

Shareholder Litigation and Corporate Social Responsibility

Steven Freund
University of Massachusetts Lowell Manning School of Business
steven_freund@uml.edu

Nam H. Nguyen
University of Texas Rio Grande Valley Vackar College of Business & Entrepreneurship
namhoang.nguyen@utrgv.edu

Hieu V. Phan 
University of Massachusetts Lowell Manning School of Business
hieu_phan@uml.edu (corresponding author)

Abstract

This research examines the relation between shareholder litigation and corporate social responsibility (CSR). Exploiting exogenous changes in shareholder litigation rights following the staggered adoption of universal demand laws by U.S. states and the Ninth Circuit Court of Appeals' ruling on securities class action lawsuits, we show that weaker shareholder litigation rights lead to lower CSR scores. Moreover, the relation is stronger for firms facing higher litigation risk, and a decreased CSR score enhances firm value. Our evidence suggests that firms engage in CSR activities partly to reduce shareholder litigation risk *ex ante* and mitigate its consequences *ex post*.

As to the meaning of 'corporate social responsibility,' Friedman and I would agree: If a certain action improves the corporation's bottom line, there's no point in labeling it 'socially responsible.' It's just good business.

Robert Reich, *Forbes*, Sept. 6, 2007¹

I. Introduction

Economic crises, corporate scandals, and evidence of market inefficiencies have made corporate social responsibility (CSR) a topical issue in recent years (Martin, Petty, and Wallace (2009)). Previous studies present different views on CSR existence. One viewpoint maintains that CSR enhances firm value because it increases product differentiation (Albuquerque, Koskinen, and Zhang (2019)), builds customer loyalty (Servaes and Tamayo (2013)), strengthens employee motivation and productivity (Gubler, Larkin, and Pierce (2018)), lowers the cost

We are especially grateful to Craig Lewis (the referee), whose comments on the paper substantially improved the exposition and analyses. We also appreciate the helpful comments from Paul Malatesta (the editor). Freund and Phan acknowledge a small research grant of the Donahue Center for Business Ethics & Social Responsibility at the University of Massachusetts Lowell. Any opinions expressed are those of the authors and not those of the Donahue Center for Business Ethics & Social Responsibility.

¹https://www.forbes.com/2007/09/06/book-qanda-reich-oped-cx_mw_0906reichqanda.html#4ab375306fe9. Last accessed June 1, 2021.

of equity capital (Ghoul, Guedhami, Kwok, and Mishra (2011), Breuer, Müller, Rosenbach, and Salzmänn (2018)), increases media coverage (Cahan, Chen, Chen, and Nguyen (2015), Byun and Oh (2018)), and fosters relationship with the community (Fombrun, Gardberg, and Barnett (2000)) and the government (Campbell (2007), Wang and Qian (2011)). Another explanation, a subset of the value enhancement view, is that CSR enhances firm reputation and builds moral capital among various stakeholders that can mitigate their negative assessments and sanctions when adverse developments occur (Godfrey (2005)). An opposite viewpoint posits that managers invest in CSR for their own benefits at the expense of shareholder value (Friedman (1970), Bénabou and Tirole (2010)).

Shareholder litigation could help improve corporate governance (Ferris, Jandik, Lawless, and Makhija (2007)) and increase transparency (Boone, Fitch, and Griffin (2019)), thereby reducing the cost of debt (Ni and Yin (2018)); however, research findings are not universal. Shareholder litigation risk may decrease corporate disclosure (Bourveau, Lou, and Wang (2018)) and firm credit ratings while increasing the cost of debt (Arena (2018)) due to firm reputational loss (Deng, Willis, and Xu (2014)). Autore, Hutton, Peterson, and Smith (2014) report that firms reduce external financing after litigation, possibly because of the increased cost of capital, which in turn leads to a decrease in corporate investments. To the extent that CSR helps firms build reputational capital and mitigates the effects of adverse shocks on their performance, whereas shareholder litigation is both costly and detrimental to firm reputation, we are interested in the relation between CSR and shareholder litigation. Previous research has attempted to ascertain the relations between CSR and other corporate policies, cost of capital, and firm value (e.g., Ghoul et al. (2011), Huseynov and Klamm (2012), Deng, Kang, and Low (2013), Koh, Qian, and Wang (2014), and Breuer et al. (2018)); however, Flammer (2015) contends that endogeneity is a challenge to empirical research on CSR.² In this study, we exploit the staggered adoption of universal demand (UD) laws as a plausible exogenous shock to shareholder rights in initiating derivative lawsuits to examine their relation to CSR.

Derivative lawsuits are distinct from the more familiar securities class action lawsuits, in which a subset of shareholders sue the firm for harm related to a decrease in stock price to their “class” and receive direct payment through award or settlement.³ In a derivative lawsuit, shareholders sue directors or officers on behalf of the corporation and any compensation is paid to the corporation after paying attorney fees. The primary motivation for shareholders to initiate derivative lawsuits is to gain improved corporate governance when facing violations of fiduciary duty by officers or directors of the firm (Ferris et al. (2007), Erickson (2010)), yet the dollar amount of recent derivative lawsuit settlements has recently reached magnitudes of hundreds of millions.⁴

²Flammer (2015) uses a regression discontinuity design to overcome endogeneity and finds a causal positive relation between CSR and corporate financial performance.

³Appel (2019) documents similar incidents of derivative (1.4% of firm year observations) and class action lawsuits (1.8%) for his samples ending 2010. Our unreported analysis finds virtually similar trends for derivative and class action lawsuits during our sample period 1996–2009.

⁴<https://www.dandodiary.com/2014/12/articles/shareholders-derivative-litigation/largest-derivative-lawsuit-settlements/>. Last accessed June 2, 2021.

To initiate a derivative lawsuit, shareholders must make “demand,” which is a petition to the board to take corrective action. As the targets of derivative lawsuits are officers or directors, the board often refuses the demand. Although the suit can continue, courts generally side with the board when it refuses demand. The “futility exception” allows shareholders to bypass the board and argue that board members are insufficiently independent to support taking corrective action through a derivative lawsuit. Both the American Law Institute and the American Bar Association deemed the process inefficient and supported reform to reduce frivolous lawsuits, decrease judicial subjectivity, and refocus the courts on litigating the allegations rather than futility (Swanson (1993), Kinney (1994)). Between 1989 and 2005, 23 states adopted UD laws, that generally require plaintiffs to make demand and force courts to accept independent directors’ recommendation to dismiss, consequently weakening the threat of derivative lawsuits (Davis (2008)). The number of derivative lawsuits decreased significantly after the adoption of UD laws (Houston, Lin, and Xie (2018), Nguyen, Phan, and Sun (2018), and Appel (2019)), and therefore, from a firm’s perspective, decreasing shareholder litigation risk.

The staggered adoption of UD laws across states represents a source of exogenous variation in the risk of derivative lawsuits, and some recent research exploits this setting to test for causal relations between shareholder litigation and corporate policies (e.g., Bourveau et al. (2018), Nguyen et al., (2018), Appel (2019), and Lin, Liu, and Manso (2021)). Similar to these studies, we use the staggered adoption of UD laws as a quasi-natural experiment to identify a causal relation between shareholder litigation and CSR. Specifically, we use the difference-in-differences (DID) approach that compares the change in CSR of a treatment firm from before and to after the passage of the UD law by its state of incorporation to the change in the same variable of a control firm not affected by the UD law over the same time period.

In general, derivative lawsuits negatively affect defendant firms’ shareholder values (Ferris et al. (2007)). Lin et al. (2021) report that the threat of shareholder litigation discourages managers from taking risk to explore new ventures, whereas the passage of UD laws, which significantly impede derivative lawsuits, improves innovative activities. Nguyen et al. (2018) find that with the passage of UD laws, firms reduce cash reserves while deploying cash for value-enhancing investments. Taken together, previous empirical evidence indicates that both the threat and the actual filing of shareholder lawsuits are costly to firms, but UD laws attenuate shareholder litigation risk and motivate firms to pursue risk-increasing policies.

Extant literature suggests that CSR, and its accompanying accumulation of reputational capital, can reduce both the incidents of litigation and the financial loss when it does occur (e.g., Godfrey, Merrill, and Hansen (2009), Barnett, Hartmann, and Solomon (2018)). To the extent that firms engage in CSR activities to build reputational capital that lowers the risk of shareholder litigation *ex ante* and mitigates its consequences *ex post*, we expect the passage of UD laws to have a negative effect on firms’ CSR activities. This argument suggests an inverse relation between the adoption of UD laws and CSR. However, it is worth noting that litigation could be a channel through which shareholders exercise corporate governance and the passage of UD laws may weaken the governance power of shareholder litigation. If CSR is a manifestation of managerial agency problems (Friedman (1970),

Bénabou and Tirole (2010), Cheng, Huang, and Lobo (2010), Masulis and Reza (2014), and Adhikari (2016)), weaker shareholder litigation rights following the UD laws adoption may motivate managers to increase CSR activities for their own benefits. These arguments suggest that the relation between UD laws and CSR is an empirical question.

Using a sample of 11,969 firm-year observations of 2,375 U.S. public firms from 1995 to 2009 for analysis, we find evidence that the adoption of UD laws is negatively related to CSR activities proxied by their CSR scores, which are an aggregate measure of firms' strengths and weaknesses in six areas including community, diversity, employee relations, environment, human rights, and product. Our results are robust to alternative measures of CSR and insensitive to controlling for year, industry, and state fixed effects, state economic conditions, corporate governance measures, the adoption of other laws during the sample period that potentially affect shareholder litigation rights, state political environment, securities class action lawsuits, and possible corporate lobbying for the adoption of UD laws.

To alleviate any concern that the adoption of UD laws and CSR follow time trends, which implies a spurious rather than causal relation between the two, we estimate a dynamic model to track the evolvement of their relation. We find that CSR activities decrease after the adoption of UD laws but not in the years beforehand. In a related analysis, we examine the relation between UD laws and CSR conditional on the likelihood of firms facing derivative lawsuits. We find that the relation is stronger for firms that have higher probability of facing derivative lawsuits *ex ante*, which further indicates that our results are not likely to be driven by a spurious relation between UD laws adoption and CSR.

Compared with financially constrained firms, financially unconstrained firms are prone to higher litigation risk due to their payment ability.⁵ Thus, the need to invest in CSR as a preemptive measure against litigation risk and its consequences should be greater for these firms. To the extent that UD laws reduce the likelihood of derivative lawsuits, we expect the negative relation between UD laws and CSR to be more pronounced for financially unconstrained firms. We employ four different financial constraint measures, which include S&P long-term credit ratings (Faulkender and Petersen (2006)), dividend payout (Fazzari, Hubbard, and Petersen (1988)), the Whited–Wu (WW) index (Whited and Wu (2006)), and the size–age (SA) index (Hadlock and Pierce (2010)), to sort firms into subgroups for analysis. Consistent with our expectation, we find that the negative relation between UD laws and CSR is stronger for financially unconstrained firms.

Faced with shareholder litigation threats, firms may purchase director and officer (D&O) insurance that presumably insulate firms and managers from direct litigation-related costs. However, D&O insurance may not provide full or even partial coverage of managers' responsibilities (Ferris et al. (2007), Nguyen et al. (2018)). Moreover, even if D&O insurance alleviates managers' financial responsibilities, defendant firms and managers would still be exposed to reputation risk for

⁵For example, Field, Lowry, and Shu (2005) find that disclosure of unexpectedly large earnings disappointments decreases the risk of securities class action lawsuits. Note that though defendant firms do not pay plaintiff shareholders following a derivative lawsuit settlement, a large part of the settlement is paid as fees to the plaintiff attorneys.

which there is no obvious insurance market. If CSR activities enhance reputational capital, which can alleviate the damaging effects of shareholder litigation on firm and manager reputation, the adoption of UD laws will reduce the need to engage in CSR activities to build reputational capital. We examine the relation between UD laws adoption and CSR for firms sorted by their reputation proxied by their inclusion in *Fortune* magazine's list of Most Admired Companies. Our analysis indicates that firms included in the list attain significantly lower CSR scores following the passage of UD laws compared with firms not in the list. In an additional analysis, we examine the relation between UD laws and CSR conditional on manager reputation proxied by their appointments as independent directors on the boards of directors of other firms (Fama and Jensen (1983), Fahlenbrach, Low, and Stulz (2010)). We find that firms with more reputable managers realize lower CSR scores after the UD laws adoption, possibly because they are less concerned about personal reputation loss due to decreased shareholder litigation threat.

