var: CSR-concerns $_{t+1}$	
	(1)	(2)	(3)	(4)
Lawsuit firm $_t$	0.611***	0.210***	0.280***	0.129***
	(11.88)	(4.91)	(4.39)	(3.89)
Log (total assets) $_t$	0.775***	0.354***	0.120***	0.090***
	(57.34)	(27.78)	(6.20)	(7.25)
Market-to-book $_t$	0.148***	0.082***	0.006	-0.008
	(13.08)	(6.96)	(0.47)	(-0.63)
Book leverage $_t$	-0.056	-0.217***	-0.019	-0.057
	(-0.81)	(-3.68)	(-0.22)	(-0.82)
ROA $_t$	0.608***	0.289**	0.078	-0.128
	(4.51)	(2.37)	(0.63)	(-0.92)
Volatility $_t$	-0.094***	-0.149***	0.056**	-0.069
	(-4.24)	(-4.58)	(2.18)	(-1.54)
Inst. Holdings $_t$	-0.277***	-0.076*	-0.203***	-0.142***
	(-6.19)	(-1.83)	(-3.32)	(-3.43)
Capital Exp. $_t$	1.444***	0.961***	-0.465	-0.023
	(4.92)	(3.63)	(-1.01)	(-0.07)
Cash Holdings $_t$	0.793***	0.069	0.098	-0.046
	(9.05)	(0.82)	(1.05)	(-0.52)
R&D Exp. $_t$	1.033***	0.494**	-0.628**	-0.384
	(3.92)	(2.16)	(-2.19)	(-1.38)
CSR-strengths $_{t-1}$		0.413***		
		(17.41)		
CSR-strengths $_{t-2}$		0.297***		
		(11.35)		
CSR- concerns $_{t-1}$				0.454***
				(29.08)
CSR- concerns $_{t-2}$				0.192***
				(12.00)
Constant	-4.583***	-2.530***	1.466***	0.942***
	(-12.93)	(-5.84)	(3.04)	(5.55)
Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	14,344	10,307	14,344	10,307
R-squared	0.4382	0.7155	0.2896	0.5832

Table 3. The Components of CSR and Lawsuit Firms

This table reports coefficient estimates from OLS regressions. The dependent variable is the environment CSR score in model (1), the community CSR score in model (2), the diversity CSR score in model (3), and the human rights CSR score in model (4). *Lawsuit firm* is an indicator variable that equals one if a firm experiences a securities lawsuit during the fiscal year, and zero otherwise. We include control variables for the one and two year lagged values of each CSR category. We additionally include our standard control variables as per Equation (2). All models include industry and year fixed effects, and all control variables are described in Appendix B. Standard errors are robust and clustered by both firm and time while *t*-statistics are reported in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

	Dependent Variable			
	Avg. CSR Environment $_{t+1}$	Avg. CSR Community $_{t+1}$	Avg. CSR Diversity $_{t+1}$	Avg. CSR Hum rights $_{t+1}$
Explanatory Variable	(1)	(2)	(3)	(4)
Lawsuit firm $_t$	0.031	0.050***	0.056**	-0.016*
	(1.27)	(2.98)	(1.99)	(-1.66)
CSR Environment $_{t-1}$	0.365***			
	(16.07)			
CSR Environment $_{t-2}$	0.246***			
	(10.13)			
CSR Community $_{t-1}$		0.456***		
		(18.26)		
CSR Community $_{t-2}$		0.095***		
		(3.88)		
CSR Diversity $_{t-1}$			0.420***	
			(24.51)	
CSR Diversity $_{t-2}$			0.185***	
			(10.69)	
CSR Human rights $_{t-1}$				0.471***
				(14.16)
CSR Human rights $_{t-2}$				0.045
				(1.43)
Constant	-1.626***	-0.548***	-1.536***	-0.324*
	(-5.78)	(-4.72)	(-5.95)	(-1.67)
Controls	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	10,307	10,306	10,306	10,306
R-squared	0.4624	0.4112	0.6260	0.3014