A concern with using the passage of UD laws as an exogenous shock to shareholder litigation risk is that the process of debating and adopting these laws would take significant time and firms could anticipate their adoption and act accordingly. Moreover, firms could lobby state legislators to adopt these laws, raising further concern about the exogeneity of their adoption. We address this concern by running an analysis using the UD law adoption by Pennsylvania supreme court's decision as an exogenous shock, but our findings are virtually unchanged. We further verify whether our findings also hold for securities class action lawsuits, the other form of shareholder litigation. We exploit the U.S. Ninth Circuit Court of Appeals' ruling in 1999 that exogenously raises the hurdle for securities class action lawsuits against firms headquartered in the circuit to investigate the relation between shareholder litigation rights and CSR. We find that the ruling also leads to a decrease in CSR scores. Our evidence implies that the threat of shareholder litigation, whether securities class action or derivative lawsuits, induces firms to increase CSR activities and that weakened shareholder litigation rights motivate firms to decrease their engagement in CSR.

If the benefits of investing money and efforts in CSR as a precautionary measure against the threat and consequences of shareholder litigation outweigh their costs, such investment is beneficial for firms. As the adoption of UD laws lowers the risk of shareholder litigation, a corresponding reduction in CSR activities should help firms save costs and increase their value. Consistent with this argument, we find that a decrease in CSR scores following the UD laws adoption is associated with an increase in firm value.

Our research contributes to the literature in three ways. First, it adds to the growing stream of studies on CSR motivation. Prior empirical evidence identifies both value enhancement (e.g., Servaes and Tamayo (2013), Lins, Servaes, and Tamayo (2017), and Liu, Cheong, and Zurbrugg (2020)) and managerial agency problems (e.g., Bénabou and Tirole (2010), Masulis and Reza (2014)) as possible drivers for CSR.⁶ Our study considers a less explored subset of value enhancement;

⁶Liu et al. (2020) further report that a revelation of a discrepancy between firms' CSR reputation and reality following environmental allegations causes negative market reactions.

that is, CSR provides value to the firm by providing ex ante protection against future adverse events that can damage the firm's and manager's reputation and negatively affect shareholder wealth.

Second, our study adds to the research considering relations between shareholder litigation risk and corporate policies. While shareholder litigation may enhance corporate governance (Ferris et al. (2007)), it has the potential to lower firm value, either directly through attorney fees or settlement awards or indirectly through a negative impact on corporate policies and reputation (Deng et al. (2014)). To the best of our knowledge, our study is the first to demonstrate a causal relation between shareholder litigation risk and CSR using the exogenous changes in shareholder litigation rights following the staggered adoption of UD laws and the Ninth Circuit Court of Appeals' ruling on securities class action lawsuits for identification. These settings are less likely to be susceptible to endogeneity issues that plague many prior CSR studies. Our examination of the direct relation between shareholder litigation rights and CSR demonstrates that decreased lawsuit threat motivates firms to reduce CSR activities and supports the view that one motivation for CSR is to reduce shareholder litigation risk ex ante and mitigate its consequences ex post.

Finally, our research can have important policy implications. Frivolous shareholder lawsuits increase the defendant firms' litigation expenses and managerial distraction. To alleviate the negative effects of such lawsuits on firm operations, policy makers have recently introduced a series of legal reforms, such as the Fairness in Class Action Litigation Act of 2017 and the Lawsuit Abuse Reduction Act of 2017, which impose mandatory sanctions for frivolous legal claims. Our empirical evidence informs policy makers in their process of making decision on shareholder litigation rights.

The rest of the paper proceeds as follows: [Section II](#) narrates related literature and develops our empirical prediction. We provide a description of the data and sample in [Section III](#). [Section IV](#) presents the empirical models, results, and discussions. [Section V](#) discusses robustness checks, and [Section VI](#) concludes.

II. Related Literature and Empirical Prediction

The business case for CSR is rooted in stakeholder theory (Freeman (2010)) under which stakeholders control and allocate resources to firms at their discretion. Stakeholders may have favorable views of the corporation if they perceive it to be responsible, which will facilitate a decrease in transaction and input costs for the firm while increasing its output prices (Jones (1995)). Essentially, stakeholder theory explains how CSR has the potential to ultimately increase firm value.

Consistent with stakeholder theory, Fombrun et al. (2000) argue that CSR does not directly affect firm financial performance but instead helps build reputation capital, which they define as firm intangibles over and above patents and intellectual know-how. Recent research has empirically examined the insurance features of corporate reputation against specific adverse events and its implications for shareholder value. Jones, Jones, and Little (2000) find that the values of firms that score high on *Fortune's* Most Admired Companies dropped significantly less during an unexpected market sell-off in 1989. Schnietz and Epstein (2005) use an event study

methodology to examine the stock price decline following the failure of the 1999 Seattle World Trade Organization ministerial meeting on labor and environmental standards. They find that stocks of firms selected on social dimensions included in the Domini Social Index avoided the price decline suffered by stocks in the control sample that were not included in the index.

Reputational capital can be at risk from all stakeholders such as a threat of boycott by activists, exposure by media, rogue behavior by employees, or litigation by shareholders. Fombrun et al. (2000) view CSR partly as a safety net for losses in reputational capital that can affect financial performance. Godfrey (2005) presents a multidisciplinary theoretical explanation of the same idea: Corporate philanthropy generates moral capital among stakeholders, which in turn provides insurance-like protection for the firm's relational assets by moderating stakeholders' unfavorable assessments and reducing investors' and analysts' negative reactions. Lins et al. (2017) find that firms with high CSR scores survived the 2008–2009 financial crisis better than firms with low CSR scores, as evidenced by their higher stock return, profitability, growth, and sales. Deng et al. (2013) report that mergers by firms with high CSR scores are completed faster, are less likely to fail, and create more wealth for acquirer shareholders.

Litigation is costly to defendant firms in terms of damages or settlement awards and attorney fees (Ferris et al. (2007), Karpoff, Lee, and Martin (2008), and Gande and Lewis (2009)). In addition to these direct costs, litigation can have a detrimental effect on firm reputation and subsequent external financing (e.g., Autore et al. (2014), Deng et al. (2014), and Arena (2018)). Arena and Julio (2015) and Nguyen et al. (2018) find that firms exposed to litigation risk tend to hold greater cash reserves for precautionary purposes. Shareholder litigation threat also causes managerial risk aversion and decreases corporate innovation (Lin et al. (2021)).

CSR has the potential to mitigate the risk and costs associated with litigation. Godfrey et al. (2009) conduct an event study on the value effect of legal or regulatory actions against firms and document that the shareholders of the firms that had previously acquired moral capital through CSR activities experience less negative abnormal returns. Atanasov, Ivanov, and Litvak (2012) report a negative relation between the reputation of venture capital firms and the propensity to be involved in litigation. Barnett et al. (2018) find fewer incidents of lawsuits for firms that have higher CSR scores. Koh et al. (2014) examine the relation between CSR and firm value conditional on shareholder litigation risk and find that firms with higher litigation risk tend to benefit more from CSR. The adoption of UD laws weakens shareholder litigation rights, thereby lowering shareholder litigation risk. If firms pursue CSR partly as a risk management strategy against shareholder litigation, they should be less concerned about CSR following the passage of UD laws, and we would expect CSR scores to decrease.

An alternative explanation for CSR is grounded in the managerial agency theory, under which the motivation for investing in CSR stems from managers' self-interest rather than the interest of shareholders. Cheng et al. (2010) find that increased managerial ownership or shareholder monitoring following the passage of shareholder-initiated governance proposal, which alleviates managerial agency problems, leads to a decrease in CSR. Masulis and Reza (2014) also find evidence

that suggests CSR to be an agency problem. They report that corporate giving is positively related to CEO compensation, but it provides only marginal benefit to shareholders. Di Giuli and Kostovetsky (2014) document that firms affiliated with Democratic (vs. Republican) founders, CEOs, and directors, and located in a Democratic- (vs. Republican-) leaning state, have higher CSR scores, but such increases in CSR scores do not benefit the firms nor their shareholders. Another example of the agency view comes from Adhikari (2016), who shows that decreased analyst coverage leads to an increase in CSR scores, a result expected for a managerial agency problem due to decreased monitoring. Nguyen, Kecskés, and Mansi (2020) argue that managers will choose the level of CSR activities that maximizes shareholder value if they are properly monitored by long-term investors. To the extent that the passage of UD laws weakens the governance power of shareholder litigation while CSR reflects managerial agency problems, we expect managers to increase CSR activities, leading to an increase in CSR scores following the adoption of UD laws.

The ultimate impact of the adoption of UD laws on firm CSR scores will reflect the tension between the opposing effects discussed above; thus, the net effect of the UD laws adoption on firm CSR needs to be determined empirically.

III. Sample, Variable Construction, and Descriptive Statistics

Our sample period is determined by the staggered adoption of UD laws by 23 U.S. states as presented in Table 1 and the availability of CSR scores. Georgia

TABLE 1
State Adoptions of Universal Demand (UD) Laws

Table 1 provides the list of the states that adopted UD laws and number of firm-year observations for each state.

UD Law Adoption Year	State	Number of Firm-Year Observations
1989	Georgia	248
1989	Michigan	270
1990	Florida	387
1991	Wisconsin	243
1992	Montana	10
1992	Virginia	317
1992	Utah	77
1993	New Hampshire	47
1993	Mississippi	237
1995	North Carolina	278
1996	Arizona	177
1996	Nebraska	57
1997	Connecticut	269
1997	Maine	7
1997	Pennsylvania	454
1997	Texas	723
1997	Wyoming	9
1998	Idaho	36
2001	Hawaii	1
2003	Iowa	76
2004	Massachusetts	441
2005	Rhode Island	58
2005	South Dakota	12
	Delaware	2,033
	New York	761
	California	1,042
	Other states	3,699
	Total firm-year observations	11,969

and Michigan were the first states to pass UD laws in 1989, and Rhode Island and South Dakota adopted UD laws in 2005. Like previous CSR studies (e.g., Kim, Li, and Li (2014), Nguyen et al. (2020)), our sample begins in 1995, when CSR scores are available in the MSCI ESG Stats database, formerly maintained by Kinder, Lydenberg, Domini & Co. (KLD), and ends in 2009, 4 years after the last state adopted UD law.⁷

Our sample includes all U.S. public firms with CSR ratings in the MSCI ESG Stats database during the sample period. We further require stock price and accounting data availability in the CRSP and S&P's Compustat, respectively, and exclude firms from the highly regulated utility and financial industries (4-digit SIC codes from 4,900 to 4,999 and 6,000 to 6,999, respectively). To mitigate the effects of outliers, we winsorize all continuous variables at the 1st and 99th percentiles. Our final sample includes 11,969 firm-year observations over the period 1995–2009. Table 1 shows the distribution of firm-year observations of our sample for each state.

We report the summary statistics of the sample in Table 2. Following prior research (e.g., Kim et al. (2014)), we construct the CSR_SCORE as the net rating for the firm based on total strengths minus concerns in six MSCI ESG categories: community, diversity, employee relations, environment, human rights, and product.⁸ Because CSR_SCORE is positively related to CSR activities, we use it as a proxy for CSR activities. UD_LAW is an indicator variable that takes the value of 1 for the years in which UD law is effective in a firm's state of incorporation, and

TABLE 2
Summary Statistics

Table 2 reports the descriptive statistics of the sample. CSR_SCORE is the corporate social responsibility score constructed from the MSCI ESG Stats data. UD_LAW is an indicator variable that takes the value of 1 for the years in which UD law is effective in a firm's state of incorporation, and 0 otherwise. SIZE is measured as the natural logarithm of the book value of annual sales. MARKET_TO_BOOK is defined as the market value of assets divided by the book value of assets. BOOK_LEVERAGE is the ratio of the book value of debt to the book value of assets. FIRM_AGE is the number of years that a firm has appeared in Compustat. PROFITABILITY is the ratio of income before extraordinary items including depreciation and amortization to the book value of assets. DIVIDEND is an indicator variable that takes the value of 1 if a firm pays a common dividend in the year, and 0 otherwise. Other variables are defined in the Appendix. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Variable	Firms in UD Law States									Firms in Non-UD Law States			
	Pre-UD Laws Adoption				Post-UD Laws Adoption				Difference in Means				
	N	Mean	Median	Std. Dev.	N	Mean	Median	Std. Dev.	Difference in Means	N	Mean	Median	Std. Dev.
CSR_SCORE	943	0.113	0.000	0.512	1,694	−0.219	−0.250	0.556	−0.332***	9,332	−0.191	−0.210	0.583
UD_LAW	943	0.000	0.000	0.000	1,694	1.000	1.000	0.000	1.000	9,332	0.000	0.000	0.000
SIZE	943	6.836	6.944	1.322	1,694	7.013	6.944	1.471	0.177	9,332	6.948	6.954	1.861
MARKET_TO_BOOK	943	2.287	1.890	1.840	1,694	2.099	1.712	1.177	−0.188	9,332	2.128	1.738	1.598
BOOK_LEVERAGE	943	0.174	0.152	0.149	1,694	0.195	0.178	0.163	0.021	9,332	0.202	0.182	0.182
FIRM_AGE	943	25.615	19,000	15,491	1,694	23.979	17,000	14,893	−1.636	9,332	22.655	16,000	16.136
PROFITABILITY	943	0.139	0.143	0.088	1,694	0.126	0.141	0.101	−0.013	9,332	0.117	0.128	0.145
DIVIDEND	943	0.510	1.000	0.502	1,694	0.508	1.000	0.488	−0.002	9,332	0.430	0.000	0.495
STOCK_RETURN	943	0.019	0.013	0.103	1,694	0.031	0.022	0.150	0.012*	9,332	0.028	0.020	0.124
RETURN_VOLATILITY	943	0.026	0.024	0.010	1,694	0.029	0.025	0.014	0.003	9,332	0.030	0.026	0.015

⁷Our findings are essentially unchanged if we extend the sample period to 2013.

⁸We provide detailed description of the CSR scores calculation in the Supplementary Material. As a robustness check and compatibility to prior studies (e.g., Servaes and Tamayo (2013), Lins et al. (2017)), we repeat all our tests with a CSR measure that excludes human rights, but our findings are essentially unchanged.

0 otherwise. SIZE is measured as the natural logarithm of the book value of annual sales. MARKET_TO_BOOK refers to the market value of assets divided by the book value of assets. BOOK_LEVERAGE is the ratio of the book value of debt to the book value of assets. FIRM_AGE is the number of years a firm has appeared in Compustat. PROFITABILITY is the ratio of income before extraordinary items including depreciation and amortization to the book value of assets. DIVIDEND is an indicator variable that takes the value of 1 if a firm pays a common dividend in the year, and 0 otherwise. STOCK_RETURN is the natural logarithm of the average daily stock return and RETURN_VOLATILITY is the standard deviation of daily stock returns of a firm for the year. The [Appendix](#) provides the definitions of the variables. The mean (median) CSR score for the 11,969 firm-year observations is -0.203 (-0.231), which indicates that the average (median) firm has more CSR concerns than strengths. These statistics are generally consistent with those reported in the literature (e.g., Deng et al. (2013), Servaes and Tamayo (2013), Borisov, Goldman, and Gupta (2016), and Lins et al. (2017)). We report separate summary statistics for the periods before and after the UD laws adoption for firms incorporated in UD law states, and those for firms incorporated in non-UD law states. The descriptive statistics indicate that the mean of CSR score is 0.113 pre-UD laws adoption, and it is -0.219 after UD laws adoption. We also test the difference between CSR scores pre- and post-UD laws adoption, and the results indicate that CSR score decreases significantly following the passage of UD laws. The difference tests also show that other firm characteristics are statistically indifferent pre- and post-UD laws adoption.

To document the frequency and type of claims brought against firms as well as the success rate, we compile a sample of derivative lawsuits from Audit Analytics for which we can identify the state of incorporation for the firms involved and hand-collect litigation details from the CourtListener, PACER (Public Access to Court Electronic Records), and Law360 databases. Table A1 in the Supplementary Material shows the distribution of the lawsuits, the types of allegations, and the success rates by state. Between the two groups, we find that the mean success rate for the states that have not adopted UD laws is 28% compared to a mean of 14% for the states that have adopted the laws, which suggests that derivative lawsuits in those states that adopt UD laws have a lower success rate. We examine the direct relation between the number of derivative lawsuits in a state and the likelihood of the state's adoption of UD law and report results in Table A2 in the Supplementary Material. The results of a state-level UD laws adoption probit model indicate a positive and significant relation between the number of derivative lawsuits and the state's likelihood of adopting UD law. Taken together, these results are consistent with the view that states with more derivative lawsuits are more likely to adopt UD laws, which reduce the success rate of subsequent lawsuits.

IV. Empirical Models, Results, and Discussions

A. Baseline Regressions

Our baseline CSR regression model specification is motivated by recent research on the determinants of CSR (e.g., Hong, Kubik, and Scheinkman (2012),

Di Giuli and Kostovetsky (2014), Adhikari (2016), and Boubakri, El Ghoul, Wang, Guedhami, and Kwok (2016)). Moreover, following recent studies that employ the staggered adoption of UD laws as a quasi-natural experiment (e.g., Nguyen et al. (2018), Ni and Yin (2018), and Appel (2019)), we use a DID model to identify the effect of weakened shareholder litigation rights on CSR:

$$(1) \quad \text{CSR_SCORE}_{i,s,t} = \alpha + \beta_1 \text{UD_LAW}_{s,t} + \beta_2 \text{SIZE}_{i,s,t-1} + \beta_3 \text{MARKET_TO_BOOK}_{i,s,t-1} \\ + \beta_4 \text{BOOK_LEVERAGE}_{i,s,t-1} + \beta_5 \text{FIRM_AGE}_{i,s,t-1} + \beta_6 \text{PROFITABILITY}_{i,s,t-1} \\ + \beta_7 \text{DIVIDEND}_{i,s,t-1} + \beta_8 \text{STOCK_RETURN}_{i,s,t-1} \\ + \beta_9 \text{RETURN_VOLATILITY}_{i,s,t-1} + \beta_{10} \text{STATE_GDP_GROWTH}_{s,t-1} \\ + \beta_{11} \text{STATE_GDP_PER_CAPITA}_{s,t-1} + \text{INDUSTRY_FIXED_EFFECTS} + \varepsilon_{i,t}$$

where i , s , and t index firms, states of incorporation, and years, respectively. The dependent variable is CSR_SCORE. We set the test variable, UD_LAW, to 1 if state s has adopted UD law in year t , and 0 otherwise.

Larger, more valuable, and more profitable firms have a greater ability to spend resources on CSR (Hong et al. (2012)). Thus, we expect positive coefficients for the control variables SIZE, MARKET_TO_BOOK, and PROFITABILITY in our CSR regressions. Conversely, debt, dividends, and business risk might reduce a firm's ability to expend resources on CSR (Adhikari (2016)). As such, we expect negative coefficients for BOOK_LEVERAGE, DIVIDEND (an indicator variable for dividend payout), and RETURN_VOLATILITY. We also control for STOCK_RETURN, which has a negative effect on CSR (Adhikari (2016)), and FIRM_AGE, which has a positive effect on CSR (Boubakri et al. (2016)).

Table 3 reports the results of the CSR baseline regressions. Column 1 includes SIZE, MARKET_TO_BOOK, BOOK_LEVERAGE, and FIRM_AGE as control variables, as well as industry fixed effects. Column 2 additionally controls for PROFITABILITY and DIVIDEND. Column 3 further includes STOCK_RETURN and RETURN_VOLATILITY as control variables. The results indicate that the coefficients of UD_LAW are negative (from -0.042 to -0.035) and statistically significant at the 1% and 5% levels in all models. The directions of the relations between the control variables and CSR are generally consistent with our predictions, with positive and statistically significant coefficients on SIZE, MARKET_TO_BOOK, PROFITABILITY, and FIRM_AGE, and negative and significant coefficients on BOOK_LEVERAGE and RETURN_VOLATILITY. Because UD laws adoption and CSR scores could be correlated with unobserved factors that could bias the coefficient estimates, such as local economic conditions, we additionally control for state GDP growth and GDP per capita and report the results in column 4 of Table 3. The coefficient of UD_LAW remains negative (-0.036) and statistically significant at the 5% level, suggesting that our finding is not sensitive to controlling for state economic conditions. Columns 5–8 include the same set of controls but are augmented with various types of fixed effects, including industry and state fixed effects, industry and year fixed effects, industry-by-year fixed effects, or industry and headquarters state-by-year fixed effects; however, our finding continues to hold. The economic effect of UD laws adoption on firm CSR scores is also important. The estimated coefficients of UD_LAW indicate that holding other variables unchanged at their sample means, the adoption of UD laws is associated

TABLE 3
UD Laws and CSR: Baseline Regressions

Table 3 reports the results of the CSR regressions. The dependent variable, CSR_SCORE, is the corporate social responsibility score constructed from the MSCI ESG Stats data. UD_LAW is an indicator variable that takes the value of 1 for the years in which UD law is effective in a firm's state of incorporation, and 0 otherwise. SIZE is measured as the natural logarithm of the book value of annual sales. MARKET_TO_BOOK is defined as the market value of assets divided by the book value of assets. BOOK_LEVERAGE is the ratio of the book value of debt to the book value of assets. FIRM_AGE is the natural logarithm of number of years that a firm has appeared in Compustat. PROFITABILITY is the ratio of income before extraordinary items including depreciation and amortization to the book value of assets. DIVIDEND is an indicator variable that takes the value of 1 if a firm pays a common dividend in the year, and 0 otherwise. STATE_GDP_GROWTH is the state-level GDP growth rate over the fiscal year. STATE_GDP_PERCAPITA is the natural logarithm of a state GDP per capita. Other variables are defined in the Appendix. *t*-statistics based on heteroscedasticity-robust standard errors clustered by firms are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Variable	1	2	3	4	5	6	7	8
UD_LAW	−0.035** (2.32)	−0.042*** (2.82)	−0.038** (2.49)	−0.036** (2.37)	−0.035** (2.15)	−0.047*** (2.77)	−0.029** (2.21)	−0.043*** (2.99)
SIZE	0.020*** (4.73)	0.014*** (2.88)	0.013*** (2.62)	0.013*** (2.59)	0.014*** (2.76)	0.026*** (3.49)	0.032*** (2.82)	0.029*** (3.27)
MARKET_TO_BOOK	0.051*** (11.80)	0.048*** (11.34)	0.048*** (11.00)	0.048*** (10.94)	0.046*** (10.56)	0.032*** (6.90)	0.044*** (11.25)	0.033*** (9.17)
BOOK_LEVERAGE	−0.113*** (3.76)	−0.108*** (3.59)	−0.088*** (2.84)	−0.083*** (2.67)	−0.057* (1.83)	−0.106*** (2.94)	−0.071** (2.34)	−0.105*** (3.75)
FIRM_AGE	0.058*** (7.35)	0.056*** (6.58)	0.057*** (6.57)	0.057*** (6.53)	0.055*** (6.19)	0.048*** (4.74)	0.061*** (7.68)	0.042*** (5.38)
PROFITABILITY		0.151*** (3.86)	0.141*** (3.37)	0.140*** (3.35)	0.135*** (3.27)	0.146*** (2.64)	0.029 (0.74)	0.120*** (3.06)
DIVIDEND		0.012 (0.95)	0.006 (0.48)	0.006 (0.42)	0.005 (0.39)	−0.032** (2.05)	0.003 (0.27)	−0.014 (1.18)
STOCK_RETURN			−0.031 (0.78)	−0.03 (0.75)	−0.025 (0.62)	−0.007 (1.27)	−0.01 (0.27)	−0.016 (0.46)
RETURN_VOLATILITY			−0.902** (2.41)	−0.931** (2.19)	−0.873** (2.04)	−0.986*** (3.20)	−0.804*** (4.27)	−0.945*** (3.41)
STATE_GDP_GROWTH				−0.033 (0.19)	0.023 (0.13)	−0.135 (0.52)	−0.073 (1.09)	−0.037 (1.16)
STATE_GDP_PERCAPITA				0.001 (0.03)	−0.131*** (2.71)	−0.123*** (2.85)	−0.067* (1.88)	−0.083** (1.88)
Intercept	−0.574*** (17.57)	−0.544*** (15.38)	−0.509*** (12.83)	−0.519 (1.24)	0.903* (1.71)	−0.795*** (3.79)	−0.270*** (3.24)	−0.410*** (3.62)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Year fixed effects	No	No	No	No	No	Yes	No	No
State fixed effects	No	No	No	No	Yes	No	No	No
Industry-by-year fixed effects	No	No	No	No	No	No	Yes	No
State-by-year fixed effects	No	No	No	No	No	No	No	Yes
No. of obs.	11,969	11,969	11,969	11,969	11,969	11,969	11,969	11,969
Adjusted R ²	0.06	0.07	0.07	0.07	0.08	0.12	0.08	0.11

with a decrease of 0.029 to 0.047 in CSR score, which is equivalent to 16%–26% of the absolute value of the sample mean. These results support the argument that the adoption of UD laws leads to a decrease in the firms' CSR scores.

The DID approach is grounded in the parallel trend assumption that without the treatment, which is the passage of UD laws, the CSR scores of the treatment and control firms should evolve in a similar way. To address any concern that our results are driven by the systematic differences between the treatment and control firms rather than the adoption of UD laws, we use a weighted sample derived by entropy balancing (Hainmueller (2012)) to rerun our analysis. This approach assigns different continuous weights to all control firms, leading to nearly perfect covariate balance along several observable dimensions across treated and control samples.