Table 4. Endogeneity

This table addresses endogeneity using change-on-change, PSM, and 2SLS regressions, respectively. In Panel A models (1) and (2), the dependent variable is the change in a firm's CSR score from year t-1 to t+1. The independent variable in model (1) is the indicator variable *Lawsuit firm* that takes on a value of one if a firm experiences SCA litigation in a year, and zero otherwise. In model (2), the independent variable is the change of the lawsuit firm variable from year t-1 to t. We exclude cases where the firm experiences a class action lawsuit in year t-1 or where a lawsuit remains pending from t-1 to t. In models (1) and (2), we include the change of control variables from Table 2 Panel A model (4) except for the lagged values of CSR score. Model (3) reports OLS regression results using the PSM sample. We first estimate a logit model where for each lawsuit firm-year the dependent variable equals one if the firm experiences an SCA lawsuit, and zero if the firm does not experience SCA litigation. We then calculate a propensity score for the likelihood of each firm experiencing a securities lawsuit and create a nearest-neighbor matched control group from non-lawsuit firms by employing 0.2 caliper width. The test of mean differences in key variables used to estimate propensity scores between treated and treatment groups are reported in Panel B. Panel A models (5) and (6) show the results of 2SLS estimation to establish causality. Model (4) presents the first-stage regression results using two instruments as independent variables. *District Lawsuit Ease Index* represents the population weighted average per U.S. federal district of state scores from 1 to 50, where 1 indicates the most difficult state to sue a company and 50 indicates the easiest state to sue a firm. The Institute for Legal Reform of the U.S. Chamber of Commerce provides the overall ranking of state liability systems. *District Lawsuit Experience* is the total number of lawsuits scaled by total population in each federal district in a given year. In model (5), we use the instrumented lawsuit variable which is the predicted lawsuit probability from the first-stage regression as an independent variable and repeat the regressions from Table 2 Panel A model (4). In model (6), we repeat the 2SLS regressions using the PSM sample. Net CSR is the net score of CSR measured as total strengths minus total concerns based on the four categories in Table 3. All models include the control variables used in Table 2 and include industry and year fixed effects. Standard errors are robust and clustered by both firm and time while *t*-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

Panel A. Endogeneity				2SLS 1st Stage (LPM)	2SLS 2nd Stage (OLS)	
	Full Sample		PSM Sample	Full Sample	Full Sample	PSM Sample
	Δ Net CSR $_{t-1, t+1}$		Net CSR $_{t+1}$	Lawsuit Firm $_t$	Net CSR $_{t+1}$	
Explanatory Variable	(1)	(2)	(3)	(4)	(5)	(6)
Lawsuit firm $_t$	0.541***		0.170**			
	(9.83)		(2.06)			
Δ Lawsuit firm $_{t-1, t}$		0.166**				
		(1.98)				
District Lawsuit Ease Index Scaled $_t$				0.005***		
				(2.69)		
District Lawsuit Experience Scaled $_t$				0.088***		
				(3.51)		
Instrumented Lawsuit firm $_t$					2.629***	3.750**
					(2.83)	(2.03)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9,330	7,844	1,937	13,854	8,193	1,593
R-squared	0.1831	0.1942	0.6896	0.0535	0.6338	0.7202
F Statistics				16.25		

Panel B: Covariate test (Post PSM match)				
Variable	Treated	Control	Difference	t-stat
Log assets	8.911	8.863	0.048	0.66
Market-to-book	1.524	1.513	0.011	0.17
Book leverage	0.615	0.609	0.006	0.53
ROA	0.041	0.047	-0.006	-0.29
Volatility	0.361	0.363	-0.002	-0.06
Inst. Holdings	0.670	0.672	-0.002	-0.18
Capital Exp.	0.046	0.045	0.001	0.22
Cash Holdings	0.139	0.141	-0.002	-0.28
R&D Exp.	0.018	0.017	0.001	0.20

Table 5: Difference-in-Difference Estimation Using the 1999 Ninth Circuit Court Ruling