The results based on the entropy balancing approach reported in Table A3 in the Supplementary Material indicate that our finding is qualitatively unchanged.

B. Dynamic Models

It is possible that both CSR and UD laws adoption follow time trends and that the observed negative relation between CSR and UD laws adoption in the DID model in Section IV.A may already have been present even before the adoption of the UD laws. To alleviate this concern, we estimate the following dynamic DID model:

$$(2) \quad \text{CSR_SCORE}_{i,s,t} = \alpha + \beta_1 \text{UD_LAW}_{s,t}^{-3} + \beta_2 \text{UD_LAW}_{s,t}^{-2} + \beta_3 \text{UD_LAW}_{s,t}^{-1} \\ + \beta_4 \text{UD_LAW}_{s,t}^0 + \beta_5 \text{UD_LAW}_{s,t}^{+1} + \beta_6 \text{UD_LAW}_{s,t}^{+2} \\ + \beta_7 \text{UD_LAW}_{s,t}^{\geq+3} + \mathbf{X}_{i,s,t-1} \boldsymbol{\lambda} \\ + \text{INDUSTRY_FIXED_EFFECTS} + \varepsilon_{i,t},$$

where i , s , and t index firms, states of incorporation, and years, respectively. The dependent variable is CSR_SCORE. We set the seven indicator variables UD_LAW⁻³, UD_LAW⁻², UD_LAW⁻¹, UD_LAW⁰, UD_LAW⁺¹, UD_LAW⁺², and UD_LAW^{≥+3} to 1 if the firm is incorporated in a state that will pass the UD law in the next 3 years, will pass the law in the next 2 years, will pass the law next year, passes the law this year, passed the law 1 year ago, passed the law 2 years ago, or passed the law 3 or more years ago respectively. The set of control variables is similar to that in the baseline regression model in equation (1). The estimation results reported in Table 4 indicate that the coefficients of UD_LAW⁻³, UD_LAW⁻², UD_LAW⁻¹, UD_LAW⁰, and UD_LAW⁺¹ are statistically insignificant while the coefficients of UD_LAW⁺², and UD_LAW^{≥+3} are negative and significant, suggesting that the decrease in CSR occurs after the adoption of UD laws but not before. This evidence supports our assumption of pretreatment parallel trends and further rules out time trends as a possible explanation for our finding.

A state's adoption of a policy could be a competitive response to the policies adopted by its neighboring states. Figure A1 in the Supplementary Material locates states that have adopted UD laws on a map of the U.S. that shows that most UD laws states are contiguous with at least one other UD laws state. We run a probit model to predict a state's likelihood of adopting UD law conditional on the ratio of number of neighboring states that have adopted UD laws. The results reported in Table A4 in the Supplementary Material indicate that a state's likelihood of adopting UD law is affected by the policy adoption of its neighboring states.

C. Litigation Risk Ex Ante

Firms faced with higher risk of shareholder litigation may choose to engage in CSR activities to reduce the risk of lawsuits ex ante and mitigate their consequences ex post. Following this argument, we expect the negative relation between the UD laws adoption and CSR to be more pronounced for firms facing a higher likelihood of shareholder litigation ex ante. To explore this prediction, we use a probit model and data obtained from the Audit Analytics database to estimate the propensity that a firm in the Compustat database faces a derivative lawsuit (Kim and Skinner (2012), Arena (2018)) in a given year. The dependent variable in the probit model

TABLE 4
UD Laws and CSR: Dynamic Models

Table 4 reports the results of the dynamic CSR regressions. The dependent variable is CSR_SCORE constructed from the MSCI ESG Stats data. The seven indicator variables UD_LAW⁻³, UD_LAW⁻², UD_LAW⁻¹, UD_LAW⁰, UD_LAW⁺¹, UD_LAW⁺², and UD_LAW^{≥+3} are set to 1 if the firm is incorporated in a state that will pass the UD law in the next 3 years, will pass the law in the next 2 years, will pass the law next year, passes the law this year, passed the law 1 year ago, passed the law 2 years ago and passed the law 3 or more years ago, respectively. Other variables are defined in the Appendix. *t*-statistics based on heteroscedasticity-robust standard errors clustered by firms are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Variable	1	2	3	4	5
UD_LAW ⁻³	-0.079 (0.57)	-0.056 (0.53)	0.027 (0.51)	0.039 (0.47)	-0.048 (0.35)
UD_LAW ⁻²	0.052 (0.50)	0.067 (0.73)	0.134 (1.51)	0.049 (0.47)	0.148 (1.35)
UD_LAW ⁻¹	0.041 (0.38)	0.055 (0.58)	0.085 (0.88)	0.062 (0.61)	0.120 (1.14)
UD_LAW ⁰	0.067 (0.97)	0.074 (1.16)	0.063 (0.99)	0.169 (1.52)	0.043 (0.69)
UD_LAW ⁺¹	0.078 (0.91)	0.086 (1.48)	0.014 (0.23)	0.101 (1.26)	0.079 (1.33)
UD_LAW ⁺²	-0.097* (1.73)	-0.012* (1.67)	-0.013* (1.69)	-0.010* (1.70)	-0.009* (1.66)
UD_LAW ^{≥+3}	-0.043** (2.24)	-0.026* (1.82)	-0.036** (2.08)	-0.017* (1.77)	-0.021* (1.71)
SIZE	0.044*** (12.00)	0.030*** (6.90)	0.045*** (10.48)	0.028*** (5.92)	0.036*** (7.90)
MARKET_TO_BOOK	0.039*** (11.02)	0.031*** (8.60)	0.036*** (10.02)	0.034*** (8.81)	0.031*** (8.68)
BOOK_LEVERAGE	-0.085*** (2.83)	-0.101*** (3.70)	-0.057** (2.03)	-0.079*** (2.62)	-0.099*** (3.51)
FIRM_AGE	0.047*** (5.83)	0.037*** (4.90)	0.051*** (6.35)	0.048*** (6.05)	0.040*** (5.07)
PROFITABILITY	0.091** (2.10)	0.109*** (2.85)	0.086** (2.25)	0.028 (0.74)	0.068* (1.77)
DIVIDEND_DUMMY	0.017 (1.36)	-0.007 (0.61)	0.024** (1.97)	-0.002 (0.20)	0.001 (0.10)
STOCK_RETURN	-0.038 (0.97)	-0.014 (0.41)	-0.031 (0.89)	0.025 (0.68)	-0.023 (0.67)
RETURN_VOLATILITY	-0.912** (2.21)	-1.805*** (4.65)	-0.967** (2.50)	-3.851*** (8.67)	-1.997*** (5.06)
STATE_GDP_GROWTH	-0.048 (0.31)	-0.571*** (3.41)	0.07 (0.46)	-0.173 (0.93)	-0.517*** (3.37)
STATE_GDP_PER_CAPITA	-0.027 (0.86)	0.196*** (5.29)	-0.233*** (4.38)	0.06 (1.57)	0.131*** (3.55)
Intercept	-0.370 (1.09)	-2.625*** (6.50)	1.818*** (3.13)	-1.067*** (2.69)	-1.947*** (4.84)
Industry fixed effects	Yes	Yes	Yes	No	Yes
Year fixed effects	No	Yes	No	No	No
State fixed effects	No	No	Yes	No	No
Industry-by-year fixed effects	No	No	No	Yes	No
State-by-year fixed effects	No	No	No	No	Yes
No. of obs.	11,969	11,969	11,969	11,969	11,969
Adjusted R ²	0.12	0.14	0.14	0.13	0.16

is a derivative lawsuit indicator that takes the value of 1 if a firm faces a derivative lawsuit in a given year, and 0 otherwise. Table A5 in the Supplementary Material reports the results of the probit model.⁹

⁹We report the derivative lawsuits probability and the distribution of firms with high litigation risk by the state of headquarters in Table A6 in the Supplementary Material. The number of firms with high litigation risk that locate headquarters among states that adopt UD laws ranges from 49 in WI and MI to

We use the probit model results to estimate the propensity that a firm faces a derivative lawsuit on a year-by-year basis and sort firms into litigation risk terciles based on the litigation propensity. We define a `HIGH_(MODERATE)_LITIGATION_RISK` indicator that takes the value of 1 for firms that have the derivative lawsuit propensity in the top (middle) tercile, and 0 otherwise. We then run CSR regressions augmented with the interactions between `UD_LAW` and 1-period lagged `HIGH_(MODERATE)_LITIGATION_RISK`. The results reported in Table 5 indicate that the coefficients of the interactions between `UD_LAW` and `HIGH_(MODERATE)_LITIGATION_RISK` are negative and statistically significant at the 1% (5%–10%) level, which is consistent with our expectation. Moreover, the coefficients of the stand-alone `HIGH_(MODERATE)_LITIGATION_RISK` are positive and highly significant, indicating that firms faced with high litigation risk have a greater CSR scores.¹⁰ While one interpretation of the negative relation between UD Law and CSR score from Table 3 is that firms tend toward lower CSR scores following the passage of UD laws, the results in Table 5 suggest a more refined interpretation. As litigation risk decreases, firms may not need to differentiate themselves on the basis of CSR.¹¹

Compared with financially constrained firms, financially unconstrained firms are prone to higher litigation risk due to their higher cash availability for settlement. To the extent that UD laws reduce the likelihood of derivative lawsuits, we expect the importance of CSR as insurance-like protection against litigation risk to decrease, and thus the negative relation between UD laws and CSR activities should be stronger for financially unconstrained firms. We sort firms into financially constrained and unconstrained subgroups using four different measures of financial constraints. We follow Faulkender and Petersen (2006) and use the S&P long-term credit ratings as the first measure. The financially unconstrained (constrained) subgroup includes firms with (without) credit ratings. The second measure employs dividend payout for classification (Fazzari et al. (1988)), with financially unconstrained (constrained) firms being those that pay (do not pay) dividends. The third measure is the WW index (Whited and Wu (2006)), which we calculate as follows:

$$\begin{aligned} (3) \quad WW_INDEX = & -0.091CASH_FLOW - 0.062DIVIDEND \\ & + 0.021LONG_TERM_DEBT - 0.044SIZE \\ & + 0.102INDUSTRY_SALES_GROWTH \\ & - 0.035SALES_GROWTH, \end{aligned}$$

where `CASH_FLOW` is the ratio of EBITDA to the book value of assets, `DIVIDEND` is an indicator variable that takes the value of 1 if a firm pays a common

324 in MA, and 345 in TX, which are more than some other states that have not adopted UD laws like New York (296) and Delaware (311), but are lower than California (498).

¹⁰To alleviate any concern that our finding related to the stand-alone `HIGH_LITIGATION_RISK` variable is driven econometrically by the inclusion of the interaction between `UD_LAW` and `HIGH_LITIGATION_RISK`, we run a regression that excludes `UD_LAW` and find that the coefficient of `HIGH_LITIGATION_RISK` remains positive and highly significant.

¹¹For example, the coefficient estimates reported in Column 1 of Table 5 indicate that high litigation firms have a net effect of $-0.043 (= 0.025 - 0.185 + 0.117)$ on CSR score after UD law, while low litigation firms have a net effect of 0.025. We thank the reviewer for suggesting this interpretation.

TABLE 5
UD Laws and CSR: Shareholder Litigation Threats

Table 5 reports the results of the CSR regressions augmented with firms' shareholder litigation threats. The dependent variable is CSR_SCORE constructed from the MSCI ESG Stats data. UD_LAW is an indicator variable that takes the value of 1 for the years in which UD law is effective in a firm's state of incorporation, and 0 otherwise. HIGH_LITIGATION_RISK is an indicator variable that takes the value of 1 for firms that have the derivative lawsuit propensity in the top tercile, and 0 otherwise, where derivative lawsuit propensity is the likelihood of a derivative lawsuit faced by a firm in the year estimated by a probit model. MODERATE_LITIGATION_RISK is an indicator variable that takes the value of 1 for firms that have the derivative lawsuit propensity in the middle tercile, and 0 otherwise. Other variables are defined in the Appendix. *t*-statistics based on heteroscedasticity-robust standard errors clustered by firms are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Variable	1	2	3	4
UD_LAW	0.025 (1.20)	−0.002 (0.11)	−0.001 (0.07)	−0.003 (0.02)
UD_LAW × HIGH_LITIGATION_RISK	−0.185*** (4.38)	−0.158*** (3.72)	−0.160*** (3.76)	−0.162*** (3.82)
UD_LAW × MODERATE_LITIGATION_RISK	−0.032* (1.92)	−0.027* (1.81)	−0.029** (2.03)	−0.025* (1.75)
HIGH_LITIGATION_RISK	0.117*** (7.48)	0.107*** (6.09)	0.103*** (5.85)	0.112*** (6.16)
MODERATE_LITIGATION_RISK	0.030 (0.84)	0.033 (0.96)	0.032 (0.92)	0.030 (0.87)
SIZE		−0.003 (0.58)	−0.004 (0.65)	−0.005 (0.96)
MARKET_TO_BOOK		0.042*** (9.98)	0.042*** (10.03)	0.043*** (10.04)
BOOK_LEVERAGE		−0.026 (0.81)	−0.022 (0.70)	−0.016 (0.49)
FIRM_AGE		0.060*** (6.85)	0.059*** (6.76)	0.059*** (6.66)
PROFITABILITY		0.226*** (5.41)	0.204*** (4.73)	0.201*** (4.66)
DIVIDEND		0.051*** (3.51)	0.045*** (3.02)	0.044*** (2.98)
STOCK_RETURN			−0.029 (0.74)	−0.028 (0.72)
RETURN_VOLATILITY			−0.853** (2.27)	−0.954** (2.23)
STATE_GDP_GROWTH				−0.099 (0.58)
STATE_GDP_PER_CAPITA				−0.065* (1.67)
Intercept	−0.199*** (20.96)	−0.482*** (13.16)	−0.444*** (11.19)	0.277 (0.64)
Industry fixed effects	Yes	Yes	Yes	Yes
No. of obs.	10,908	10,908	10,908	10,908
Adjusted R^2	0.04	0.07	0.07	0.07

dividend in the year, and 0 otherwise, LONG_TERM_DEBT is the ratio of total long-term debt to the book value of assets, SALES_GROWTH is the ratio of a firm's change in total sales from year $t - 1$ to year t , and INDUSTRY_SALES_GROWTH is the average sales growth of firms belonging to the same 3-digit SIC-code industry. We classify firms in the top (bottom) tercile of the WW index as financially constrained (unconstrained). Our final financial constraint measure is the SA index (Hadlock and Pierce (2010)):

$$(4) \quad SA_INDEX = -0.737AT + 0.043AT^2 - 0.040AGE,$$

where AT is the natural logarithm of inflation-adjusted book assets, and AGE is the number of years the firm has been on Compustat. Financially constrained

(unconstrained) firms include those in the top (bottom) tercile of the SA index. Table A7 in the Supplementary Material reports the results of the CSR regressions for financially constrained and unconstrained subgroups. The results indicate that the negative relation between UD law and CSR is stronger for financially unconstrained firms, which is consistent with our expectation.

D. Firm and Manager Reputation

Firms may purchase D&O insurance to protect managers from litigation-related responsibilities; however, D&O insurance may not provide coverage in case of management dishonesty or intentional misconduct (Ferris et al. (2007)), leaving firms exposed to costly settlements and attorney fees. Moreover, even if D&O insurance covers the financial responsibilities, managers may still be concerned about reputation loss due to litigation for which there is no obvious insurance market. Damaging information from shareholder litigation may reduce outside stakeholders' trust in and willingness to do business with firms and managers, and adversely affect managers' job security and wealth. To assess the impact of litigation on CEO job security and compensation, we examine forced CEO turnover over a 3-year window after a derivative lawsuit.¹² The results reported in Table A8 in the Supplementary Material show that the likelihood of a forced CEO turnover increases following a derivative lawsuit and more so after a successful lawsuit, whereas UD laws adoption reduces the likelihood of such turnover. We further examine the relation between derivative lawsuits and CEO compensation and report the results in Table A9 in the Supplementary Material. The evidence indicates negative relations between CEO compensation and derivative lawsuits and successful lawsuits.

Against this background, CSR could be a way to build reputational capital and reduce the risk and costs of litigation, thereby mitigating firm and manager reputation loss from litigation. The adoption of UD laws will reduce the need to engage in CSR activities for reputational capital, particularly for firms and managers that are more sensitive to reputation concern. We investigate the relation between UD laws adoption and CSR for firms that vary on firm reputation. We construct CORPORATE_REPUTATION as an indicator variable that takes the value of 1 for firms included in *Fortune's* annual list of Most Admired Companies in the year, and 0 otherwise (Jones et al. (2000)). We run the CSR regressions augmented with CORPORATE_REPUTATION and its interaction with UD_LAW. The results reported in columns 1 and 2 of Table 6 indicate that the coefficients of the interaction variable between UD_LAW and CORPORATE_REPUTATION are negative and significant while the stand-alone coefficients of CORPORATE_REPUTATION are positive and highly significant. These results corroborate our argument that firms are less concerned about reputation loss due to litigation following the passage of UD laws and thus obtain lower CSR scores.

¹²We thank the reviewer for suggesting looking at CEO turnover following derivative lawsuits.

TABLE 6
UD Laws, Firm and Manager Reputation, and CSR

Table 6 reports the results of the CSR regressions augmented with corporate reputation. The dependent variable is CSR_SCORES constructed from the MSCI ESG Stats data. UD_LAW is an indicator variable that takes a value of 1 for the years in which UD law is effective in a firm's state of incorporation, and 0 otherwise. CORPORATE_REPUTATION is an indicator variable that equals to 1 for firms in the list of *Fortune* magazine's Most Admired Companies in the year, and 0 otherwise. CEO_INDEPENDENT_DIRECTOR is an indicator variable that equals to 1 if CEO is an independent director on another firm's board of directors, and 0 otherwise. Other variables are defined in the Appendix. *t*-statistics based on heteroscedasticity-robust standard errors clustered by firms are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Variable	1	2	3	4	5	6
UD_LAW	−0.033 (1.40)	−0.029 (1.21)	−0.026 (1.52)	−0.02 (1.11)	−0.005 (0.30)	−0.006 (0.30)
UD_LAW × CORPORATE_REPUTATION	−0.091** (2.16)	−0.064** (2.34)			−0.090** (2.15)	−0.062* (1.89)
CORPORATE_REPUTATION	0.077*** (3.71)	0.064*** (3.02)			0.056** (2.47)	0.041* (1.84)
UD_LAW × CEO_INDEPENDENT_DIRECTOR			−0.231*** (5.02)	−0.216*** (4.95)	−0.212*** (4.64)	−0.203*** (4.63)
CEO_INDEPENDENT_DIRECTOR			0.156*** (7.80)	0.159*** (7.76)	0.148*** (7.50)	0.151*** (7.51)
SIZE	0.029*** (5.86)	0.027*** (5.26)	0.040*** (7.03)	0.035*** (5.93)	0.031*** (4.71)	0.027*** (3.95)
MARKET_TO_BOOK	0.045*** (11.62)	0.045*** (11.39)	0.055*** (9.51)	0.056*** (9.55)	0.053*** (9.37)	0.055*** (9.44)
BOOK_LEVERAGE	−0.074*** (2.73)	−0.047* (1.65)	−0.033 (0.85)	0.002 (0.06)	−0.014 (0.37)	0.022 (0.55)
FIRM_AGE	0.054*** (7.66)	0.052*** (6.81)	0.031*** (3.49)	0.026*** (2.65)	0.030*** (3.44)	0.022** (2.29)
PROFITABILITY	0.090** (2.44)	0.062 (1.57)	0.172** (2.45)	0.118 (1.56)	0.193*** (2.75)	0.125* (1.65)
DIVIDEND		0.004 (0.32)		0.009 (0.65)		0.023 (1.62)
STOCK_RETURN		−0.029 (0.83)		−0.029 (0.63)		−0.024 (0.52)
RETURN_VOLATILITY		−1.585*** (4.01)		−2.257*** (4.31)		−2.188*** (4.18)
STATE_GDP_GROWTH		(0.220) (1.43)		−0.201 (1.05)		−0.161 (0.85)
STATE_GDP_PER_CAPITA		0.031 (0.89)		0.077* (1.83)		0.082** (1.97)
Intercept	−0.617*** (18.09)	−0.871** (2.31)	−0.663*** (15.61)	−1.372*** (2.98)	−0.601*** (12.80)	−1.370*** (3.01)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	8,706	8,706	8,706	8,706	8,706	8,706
Adjusted R^2	0.08	0.08	0.09	0.09	0.09	0.09

In an additional analysis, we replace firm reputation with manager reputation in the regressions. Manager reputation is proxied by CEO_INDEPENDENT_DIRECTOR, which takes the value of 1 if the CEO is an independent director on another firm's board of directors, and 0 otherwise (Fama and Jensen (1983), Fahlenbrach et al. (2010)). Intuitively, a CEO's appointment as an independent director in another firm indicates the market validation of CEO reputation. The results reported in columns 3 and 4 of Table 6 indicate that the coefficients of the interactions variables between UD_LAW and CEO_INDEPENDENT_DIRECTOR are negative and highly significant while the stand-alone coefficients

of CEO_INDEPENDENT_DIRECTOR are significantly positive.¹³ We further run CSR regressions that include both firm and manager reputation proxies. The results reported in columns 5 and 6 of Table 6 indicate that the coefficients of the interactions between UD_LAW and firm and manager reputation are negative and statistically significant, suggesting that less concern about reputation loss following the UD laws adoption leads firms to reduce CSR activities.

V. Robustness Checks and Additional Analysis

A. Control for Other Laws and Regulations

Our results could be confounded by the state adoption of other laws and regulations during the sample period, such as business combinations laws (BC laws) or poison pill legislation (PP laws). BC and PP laws can affect the likelihood of future takeovers, which in turn affect corporate governance and CSR activities. We define BC_LAW (PP_LAW) as an indicator variable that takes the value of 1 if the state of incorporation for the firm has passed the BC law (PP law) in the year, and 0 otherwise, and control for these laws' adoption in the regressions. The results reported in column 1 (column 2) of Table 7 show that the coefficients of UD_LAW are negative and statistically significant at the 5% (1%) level, suggesting that our findings are robust to controlling for the adoption of BC (PP) laws. We also test, in turn, controlling for the adoption of Private Securities Litigation Reform Act PSLRA, which requires plaintiffs in lawsuits to present evidence of managers intentionally deceiving shareholders that can also impede shareholder litigation.¹⁴ Our unreported results suggest that the negative relation between UD laws adoption and CSR scores is qualitatively unchanged.

B. Control for Securities Class Action Lawsuits as Possible Substitute for Derivative Lawsuits

With UD laws in place that impede derivative lawsuits, shareholders may seek alternative avenues to discipline management through litigation, such as securities class action lawsuits. We obtain data from the Cornerstone Research and Stanford Law School and construct the CLASS_ACTION_LAWSUIT variable as the natural logarithm transformations of the number of securities class action lawsuits in a state each year. The result reported in column 3 of Table 7, which additionally controls for CLASS_ACTION_LAWSUIT, indicates that the coefficient of UD_LAW continues to remain negative and significant at the 5% level. Cheng et al. (2010) report that securities class action lawsuits with institutional investors as lead plaintiffs are more successful in both settlement and corporate governance

¹³In an unreported robustness check, we construct another firm manager reputation variable, INDEPENDENT_DIRECTOR_PERCENTAGE, which is the ratio of a firm's management team that holds independent director positions in other firms. The regression results are qualitatively similar if we use this variable as proxy for manager reputation.

¹⁴However, there is mixed evidence in the literature of the effects of PSLRA. Recent lawsuit statistics indicate that the number of class action lawsuits in 2018 set a record, causing litigation and settlement costs that were almost triple the average amount from 1997 to 2017 (Coffee (2019)). These observations raise doubt about the effectiveness of PSLRA (U.S. Chamber Institute for Legal Reform (2019)).

TABLE 7
UD Laws and CSR: Control for BC Law, PP Law, Class Action Lawsuit,
Political Balance, and Other Corporate Governance Measures

Table 7 reports the results of the CSR regressions. The dependent variable is CSR_SCORES constructed from the MSCI ESG Stats data. UD_LAW is an indicator variable that takes the value of 1 for the years in which UD law is effective in a firm's state of incorporation, and 0 otherwise. BC_LAW (PP_LAW) is an indicator variable that takes the value of 1 for a firm incorporated in a state that has passed the BC law (PP law), and 0 otherwise. CLASS_ACTION_LAWSUITS is measured as the natural logarithm of the number of securities class action lawsuits in a state in the year. POLITICAL_BALANCE is the state-level fraction of the Democratic Party members in the House of Representatives in the year. INSTITUTIONAL_OWNERSHIP is the aggregate equity ownership of institutional investors of a firm in the year. HOSTILE_INDEX is the firm-level index of takeover susceptibility. Other variables are defined in the Appendix. *t*-statistics based on heteroscedasticity-robust standard errors clustered by firms are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Variable	1	2	3	4	5	6
UD_LAW	−0.032** (2.20)	−0.057*** (2.94)	−0.028** (2.14)	−0.027** (2.06)	−0.026* (1.88)	−0.029* (1.71)
BC_LAW	−0.011 (0.50)	−0.012 (0.55)	0.012 (0.50)	0.017 (0.59)	0.019 (0.67)	−0.014 (0.50)
PP_LAW		0.033** (2.09)	0.030* (1.81)	0.027 (1.43)	0.019 (0.94)	0.034 (1.63)
CLASS_ACTION_LAWSUITS			0.028*** (6.26)	0.028*** (6.16)	0.026*** (5.49)	0.025*** (5.23)
POLITICAL_BALANCE				0.163 (0.30)	0.274 (0.49)	0.292 (0.52)
INSTITUTIONAL_OWNERSHIP					−0.096*** (3.61)	−0.098*** (3.63)
HOSTILE_INDEX						0.086 (0.68)
Other control variables	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
No. of obs.	10,251	10,251	10,251	10,251	10,251	10,251
Adjusted <i>R</i> ²	0.10	0.10	0.11	0.11	0.11	0.11

improvement, therefore we also control for, in turn, the number of such suits, but our unreported results indicate that the negative relation between UD laws adoption and CSR scores is qualitatively unchanged. We further find that the threat of securities class action lawsuits is positively related to firms' CSR scores, which further suggests that firms faced with higher shareholder litigation threat invest more in CSR, possibly for insurance-like protection purposes.