This table reports the (OLS) results of difference-in-difference estimation using the exogenous change in litigation risk around the Ninth Circuit court ruling in 1999. For this quasi-experimental analysis, we expand our data to cover the time period before the 1999 ruling. *Post 2 (3) years* is an indicator variable that equals one if the observation occurs in the post-9th Circuit U.S. Court of Appeals period of 2000-2001 (2000-2002), and zero if the observations occur in the pre-9th Circuit U.S. Court of Appeals period of 1997-1998 (1996-1998). We require firms to have at least one year of data available in both the pre- and post-event periods. *Circuit 9* represents treated firms with headquarters in the Ninth Circuit states. Control firms are firms with headquarters outside of the Ninth Circuit states. All models include the control variables used in Table 2 Panel A model (4) and include industry and year fixed effects. Standard errors are robust and clustered by both firm and time while *t*-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

	Dependent Variable					
	Net CSR $_{t+1}$	CSR-strengths $_{t+1}$	CSR-concerns $_{t+1}$	Net CSR $_{t+1}$	CSR-strengths $_{t+1}$	CSR-concerns $_{t+1}$
Explanatory Variable	(1)	(2)	(3)	(4)	(5)	(6)
Circuit 9	-0.178	0.622**	0.469*	0.066	0.609**	0.371*
	(-0.59)	(2.13)	(1.65)	(0.27)	(2.52)	(1.65)
Post 2 years	0.121	0.185**	0.021			
	(1.25)	(2.19)	(0.39)			
Circuit 9 × Post 2 years	-0.473**	-0.474**	0.273**			
	(-1.99)	(-2.40)	(1.97)			
Post 3 years				0.085	0.158**	0.043
				(1.06)	(2.09)	(0.85)
Circuit 9 × Post 3 years				-0.457**	-0.395**	0.207*
				(-2.08)	(-2.29)	(1.77)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	985	985	985	1,451	1,451	1,451
R-squared	0.7090	0.6254	0.5323	0.6864	0.5991	0.5227

Table 6. Stakeholder Awareness.

This table presents results from OLS regressions on the advertising intensity of lawsuit firms. *Lawsuit firm* is an indicator variable that equals one if a firm experiences an SCA lawsuit in a given year, and zero otherwise. *Instrumented lawsuit firm* is the predicted lawsuit probability from the first-stage regression in Table 4. All models include industry and year fixed effects. Models (1) and (2) use the full sample, and model (3) uses the PSM sample. Standard errors are robust and clustered by both firm and time while *t*-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

	2SLS-Second Stage		
	Full Sample	Full Sample	PSM Sample
	Dependent Var: Advertising Intensity $_{t+1}$		
Explanatory Variable	(1)	(2)	(3)
Lawsuit firm $_t$	0.003***		
	(3.56)		
Instrumented Lawsuit firm $_t$		0.113***	0.076***
		(6.29)	(3.20)
Log (total assets) $_t$	0.001***	-0.002***	0.001
	(2.75)	(-4.20)	(1.05)
Market-to-book $_t$	0.002***	0.001***	0.004***
	(6.01)	(3.56)	(3.17)
Book leverage $_t$	-0.001	0.003	-0.004
	(-0.99)	(1.56)	(-0.96)
ROA $_t$	-0.006	-0.009*	-0.028**
	(-1.55)	(-1.65)	(-2.07)
Volatility $_t$	0.001	0.001	0.002
	(1.07)	(0.67)	(1.38)
Inst. Holdings $_t$	0.002*	0.003*	0.005
	(1.90)	(1.77)	(1.26)
Capital Exp. $_t$	-0.016**	-0.018**	0.054**
	(-2.27)	(-2.01)	(2.28)
Cash Holdings $_t$	0.015***	0.016***	0.007
	(5.84)	(4.90)	(1.15)
R&D Exp. $_t$	-0.031***	-0.039***	-0.014
	(-5.17)	(-5.02)	(-0.77)
Constant	-0.004	0.012***	-0.024***
	(-1.38)	(2.77)	(-3.16)
Industry fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	13,552	9,698	1,819
R-squared	0.1895	0.2012	0.3075