C. Control for Political Balance

The adoption of UD laws could reflect political balance in a state. States with Republican dominance tend to favor businesses, and firms might select these states because they are more likely to pass business-friendly legislation such as UD laws. Similarly, political balance may affect CSR activities because they can help build relationship with local political officials (Di Giuli and Kostovetsky (2014)). To control for political balance, we construct the variable POLITICAL_BALANCE, measured as the fraction of Democratic Party members in the House of Representatives of a firm's state of incorporation each year. The result reported in column 4 of Table 7, which additionally controls for POLITICAL_BALANCE, shows that the coefficients of UD_LAW remain negative and statistically significant at the 5% level in all models, suggesting that our finding is not sensitive to controlling for state political balance.

D. Control for Corporate Governance

The MSCI ESG categories also include corporate governance, but prior studies (e.g., Servaes and Tamayo (2013), Kim et al. (2014), and Lins et al. (2017)) exclude governance from CSR score because it is generally not part of a firm's CSR budget. However, corporate governance could be correlated with CSR, particularly if the degree of CSR activities is driven by managerial agency problems. As a robustness check, we run CSR regressions that further control for corporate governance proxied by institutional ownership and hostile takeover index. INSTITUTIONAL_OWNERSHIP is the aggregate equity ownership of institutional investors of a firm. Because institutional investors can better monitor management and intervene when necessary, larger institutional ownership indicates better governance. The HOSTILE_INDEX is the hostile takeover index developed by Cain, McKeon, and Solomon (2017) to measure firm-level takeover susceptibility. A higher (lower) index value implies poorer (better) corporate governance. Column 5 (column 6) of Table 7 reports the results of the regression that further controls for institutional ownership (hostile takeover index). We find that the negative relation between UD_LAW and CSR_SCORE continues to be significant. Moreover, we find a negative relation between institutional ownership and CSR. In an alternative specification, we include, in turn, the GIM antitakeover index developed by Gompers, Ishii, and Metrick (2003) or the managerial entrenchment (BCF) index constructed by Bebchuk, Cohen, and Ferrell (2009) as surrogate for corporate governance, but our main finding is qualitatively similar.^{15,16}

E. Other Unobservable Shocks

To alleviate any concern that our finding of a negative relation between the passage of UD laws and CSR scores is driven by other unobserved shocks that occurred around the time of the state adoption of UD laws, we run placebo tests based on counterfactual state adoption of UD laws using the framework suggested by Cornaggia, Mao, Tian, and Wolfe (2015). Specifically, we obtain the empirical distribution of the UD laws adoption years by states during our sample period and then randomly assign states to the UD laws adoption years (without replacement) following the empirical distribution. This approach maintains the distribution of UD laws adoption years but disrupts the proper assignment of UD laws adoption years to states. The randomization process counterfactually assigns nonadopted states to actual adoption years and thus should weaken the negative relation between the UD laws adoption and CSR. We construct the UD_PLACEBO_DUMMY as an indicator variable that takes the value of 1 for firms incorporated in a state that has been randomly assigned to a year in which the UD law has been adopted, and 0 otherwise. The results reported in Table A10 in the Supplementary Material

¹⁵The coefficients of the GIM_INDEX and the BCF_INDEX are all positive and highly significant, implying that poorly governed firms spend more on CSR. This finding, consistent with the agency explanation for CSR, is in line with the evidence reported in Jo and Harjoto (2012), Cheng, Hong, and Shue (2013), and Masulis and Reza (2014).

¹⁶In an unreported analysis, we further control for managerial equity-based compensation but our results are qualitatively similar.

indicate either a marginally positive or insignificant relation between UD_PLACEBO_DUMMY and CSR, which is inconsistent with our finding based on true UD laws adoption.¹⁷ This evidence suggests that the negative relation between UD laws adoption and CSR scores is unlikely to be driven by other unobserved shocks during the sample period.

F. Control for Corporate Lobbying

Firms can lobby state legislators for the passage of UD laws. Moreover, the process of debating and adopting a law or regulation would take time, and firms could anticipate their outcomes and act accordingly. These arguments raise concern about the exogeneity of the adoption of UD laws that potentially invalidates our inferences. Ni and Yin (2018) note that the adoption of UD law by the Supreme Court of Pennsylvania was in line with judicial precedent, which is less susceptible to corporate lobbying, rather than through legislative action. Moreover, court decisions are less predictable than legislative actions, alleviating concern about the exogeneity of UD laws adoption. Therefore, we run the CSR regressions using a subsample of firms incorporated in Pennsylvania and neighboring states, none of which has adopted UD laws. The estimation results reported in Table 8 indicate that our findings persist.

G. UD Laws and CSR Components

As another robustness check, we examine the effects of UD laws adoption on each of the six CSR components: community, diversity, employee relations, environment, human rights, and product. The results reported in Table A11 in the Supplementary Material indicate that the adoption of UD laws has negative effects on community, diversity, and environment components. We provide some examples of firms that decrease CSR scores following the passage of UD laws in the Supplementary Material. Our results imply that firms have less need to maintain the level of CSR in these components as insurance against litigation following the UD laws adoption. A possible explanation for these results is that these components have greater visibility outside the firm, where reputational effects contribute to the accumulation of moral capital. By contrast, employee relations and human rights are less visible outside the firm. Finally, investing in R&D and maintaining a quality program could lead to more innovative and superior products or services, and both these factors count as strengths in the product component of MSCI ESG. Our evidence of a positive relation between UD laws adoption and the product component is consistent with the finding of Lin et al. (2021) that UD laws adoption is positively related to corporate innovation.¹⁸

¹⁷In unreported analysis, we repeat the randomization process of assigning states to UD laws adoption years 1,000 times and rerun CSR regressions using the randomly generated UD laws adoption data. We find that most of the coefficients of UD_PLACEBO_DUMMY are either positive or statistically insignificant.

¹⁸We run probit regressions to examine which CSR components are more likely to change after the adoption of UD laws. Our unreported results indicate the community, diversity, and environment component scores are more likely to decrease, driven by lower strength scores rather than greater concern scores for the same components.

TABLE 8
UD Laws and CSR: Pennsylvania UD Law Adoption

Table 8 reports the results of the CSR regressions for a subsample of firms incorporated in Pennsylvania and neighboring states. The dependent variable is the CSR_SCORES constructed from the MSCI ESG Stats data. UD_LAW is an indicator variable that takes the value of 1 for the years in which UD law is effective in a firm's state of incorporation, and 0 otherwise. Other variables are defined in the Appendix. *t*-statistics based on heteroscedasticity-robust standard errors clustered by firms are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Variable	1	2	3	4
UD_LAW	−0.551*** (3.70)	−0.377** (2.40)	−0.402** (2.51)	−0.407** (2.45)
SIZE		−0.074*** (2.93)	−0.052** (2.09)	−0.062** (2.56)
MARKET_TO_BOOK		−0.066* (1.66)	−0.064* (1.76)	−0.073* (1.88)
BOOK_LEVERAGE		0.275 (1.41)	0.273 (1.30)	0.384* (1.81)
FIRM_AGE		0.057 (0.99)	0.087 (1.39)	0.087 (1.37)
PROFITABILITY			−0.681* (1.85)	−0.959** (2.52)
DIVIDEND			−0.128* (1.78)	−0.107 (1.33)
STOCK_RETURN				0.449*** (2.66)
RETURN_VOLATILITY				−4.470** (2.12)
Intercept	0.203 (1.40)	0.409 (1.28)	0.329 (1.01)	0.497 (1.48)
Industry fixed effects	Yes	Yes	Yes	Yes
No. of obs.	256	256	256	256
Adjusted R^2	0.15	0.17	0.20	0.23

H. Direct Relation Between Securities Class Action Lawsuits and CSR

The robustness check results discussed in Section V.B indicate that the threat of securities class action lawsuits is also positively related to CSR scores. In this section, we exploit the U.S. Ninth Circuit Court of Appeals' ruling of July 2, 1999 (re: Silicon Graphics Inc. Securities Litigation) as a plausible exogenous shock to the stringency of securities class action litigation standards for firms headquartered in states in the Ninth Circuit to examine the relation between securities class action and CSR. Specifically, the ruling raises the hurdle for securities class action lawsuits against corporations headquartered in the circuit by mandating that plaintiffs prove clear evidence of intentional managerial misbehavior. Pritchard and Sale (2005) and Huang, Roychowdhury, and Sletten (2020) argue that the U.S. Ninth Circuit Court of Appeals' ruling significantly reduces the risk of securities class action litigation to firms headquartered in this circuit. Crane and Koch (2018) report that the number of class action lawsuits in the Ninth Circuit decreased by 43% following the ruling while the number of class action lawsuits increased 14% in other circuits during the same period.

To the extent that firms engage in CSR activities to build reputation capital and reduce the likelihood of shareholder litigation, we expect a negative effect of the Ninth Circuit Court of Appeals' ruling on firm CSR scores. We run CSR regressions for a subsample of firms headquartered in the Ninth Circuit states (Alaska, Arizona,

TABLE 9
U.S. Ninth Circuit Court of Appeal's Ruling and CSR

Table 9 reports the results of the CSR regressions. The dependent variable is CSR_SCORE constructed from the MSCI ESG Stats data. U.S._NINTH_CIRCUIT_COURT_RULING is an indicator variable that takes the value of 1 for the years in which the Ninth Circuit Court of Appeals' ruling is effective in a firm's state of headquarter, and 0 otherwise. SIZE is measured as the natural logarithm of the book value of annual sales. MARKET_TO_BOOK is defined as the market value of assets divided by the book value of assets. BOOK_LEVERAGE is the ratio of the book value of debt to the book value of assets. FIRM_AGE is the natural logarithm of number of years the firm has appeared in Compustat. PROFITABILITY is the ratio of income before extraordinary items including depreciation and amortization to the book value of assets. Other variables are defined in the Appendix. *t*-statistics based on heteroscedasticity-robust standard errors clustered by firms are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Variable	1	2	3	4
U.S._NINTH_CIRCUIT_COURT_RULING	−0.101*** (3.34)	−0.105*** (3.52)	−0.109*** (3.57)	−0.105*** (3.19)
SIZE	0.107*** (13.11)	0.114*** (12.60)	0.117*** (12.81)	0.116*** (12.72)
MARKET_TO_BOOK	0.015*** (3.27)	0.019*** (4.12)	0.015*** (3.40)	0.016*** (3.45)
BOOK_LEVERAGE	−0.310*** (6.10)	−0.304*** (6.03)	−0.312*** (6.03)	−0.310*** (5.98)
FIRM_AGE	0.076*** (4.60)	0.067*** (4.06)	0.072*** (4.35)	0.072*** (4.32)
PROFITABILITY		−0.218*** (3.00)	−0.259*** (3.28)	−0.261*** (3.32)
DIVIDEND		0.075*** (2.69)	0.055** (2.00)	0.055** (1.98)
STOCK_RETURN			−0.035 (0.57)	−0.038 (0.61)
RETURN_VOLATILITY			−1.358** (1.97)	−1.550** (2.04)
STATE_GDP_GROWTH				−0.131 (0.53)
STATE_GDP_PER_CAPITA				−0.033 (0.35)
Intercept	−0.829*** (12.43)	−0.843*** (12.48)	−0.790*** (10.90)	−0.416 (0.40)
Industry fixed effects	Yes	Yes	Yes	Yes
No. of obs.	3,074	3,074	3,074	3,074
Adjusted <i>R</i> ²	0.22	0.22	0.24	0.24

California, Hawaii, Idaho, Montana, Nevada, Oregon, and Washington) and neighboring states, which we use as controls, and report the results in Table 9. We set the test variable, U.S._NINTH_CIRCUIT_COURT_RULING, to 1 for firms headquartered in the Ninth Circuit states after 1999, and 0 otherwise. The estimation results indicate that the coefficients of U.S._NINTH_CIRCUIT_COURT_RULING are negative (from −0.109 to −0.101) and statistically significant at the 1% level, suggesting that a lower threat of securities class action lawsuits following the Ninth Circuit Court of Appeals' ruling leads to lower CSR scores. This evidence is consistent with our finding based on the UD laws adoption.