Table 7. Event Time Effects of Litigation on CSR

This table presents event time effects from OLS regressions of total net CSR scores / advertising intensity on firms with lawsuits. Net CSR scores are measured as total strengths minus total concerns using the four categories of CSR in Table 3. In Panel A, we use the net CSR scores from the year of the lawsuits (year t) until four years after the lawsuits as dependent variables in models (1) to (5). *Lawsuit firm* is an indicator variable equal to one if a firm experiences an SCA lawsuit in a given year, and zero otherwise. In Panel B, we use *Lawsuit settlement year* as the main independent variable and report regression results. The dependent variable is total net CSR score ranging from two years prior to the lawsuit settlement year to two years after the settlement year in models (1) to (5). *Lawsuit firm* is an indicator variable that equals one if the firm experiences SCA lawsuits in the fiscal year. We draw control variables from Table 2 Panel A model (4) and include industry and year fixed effects in all regressions. All variables are described in Appendix B. Robust standard errors are clustered by both firm and time while t statistics are shown in the parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

Panel A: Lawsuit initiation on CSR

Explanatory Variable	Net CSR $_t$ (1)	Net CSR $_{t+1}$ (2)	Net CSR $_{t+2}$ (3)	Net CSR $_{t+3}$ (4)	Net CSR $_{t+4}$ (5)
Lawsuit firm $_t$	0.169*	0.206***	-0.105	-0.039**	-0.052
	(1.92)	(2.72)	(-1.09)	(-2.40)	(-0.494)
Controls	Yes	Yes	Yes	Yes	Yes
Industry/Year FE	Yes	Yes	Yes	Yes	Yes
Observations	9,301	8,792	8,339	7,365	6,165
R-squared	0.7977	0.6362	0.5859	0.5497	0.5472

Panel B: Lawsuit settlement (for lawsuits with exactly 3 years to settlement) on CSR

Explanatory Variable	Net CSR $_{t-2}$ (1)	Net CSR $_{t-1}$ (2)	Net CSR $_t$ (3)	Net CSR $_{t+1}$ (4)	Net CSR $_{t+2}$ (5)
Lawsuit settlement year $_t$	0.292***	0.165*	-0.028	-0.042	0.144
	(3.76)	(1.94)	(-1.19)	(-0.65)	(1.58)
Controls	Yes	Yes	Yes	Yes	Yes
Industry/Year FE	Yes	Yes	Yes	Yes	Yes
Observations	4,738	4,759	4,761	4,516	4,201
R-squared	0.0547	0.0614	0.0829	0.1552	0.1872

Table 8. Event Time Effects of Litigation on Stakeholder Awareness

This table presents event time effects from OLS regressions of advertising intensity on firms with lawsuits. The dependent variable, *Advertising intensity*, is defined as the annual advertising expenditures divided by sales revenue in a year. In Panel A, we use the *Advertising intensity* from the year of the lawsuits (year t) until four years after the lawsuits as dependent variables in models (1) to (5). *Lawsuit firm* is an indicator variable equal to one if a firm experiences an SCA lawsuit in a year, and zero otherwise. In Panel B, we use *Lawsuit settlement year* as the main independent variable and report regression results. The dependent variable is *Advertising intensity* ranging from two years prior to the lawsuit settlement year to two years after the settlement year in models (1) to (5). We draw control variables from Table 2 Panel A model (4) and include industry and year fixed effects in all regressions. All variables are described in Appendix B. Robust standard errors are clustered by both firm and time while t statistics are shown in the parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