I. UD Laws, CSR, and Firm Value

If the marginal benefits of engaging in CSR activities as a precautionary measure against the threat and consequences of shareholder litigation dominate its marginal costs, investing money and effort in such CSR activities is worthwhile for firms. Because the adoption of UD laws lowers the risk of shareholder litigation, a corresponding reduction in CSR activities should enhance firm value. To test this

prediction, we examine the value effect of the change in CSR scores conditional on the adoption of UD laws using the market-to-book model (Fama and French (1998), Pinkowitz, Stulz, and Williamson (2006), Dittmar and Mahrt-Smith (2007), and Bates, Kahle, and Stulz (2009)), which has the following form:

$$\begin{aligned}
 (5) \quad \frac{MV_{i,t}}{BA_{i,t}} = & \gamma_0 + \gamma_1 UD_LAW_{i,t} + \gamma_2 UD_LAW_{i,t} \times CSR_SCORE_{i,t} \\
 & + \gamma_3 CSR_SCORE_{i,t} + \gamma_4 \frac{E_{i,t}}{BA_{i,t}} + \gamma_5 \frac{\Delta E_{i,t}}{BA_{i,t}} + \gamma_6 \frac{R\&D_{i,t}}{BA_{i,t}} \\
 & + \gamma_7 \frac{\Delta R\&D_{i,t}}{BA_{i,t}} + \gamma_8 \frac{D_{i,t}}{BA_{i,t}} + \gamma_9 \frac{\Delta D_{i,t}}{BA_{i,t}} + \gamma_{10} \frac{I_{i,t}}{BA_{i,t}} + \gamma_{11} \frac{\Delta I_{i,t}}{BA_{i,t}} \\
 & + \gamma_{12} \frac{\Delta NA_{i,t}}{BA_{i,t}} + \gamma_{13} \frac{\Delta E_{i,t+2}}{BA_{i,t}} + \gamma_{14} \frac{\Delta R\&D_{i,t+2}}{BA_{i,t}} + \gamma_{15} \frac{\Delta D_{i,t+2}}{BA_{i,t}} \\
 & + \gamma_{16} \frac{\Delta I_{i,t+2}}{BA_{i,t}} + \gamma_{17} \frac{\Delta NA_{i,t+2}}{BA_{i,t}} + \gamma_{18} \frac{\Delta MV_{i,t+2}}{BA_{i,t}} \\
 & + INDUSTRY_FIXED_EFFECTS + \varepsilon_{i,t}.
 \end{aligned}$$

In equation (5), the dependent variable is MARKET_TO_BOOK, where MV is the market value of assets and BA is the book value of assets. Except for UD_LAW, $X_{i,t}$ indicates a change in the level of X from time $t-1$ to t . In addition, ΔX_t indicates a change in the level of X from time $t-2$ to t , ΔX_{t+2} indicates a change in the level of X from time t to $t+2$, E is earnings before extraordinary items, R&D is research and development expenses, D is common dividends, I is interest expenses, and NA is the book value of assets minus cash. We control for corporate governance in some model specifications. Consistent with our expectation, the results reported in Table 10 indicate negative and highly significant coefficients of the interaction between UD_LAW and CSR_SCORE, suggesting that a decrease in CSR scores following the adoption of UD laws increases firm value. Moreover, we find a positive relation between the stand-alone change in the CSR variable and firm value, implying that the marginal benefit of CSR outweighs its marginal cost (including possible managerial agency costs associated with CSR, as suggested by previous studies (e.g., Bénabou and Tirole (2010), Cheng et al. (2010), and Masulis and Reza (2014)), resulting in a positive net effect of CSR on the value of the average sample firm.

In a complimentary analysis, we substitute the UD_LAW indicator variable with the U.S._NINTH_CIRCUIT_COURT_RULING indicator variable in equation (5) and rerun the regression using the corresponding sample. The results reported in Table A12 in the Supplementary Material suggest that a decrease in CSR activities following the Ninth Circuit Court of Appeals' ruling also leads to an increase in firm value.

VI. Conclusion

CSR can help firms build moral capital among stakeholders and reduce the impacts of adverse shocks including shareholder litigation. We use the staggered adoption of UD laws by 23 states over the 1989–2005 period to investigate the

TABLE 10
UD Laws, CSR, and Firm Value

Table 10 reports the results of the market-to-book regressions. The dependent variable is MARKET_TO_BOOK. CSR_SCORE is constructed from the MSCI ESG Stats data. UD_LAW is an indicator variable that takes the value of 1 for the years in which UD law is effective in a firm's state of incorporation, and 0 otherwise. Except for UD law, $X_{i,t}$ indicates a change in the level of X from time $t-1$ to t . $\Delta X_{i,t}$ indicates a change in the level of X from time $t-2$ to t . $\Delta X_{i,t+2}$ indicates a change in the level of X from time t to $t+2$. E is earnings before extraordinary items, R&D is research and development expenses, D is common dividends, I is interest expenses and NA is assets minus cash. All variables except for UD_LAW and CSR_SCORE are scaled by the book value of assets. INSTITUTIONAL_OWNERSHIP is the aggregate equity ownership of institutional investors of a firm in the year. HOSTILE_INDEX is the firm-level index of takeover susceptibility. Other variables are defined in the Appendix. t -statistics based on heteroscedasticity-robust standard errors clustered by firms are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Variable	1	2	3	4	5	6
UD_LAW	-0.525*** (3.45)	-0.533*** (3.50)	-0.327** (2.26)	-0.336** (2.31)	-0.479*** (2.71)	-0.489*** (2.74)
UD × CSR_SCORE	-0.232** (2.25)	-0.229** (2.08)	-0.179** (2.52)	-0.183** (2.40)	-0.265** (2.20)	-0.263** (2.10)
CSR_SCORE	0.148*** (3.12)	0.229*** (4.46)	0.070** (2.48)	0.146*** (4.73)	0.178*** (4.58)	0.256*** (4.70)
INSTITUTIONAL_OWNERSHIP					0.716* (1.67)	0.994* (1.81)
HOSTILE_INDEX					-5.021*** (5.98)	-5.323*** (5.85)
$E_{i,t}$	0.221 (1.39)	0.233 (1.47)	0.259* (1.85)	0.094 (0.68)	0.117 (0.74)	0.263* (1.86)
$R\&D_{i,t}$	-3.551*** (12.52)	-3.583*** (12.75)	-3.599*** (9.80)	-3.703*** (10.49)	-3.239*** (11.48)	-3.399*** (12.40)
$D_{i,t}$	4.891 (0.91)	4.435 (0.84)	4.212 (0.78)	3.293 (0.66)	3.787 (0.78)	2.659 (0.61)
$I_{i,t}$	-1.023* (1.90)	-1.242* (1.91)	-1.022* (1.86)	-0.977** (2.26)	-1.408*** (2.73)	-1.531*** (3.13)
$\Delta E_{i,t}$	-0.392*** (9.69)	-0.296*** (9.14)	-0.160*** (9.85)	-0.054*** (8.99)	-0.444*** (9.62)	-0.313*** (8.95)
$\Delta R\&D_{i,t}$	-12.989*** (61.10)	-12.972*** (62.80)	-10.258*** (36.33)	-10.217*** (38.06)	-12.344*** (46.33)	-12.268*** (49.00)
$\Delta D_{i,t}$	19.412*** (3.80)	18.983*** (3.67)	19.769*** (4.07)	19.216*** (4.06)	21.652*** (5.42)	21.055*** (5.44)
$\Delta I_{i,t}$	-2.763 (0.56)	-4.757 (0.98)	-2.717 (0.57)	-6.855 (1.44)	-6.706 (1.18)	-1.005* (1.88)
$\Delta NA_{i,t}$	-0.716*** (4.27)	-0.761*** (4.58)	-0.674*** (4.44)	-0.730*** (5.02)	-0.754*** (4.15)	-0.840*** (4.52)
$\Delta E_{i,t+2}$	-4.270*** (13.10)	-2.916*** (5.79)	-4.719*** (7.87)	-3.621 (0.99)	-2.891*** (5.79)	-2.967*** (9.92)
$\Delta R\&D_{i,t+2}$	-15.803*** (56.79)	-18.328*** (9.42)	-18.069*** (65.43)	-15.049*** (16.56)	-18.081*** (53.98)	-14.200*** (14.37)
$\Delta D_{i,t+2}$	0.791*** (5.17)	0.790*** (5.29)	0.993*** (5.78)	0.937*** (6.20)	1.200*** (4.66)	1.084*** (4.76)
$\Delta I_{i,t+2}$	-14.716*** (5.15)	-12.258*** (4.04)	-13.716*** (5.15)	-12.677*** (4.87)	-17.258*** (4.04)	-16.360*** (3.28)
$\Delta NA_{i,t+2}$	-1.442*** (7.53)	-0.917*** (6.23)	-0.871*** (7.49)	-1.603 (0.56)	-0.723*** (8.14)	-0.189 (0.10)
$\Delta MV_{i,t+2}$	-0.035 (0.97)	-0.032 (0.91)	-0.034 (0.91)	-0.029 (0.80)	-0.044 (1.16)	-0.049 (1.05)
Intercept	2.849*** (29.34)	2.710*** (32.17)	2.598*** (35.43)	1.286*** (4.30)	4.802*** (20.68)	4.638*** (17.38)
Year fixed effects	No	Yes	No	Yes	No	Yes
Industry fixed effects	No	No	Yes	Yes	Yes	Yes
No. of obs.	9,285	9,285	9,285	9,285	8,706	8,706
Adjusted R^2	0.27	0.27	0.33	0.34	0.32	0.33

relation between shareholder litigation rights and CSR. We find that following the adoption of UD laws, which lower shareholder litigation threat, firms decrease their CSR activities. Our results are robust to alternative measures of CSR and insensitive

to controlling for corporate governance measures, state-level economic conditions and political balance, the adoption of other laws that potentially affect shareholder litigation rights, securities class action lawsuits, potential corporate lobbying, and several types of fixed effects. The negative relation between UD laws and CSR is stronger for firms that face a higher threat of shareholder litigation *ex ante*, for financially unconstrained firms, and for firms and managers that are likely to be more concerned about reputation. Our findings also extend to securities class action lawsuits. Overall, our evidence indicates that weakened shareholder litigation rights motivate firms to decrease CSR activities.

Appendix. Variable Definitions

BC_LAW: An indicator variable that takes the value of 1 if the state of incorporation for the firm has passed the BC law in the year, and 0 otherwise.

BCF_INDEX: Constructed by Bebchuk et al. (2009), this index measures the adoption of six antitakeover provisions: Staggered boards, supermajority requirements for mergers, supermajority requirements for charter amendments, limits to shareholder bylaw amendments, poison pills, and golden parachutes.

BOOK_LEVERAGE: Ratio of book value of short-term and long-term debts to the book value of assets.

CASH_FLOW: Ratio of EBITDA to the book value of assets.

CEO_INDEPENDENT_DIRECTOR: An indicator variable that takes the value of 1 if CEO is an independent director on another firm's board of directors, and 0 otherwise.

CLASS_ACTION_LAWSUIT Natural logarithm of the number of securities class action lawsuits in a state each year.

CORPORATE_REPUTATION: An indicator variable that takes the value of 1 for firms included *Fortune's* annual list of Most Admired Companies in the year, and 0 otherwise.

CSR_SCORE: Net score of CSR rating based on the MSCI ESG data, measured as total strengths minus total concerns in six categories: community, diversity, employee relations, environment, human rights, and product.

DIVIDEND: An indicator variable that takes the value of 1 if a firm pays a common dividend in the year, and 0 otherwise.

FIRM_AGE: Natural logarithm of number of years that a firm has appeared in Compustat.

GIM_INDEX: Developed by Gompers et al. (2003), this index of managerial entrenchment measures the adoption of 24 antitakeover provisions adopted by a firm.

HIGH_LITIGATION_RISK: An indicator variable that takes the value of 1 for firms that have the derivative lawsuit propensity in the top tercile of the sample, and 0 otherwise.

HOSTILE_INDEX: Developed by Cain et al. (2017), this index measures firm-level takeover susceptibility.