Panel A: Lawsuit initiation on stakeholder awareness

Explanatory Variable	Advertising Intensity $_t$ (1)	Advertising Intensity $_{t+1}$ (2)	Advertising Intensity $_{t+2}$ (3)	Advertising Intensity $_{t+3}$ (4)	Advertising Intensity $_{t+4}$ (5)
Lawsuit firm $_t$	0.005***	0.004**	0.003*	0.003*	0.002
	(3.47)	(2.58)	(1.89)	(1.94)	(1.27)
Controls	Yes	Yes	Yes	Yes	Yes
Industry/Year FE	Yes	Yes	Yes	Yes	Yes
Observations	9,728	9,513	9,220	8,158	6,683
R-squared	0.1996	0.2068	0.2158	0.2230	0.2340

Panel B: Lawsuit settlement (for lawsuits with exactly 3 years to settlement) on stakeholder awareness

Explanatory Variable	Advertising Intensity $_{t-2}$ (1)	Advertising Intensity $_{t-1}$ (2)	Advertising Intensity $_t$ (3)	Advertising Intensity $_{t+1}$ (4)	Advertising Intensity $_{t+2}$ (5)
Lawsuit settle year$_t$	0.004**	0.003*	0.002	0.002	0.001
	(2.45)	(1.92)	(0.98)	(0.75)	(0.88)
Controls	Yes	Yes	Yes	Yes	Yes
Industry/Year FE	Yes	Yes	Yes	Yes	Yes
Observations	9,302	9,593	9,728	9,513	9,220
R-squared	0.1943	0.1953	0.1985	0.2063	0.2149

Table 9. Litigation on CSR – Subsample Effects

This table presents event time effects from OLS regressions of total net CSR scores on firms with lawsuits. Net CSR scores are measured as total strengths minus total concerns using the four categories of CSR in Table 3. In Panels A and B, we use the net CSR scores from the year of the lawsuits (year t) until four years after the lawsuits as dependent variables in models (1) to (5). *Lawsuit firm* is an indicator variable equal to one if a firm experiences an SCA lawsuit in a year, and zero otherwise. We divide Panels A and B into quantiles using 1) the Citizen Ideology measure of Berry et al. (1998) and 2) urban vs. rural states using decennial census data from the U.S. Census Bureau, respectively. We replicate panels C and D from panels A and B using *Lawsuit settlement year* as the main independent variable and report regression results. The dependent variable is net CSR score ranging from two years prior to the settlement year to two years after the settlement year in models (1) to (5). We draw control variables from Table 2 Panel A model (4) and include industry and year fixed effects in all regressions. All variables are described in Appendix B. Robust standard errors are clustered by both firm and time while t statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

Panel A: Lawsuit initiation on CSR

	Net CSR $_t$	Net CSR $_{t+1}$	Net CSR $_{t+2}$	Net CSR $_{t+3}$	Net CSR $_{t+4}$
	(1)	(2)	(3)	(4)	(5)
Lawsuit firm $_t$	0.257***	0.410***	0.128	-0.095	-0.212
(Liberal states)	(2.86)	(3.35)	(1.19)	(-0.68)	(-1.32)
Lawsuit firm $_t$	0.128	-0.087	-0.135	-0.041	-0.153
(Conservative states)	(1.41)	(-0.57)	(-0.60)	(-0.22)	(-0.73)
Controls	Yes	Yes	Yes	Yes	Yes
Industry/Year FE	Yes	Yes	Yes	Yes	Yes
P-value of Wald test	0.031**	0.002***	0.178	0.795	0.463

Panel B: Lawsuit initiation on CSR

	Net CSR $_t$	Net CSR $_{t+1}$	Net CSR $_{t+2}$	Net CSR $_{t+3}$	Net CSR $_{t+4}$
	(1)	(2)	(3)	(4)	(5)
Lawsuit firm $_t$	0.291**	0.385**	0.150	0.006	0.180
(Urban states)	(2.35)	(2.61)	(0.95)	(0.69)	(1.05)
Lawsuit firm $_t$	0.110	-0.006	-0.109	-0.105	-0.037
(Rural states)	(1.39)	(-0.05)	(-0.64)	(-1.05)	(-0.20)
Controls	Yes	Yes	Yes	Yes	Yes
Industry/Year FE	Yes	Yes	Yes	Yes	Yes
P-value of Wald test	0.046**	0.043**	0.584	0.435	0.658

Panel C: Lawsuit settlement (for lawsuits with exactly 3 years to settlement) on CSR

| | Net CSR $_{t-2}$ | Net CSR $_{t-1}$ | Net CSR $_t$ | Net CSR $_{t+1}$ | Net CSR $_{t+2}$ |
	(1)	(2)	(3)	(4)	(5)
Lawsuit settlement year $_t$	0.182**	0.127*	0.097	0.089	0.108
(Liberal states)	(2.46)	(1.95)	(0.91)	(0.53)	(0.67)
Lawsuit settlement year $_t$	-0.217	-0.040	-0.031	-0.016	-0.143
(Conservative states)	(-1.57)	(-1.37)	(-0.34)	(-0.14)	(-0.98)
Controls	Yes	Yes	Yes	Yes	Yes
Industry/Year FE	Yes	Yes	Yes	Yes	Yes
P-value of Wald test	0.003***	0.081*	0.248	0.579	0.467

Panel D: Lawsuit settlement (for lawsuits with exactly 3 years to settlement) on CSR

| | Net CSR $_{t-2}$ | Net CSR $_{t-1}$ | Net CSR $_t$ | Net CSR $_{t+1}$ | Net CSR $_{t+2}$ |
	(1)	(2)	(3)	(4)	(5)
Lawsuit settlement year $_t$	0.169**	0.102	0.117	0.125	0.186
(Urban states)	(2.02)	(1.39)	(1.00)	(0.21)	(0.96)
Lawsuit settlement year $_t$	-0.115	-0.052	-0.016	-0.023	-0.149
(Rural states)	(-0.03)	(-0.42)	(-0.16)	(-0.19)	(-1.36)
Controls	Yes	Yes	Yes	Yes	Yes
Industry/Year FE	Yes	Yes	Yes	Yes	Yes
P-value of Wald test	0.026**	0.138	0.476	0.351	0.525

Table 10. Litigation on CSR – Reputational Risk Effects

This table shows estimated coefficients from OLS regressions of net CSR scores on *Instrumented lawsuit firm* (as constructed in Table 4) given varying degree of reputational risks. Panel A partitions the sample into high and low groups using the ESG coverage collected by Reprisk. High group is identified if the firm had at least one negative news article about its practices within the ESG category in the year, with Low group identified if the firm had no negative news article. Panel B partitions the sample and reports regression coefficients for high and low quartiles. We partition the sample based on the percentage of outside directors on the board in model (1). Model (2) partitions the sample based on the average number of board seats directors hold (counting the primary firm). Model (3) partitions the sample based on the average number of board seats outside directors hold. We then separate the sample in model (4) by the indicator variable, Director-CEO, which takes on a value of one if any director on the board is also another firm's CEO, and zero otherwise. In model (5) we partition by the percentage of outside director-CEOs, defined as the number of outside directors who are also another firm's CEO divided by the total number of outside board members. Models (6) and (7) partition the sample based on the average director's tenure. Model (7) repeats model (6) limiting the sample to the post SOX period which affected firm independent director requirements. All models include the control variables used in Table 2 and industry and year fixed effects. All variables are described in Appendix B. Standard errors are robust and clustered by both firm and time and t-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

Panel A: ESG Reputation Risks

	Environmental Risk Issues	Social Risk Issues	Governance Risk Issues
	(1)	(2)	(3)
High	8.603***	6.387**	6.968**
	(2.85)	(2.00)	(2.20)
Low	2.757*	3.628*	4.388**
	(1.82)	(1.94)	(1.99)
Controls	Yes	Yes	Yes
Industry/Year FE	Yes	Yes	Yes
P-Value of Wald Test	0.0161**	0.0890*	0.3803

Panel B: Director Reputation Risks

	% outside directors	Avg # board seats for directors	Avg # board seats for outside directors'	Director-CEO	% outside director-CEO	Director Tenure (2001-2013)	Dir Tenure Post SOX (2003-2013)
	Quartiles	Quartiles	Quartiles	(Top=1)	Quartiles	Quartiles	Quartiles
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bottom	1.740	3.484*	2.680	1.183	1.183	5.107**	5.228**
	(1.04)	(1.92)	(1.33)	(0.88)	(0.88)	(2.24)	(2.19)
Top	4.503**	4.435**	3.224**	2.995**	2.121**	1.511	1.887
	(2.02)	(2.45)	(2.14)	(1.99)	(2.13)	(0.72)	(0.80)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry/Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
P-value Wald	0.021**	0.001***	0.001***	0.001***	0.001***	0.074*	0.047**

Internet Appendix to

The Mitigation of Reputational Risk via Responsive CSR: Evidence from Securities Class Action Lawsuits

Abstract

We examine the effect of securities class action litigation on the strategic production of CSR as an ex-post damage control instrument (responsive CSR). Net CSR scores increase by 53% on average after a filing and are primarily driven by greater community and diversity strengths. Our study is the first to provide evidence of a strategic duration for responsive CSR. Using hand-collected data to supplement our main dataset, we show that positive CSR increases in two distinct periods – first, immediately around the trigger event to maintain ESG scores and reduce media bias, and then beginning several months later where it rises, remains elevated until stakeholders determine penalties, and then afterwards significantly declines. The use of responsive CSR is concentrated in urban or liberal-leaning states and in firms with higher ESG and director reputational risks.

Scaled CSR Scores

Servaes and Tamayo (2013) point out that the number of strengths and concerns in each CSR category has evolved as KLD has refined its database over time. To verify that our main results are not contaminated by this data issue, we scale CSR scores based on Servaes and Tamayo (2013) as follows:

$$\text{Scaled CSR}_{i,t} = \sum \text{CSR Strengths}_{i,t} \,/\, \text{Max CSR Strengths}_t \qquad (3)$$
$$- \sum \text{CSR Concerns}_{i,t} \,/\, \text{Max CSR Concerns}_t$$

We divide the number of strengths (concerns) for each firm year within each CSR category by the maximum possible number of strengths (concerns) in each category each year to obtain a strengths (concerns) index. We then subtract the concerns index from the strengths index to obtain a net CSR measure in each area ranging from -1 to $+1$ each year. We then aggregate community, diversity, environment, and human rights into one overall net scaled CSR measure that ranges from -4 to $+4$. We repeat the baseline and various endogeneity mitigating regressions using the scaled CSR measures and report our results in Table IA.1. In Panel B, we replace CSR scores with the scaled CSR scores and repeat various regressions from Table 4.

Table IA.1. Scaled CSR Scores

This table reports the regression results using the scaled CSR score measures. Panel A shows the results of regressions using scaled CSR scores as dependent variable. The dependent variable is the scaled total CSR score in model (1). The dependent variable in model (2) is the scaled CSR strengths score, and the dependent variable in model (3) is the scaled CSR concerns score. All control variables are drawn from Table 2 Panel A model (4). Panel B repeats the regressions of Table 4 using scaled CSR scores as dependent variables. All models include the control variables used in Table 2 Panel A model (4) and include industry and year fixed effects. Standard errors are robust and clustered by both firm and time and *t*-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

Panel A: Scaled CSR	Dependent Variable		
	Scaled CSR $_{t+1}$	Scaled CSR-strengths $_{t+1}$	Scaled CSR-concerns $_{t+1}$
Explanatory Variable	(1)	(2)	(3)
Lawsuit firm $_t$	0.013**	0.046***	0.034***
	(2.47)	(7.71)	(4.10)
Controls	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	10,307	10,306	10,306
R-squared	0.5816	0.5920	0.4140

Panel B: Endogeneity			2SLS 2nd Stage (OLS)	
	Full Sample	PSM Sample	Full Sample	PSM Sample
	Δ Net CSR $_{t-1, t+1}$	Net CSR $_{t+1}$	Net CSR $_{t+1}$	
Explanatory Variable	(1)	(2)	(3)	(4)
Lawsuit firm $_t$	0.020***	0.019**		
	(4.25)	(2.19)		
Instrumented Lawsuit firm $_t$			0.356***	0.506***
			(3.61)	(2.62)
Controls	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	9,330	1,937	8,193	1,593
R-squared	0.2137	0.1343	0.6192	0.6916

Governance and CEO Compensation

We employ two proxies to measure corporate governance: 1) the governance index (Gompers, Ishii, and Metrick (2003)) and 2) the entrenchment index (Bebchuk, Cohen, and Ferrell (2009)). We run regressions in the top and bottom quartiles of each index and report our results in models (1) and (2) of Table IA.2. The results of models (1) and (2) suggest that firms with stronger governance mechanisms (bottom quartile) tend to utilize more responsive CSR activities after securities litigation, supporting the argument that good governance firms are more likely to maintain their governance reputations. This is consistent with the result in Table 10 based on the higher percentage of outside directors, which also represents good governance.

We then examine the impact of the CEO's compensation structure on the relationship between the occurrence of securities litigation and the use of responsive CSR. Bebchuk, Cremers, and Peyer (2011) argue that firms with good corporate governance should have relatively smaller pay gaps between their CEOs and other executives, and that these CEOs should not take a huge portion of the compensation pool from other executives (i.e., smaller pay slices). In our study, powerful CEOs (as proxied by large pay slices) should be able to resist reputational pressures from the securities lawsuit and should be less likely to utilize responsive CSR. CEO pay slice is the proportion of the CEO's total pay to the sum of the total compensation of top five executives in a firm. We first separate our sample into bottom and top quartiles based on the CEO's pay slice and run regressions in each quartile in model (3). We find in model (3) that CEO's with a larger pay slice are indeed able to resist the need to utilize responsive CSR.

We also compute the CEO's compensation delta and separate our sample into bottom and top quartiles in model (4). CEO delta represents the dollar change of the CEO's compensation wealth with respect to a 1% change in the stock price following Coles, Daniel, and Naveen (2006)). We find in model (4) that CEOs with higher compensation

sensitivity are more likely to utilize responsive CSR. This suggests that CEO incentives to utilize responsive CSR to manage the reputational crisis are intensified when their individual wealth is highly tied to the firms' stock price performance. If responsive CSR increases firm value or stock price (Krüger (2015)), then high delta CEOs would directly benefit from stock and options holdings.

Table IA.2. Corporate governance and CEO compensation.

This table shows estimated coefficients from OLS regressions of net CSR scores on *Instrumented lawsuit firm* (as constructed in Table 4) given varying antitakeover law protection and the CEO's compensation incentives in the top executive team. We first partition the sample into quartiles using G-index and report the regression coefficients in the bottom and top quartiles in model (1). We next partition the sample into quartiles using E-index and report the regression coefficients in the bottom and top quartiles in model (2). We then turn to CEO incentives. We run regressions in the bottom and top quartiles based on the CEO's pay slice and report coefficients in model (3). We then run regressions in the bottom and top quartiles based on the CEO's compensation delta and report coefficients in model (4). All models include the control variables used in Table 2 and industry and year fixed effects. Standard errors are robust and clustered by both firm and time and *t*-statistics are shown in parentheses. Statistical significance at the 1%, 5%, and 10% level is indicated by ***, **, and *, respectively.

| | G-index Quartiles | E-index Quartiles | CEO Pay Slice Quartiles | CEO Delta Quartile |
	(1)	(2)	(3)	(4)
Bottom	3.038*	3.572**	2.553*	1.157
	(1.90)	(1.96)	(1.93)	(0.59)
Top	2.337	0.174	1.935	2.626**
	(1.07)	(0.08)	(1.47)	(2.06)
Controls	Yes	Yes	Yes	Yes
Industry/Yr FE	Yes	Yes	Yes	Yes
P-value of Wald Test	0.613	0.007***	0.508	0.042**

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