INDEPENDENT_DIRECTOR_PERCENTAGE: Percentage of the firm's management team that holds independent director positions in other firms.

INSTITUTIONAL_OWNERSHIP: Aggregate equity ownership of institutional investors of a firm each year.

MARKET_TO_BOOK: Market value of assets divided by the book value of assets.

MODERATE_LITIGATION_RISK: An indicator variable that takes the value of 1 for firms that have the derivative lawsuit propensity in the middle tercile of the sample, and 0 otherwise.

POLITICAL_BALANCE: State-level fraction of the Democratic Party members in the House of Representatives each year.

PP_LAW: An indicator variable that takes the value of 1 if the state of incorporation for the firm has passed the PP law in the year, and 0 otherwise.

PROFITABILITY: Ratio of income before extraordinary items including depreciation and amortization to the book value of assets.

RETURN_VOLATILITY: Standard deviation of daily stock return of a firm each year.

SA_INDEX: The SA index is calculated as: $-0.737 \times AT + 0.043 \times AT^2 - 0.040 \times AGE$, where AT is the natural logarithm of inflation-adjusted book assets and AGE is the number of years the firm has been on Compustat.

SIZE: Natural logarithm of the book value of annual sales.

STATE_GDP_GROWTH: State-level GDP growth rate over the fiscal year.

STATE_GDP_PER_CAPITA: Natural logarithm of state GDP per capita.

STOCK_RETURN: Natural logarithm of the average daily stock return of a firm each year.

UD_LAW: An indicator variable that takes the value of 1 if the state of incorporation for the firm has passed the UD law in the year, and 0 otherwise.

U.S._NINTH_CIRCUIT_COURT_RULING: An indicator variable that takes the value of 1 for firms headquartered in the Ninth Circuit states after 1999, and 0 otherwise.

WW_INDEX: Calculated as $-0.091 \times CASH_FLOW - 0.062 \times DIVIDEND + 0.021 \times LONG_TERM_DEBT - 0.044 \times SIZE + 0.102 \times INDUSTRY_SALES_GROWTH - 0.035 \times SALES_GROWTH$.

Supplementary Material

Supplementary Material for this article is available at <https://doi.org/10.1017/S002210902200031X>.

References

- Adhikari, B. K. "Causal Effect of Analyst Following on Corporate Social Responsibility." *Journal of Corporate Finance*, 41 (2016), 201–216.
- Albuquerque, R.; Y. Koskinen; and C. Zhang. "Corporate Social Responsibility and Firm Risk: Theory and Empirical Evidence." *Management Science*, 65 (2019), 4451–4469.
- Appel, I. "Governance by Litigation." SSRN Working Paper No. 2532278 (2019).

- Arena, M. "Corporate Litigation and Debt." *Journal of Banking & Finance*, 87 (2018), 202–215.
- Arena, M., and B. Julio. "The Effects of Securities Class Action Litigation on Corporate Liquidity and Investment Policy." *Journal of Financial and Quantitative Analysis*, 50 (2015), 251–275.
- Atanasov, V.; V. Ivanov; and K. Litvak. "Does Reputation Limit Opportunistic Behavior in The VC Industry? Evidence From Litigation Against VCs." *Journal of Finance*, 67 (2012), 2215–2246.
- Autore, D.; I. Hutton; D. R. Peterson; and A. H. Smith. "The Effect of Securities Litigation on External Financing." *Journal of Corporate Finance*, 27 (2014), 231–250.
- Barnett, M. L.; R. Hartmann; and R. M. Solomon. "Have You Been Served? Extending The Relationship Between Corporate Social Responsibility and Lawsuits." *Academy of Management Discoveries*, 4 (2018), 109–126.
- Bates, T. W.; K. M. Kahle; and R. M. Stulz. "Why Do U.S. Firms Hold So Much More Cash than They Used To?" *Journal of Finance*, 64 (2009), 1985–2021.
- Bebchuk, L.; A. Cohen; and A. Ferrell. "What Matters in Corporate Governance?" *Review of Financial Studies*, 22 (2009), 783–823.
- Bénabou, R., and J. Tirole. "Individual and Corporate Social Responsibility." *Economica*, 77 (2010), 1–19.
- Boone, A. L.; E. M. Fich; and T. Griffin. "Shareholder Litigation and the Information Environment." SSRN Working Paper No. 3106086 (2019).
- Borisov, A.; E. Goldman; and N. Gupta. "The Corporate Value of (Corrupt) Lobbying." *Review of Financial Studies*, 29 (2016), 1039–1071.
- Boubakri, N.; S. El Ghouli; H. Wang; O. Guedhami; and C. C. Kwok. "Cross-Listing and Corporate Social Responsibility." *Journal of Corporate Finance*, 41 (2016), 123–138.
- Bourveau, T.; Y. Lou; and R. Wang. "Shareholder Litigation and Corporate Disclosure: Evidence from Derivative Lawsuits." *Journal of Accounting Research*, 56 (2018), 797–842.
- Breuer, W.; T. Müller; D. Rosenbach; and A. Salzmann. "Corporate Social Responsibility, Investor Protection, and Cost of Equity: A Cross-Country Comparison." *Journal of Banking & Finance*, 96 (2018), 34–55.
- Byun, S. K., and J. M. Oh. "Local Corporate Social Responsibility, Media Coverage, and Shareholder Value." *Journal of Banking & Finance*, 87 (2018), 68–86.
- Cahan, S. F.; C. Chen; L. Chen; and N. H. Nguyen. "Corporate Social Responsibility and Media Coverage." *Journal of Banking & Finance*, 59 (2015), 409–422.
- Cain, M. D.; S. B. McKeon; and S. D. Solomon. "Do Takeover Laws Matter? Evidence from Five Decades of Hostile Takeovers." *Journal of Financial Economics*, 124 (2017), 464–485.
- Campbell, J. L. "Why Would Corporations Behave in Socially Responsible Ways? An Institutional Theory of Corporate Social Responsibility." *Academy of Management Review*, 32 (2007), 946–967.
- Cheng, I. H.; H. Hong; and K. Shue. "Do Managers Do Good with Other People's Money?" NBER Working Paper No. 19432 (2013).
- Cheng, C. A.; H. H. Huang; Y. Li; and G. Lobo. "Institutional Monitoring Through Shareholder Litigation." *Journal of Financial Economics*, 95 (2010), 356–383.
- Coffee, J. C. "The Changing Character of Securities Litigation in 2019: Why It's Time to Draw Some Distinctions." The CLS Blue Sky Blog (2019), available at <http://clsbluesky.law.columbia.edu/2019/01/22/the-changing-character-of-securities-litigation-in-2019-why-its-time-to-draw-some-distinctions/> (accessed Feb. 16, 2020).
- Cornaggia, J.; Y. Mao; X. Tian; and B. Wolfe. "Does Banking Competition Affect Innovation?" *Journal of Financial Economics*, 115 (2015), 189–209.
- Crane, A. D., and A. Koch. "Shareholder Litigation and Ownership Structure: Evidence from a Natural Experiment." *Management Science*, 64 (2018), 5–23.
- Davis Jr, K. B. "The Forgotten Derivative Suit." *Vanderbilt Law Review*, 61 (2008), 387.
- Deng, X.; J. K. Kang; and B. S. Low. "Corporate Social Responsibility and Stakeholder Value Maximization: Evidence from Mergers." *Journal of Financial Economics*, 110 (2013), 87–109.
- Deng, S.; R. H. Willis; and L. Xu. "Shareholder Litigation, Reputational Loss, and Bank Loan Contracting." *Journal of Financial and Quantitative Analysis*, 49 (2014), 1101–1132.
- Di Giulio, A., and L. Kostovetsky. "Are Red or Blue Companies More Likely to Go Green? Politics and Corporate Social Responsibility." *Journal of Financial Economics*, 111 (2014), 158–180.
- Dittmar, A., and J. Mahrt-Smith. "Corporate Governance and the Value of Cash Holdings." *Journal of Financial Economics*, 83 (2007), 599–634.
- Erickson, J. "Corporate Governance in the Courtroom: An Empirical Analysis." *William and Mary Law Review*, 51 (2010), 1749–1831.
- Fahlenbrach, R.; A. Low; and R. M. Stulz. "Why Do Firms Appoint CEOs as Outside Directors?" *Journal of Financial Economics*, 97 (2010), 12–32.
- Fama, E. F., and K. R. French. "Taxes, Financing Decisions, and Firm Value." *Journal of Finance*, 53 (1998), 819–843.

- Fama, E. F., and M. C. Jensen. "Separation of Ownership and Control." *Journal of Law and Economics*, 26 (1983), 301–325.
- Faulkender, M., and M. A. Petersen. "Does the Source of Capital Affect Capital Structure?" *Review of Financial Studies*, 19 (2006), 45–79.
- Fazzari, S.; R. G. Hubbard; and B. Petersen. "Financing Constraints and Corporate Investment." *Brookings Papers on Economic Activity*, 1 (1988), 141–206.
- Ferris, S. P.; T. Jandik; R. M. Lawless; and A. Makhija. "Derivative Lawsuits as a Corporate Governance Mechanism: Empirical Evidence on Board Changes Surrounding Filings." *Journal of Financial and Quantitative Analysis*, 42 (2007), 143–165.
- Field, L.; M. Lowry; S. Shu. "Does Disclosure Deter or Trigger Litigation?" *Journal of Accounting and Economics*, 39 (2005), 487–507.
- Flammer, C. "Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach." *Management Science*, 61 (2015), 2549–2568.
- Fombrun, C. J.; N. A. Gardberg; and M. L. Barnett. "Opportunity Platforms and Safety Nets: Corporate Citizenship and Reputational Risk." *Business and Society Review*, 105 (2000), 85–106.
- Freeman, E. R. *Strategic Management: A Stakeholder Approach*. Cambridge: Cambridge University Press (2010).
- Friedman, M. "The Social Responsibility of Business is to Increase its Profits." *New York Times Magazine*, Sept. 13 (1970), 32–33, 122, 124, 126.
- Gande, A., and C. Lewis. "Shareholder-Initiated Class Action Lawsuits: Shareholder Wealth Effects and Industry Spillovers." *Journal of Financial and Quantitative Analysis*, 44 (2009), 823–850.
- Ghoul, S.; O. Guedhami; C. Kwok; and D. Mishra. "Does Corporate Social Responsibility Affect the Cost of Capital?" *Journal of Banking & Finance*, 35 (2011), 2388–2406.
- Godfrey, P. C. "The Relationship Between Corporate Philanthropy and Shareholder Wealth: A Risk Management Perspective." *Academy of Management Review*, 30 (2005), 777–798.
- Godfrey, P. C.; C. B. Merrill; and J. M. Hansen. "The Relationship Between Corporate Social Responsibility and Shareholder Value: An Empirical Test of the Risk Management Hypothesis." *Strategic Management Journal*, 30 (2009), 425–445.
- Gompers, P.; J. Ishii; and A. Metrick. "Corporate Governance and Equity Prices." *Quarterly Journal of Economics*, 118 (2003), 107–156.
- Gubler, T.; I. Larkin and L. Pierce. "Doing Well by Making Well: The Impact of Corporate Wellness Programs on Employee Productivity." *Management Science*, 64 (2018), 4967–4987.
- Hadlock, C. J., and J. R. Pierce. "New Evidence on Measuring Financial Constraints: Moving Beyond the KZ Index." *Review of Financial Studies*, 23 (2010), 1909–1940.
- Hainmueller, J. "Entropy Balancing for Causal Effects: A Multivariate Reweighting Method to Produce Balanced Samples in Observational Studies." *Political Analysis*, 20 (2012), 25–46.
- Hong, H.; J. D. Kubik; and J. A. Scheinkman. "Financial Constraints on Corporate Goodness." NBER Working Paper No. w18476 (2012).
- Houston, J. F.; C. Lin; and W. Xie. "Shareholder Protection and the Cost of Capital." *Journal of Law and Economics*, 61 (2018), 677–710.
- Huang, S.; S. Roychowdhury; and E. Sletten. "Does Litigation Deter or Encourage Real Earnings Management?" *Accounting Review*, 95 (2020), 251–278.
- Huseynov, F., and B. Klamm. "Tax Avoidance, Tax Management and Corporate Social Responsibility." *Journal of Corporate Finance*, 18 (2012), 804–827.
- Jo, H., and M. A. Harjoto. "The Causal Effect of Corporate Governance on Corporate Social Responsibility." *Journal of Business Ethics*, 106 (2012), 53–72.
- Jones, T. M. "Instrumental Stakeholder Theory: A Synthesis of Ethics and Economics." *Academy of Management Review*, 20 (1995), 404–437.
- Jones, G. H.; B. H. Jones; and P. Little. "Reputation as Reservoir: Buffering Against Loss in Times of Economic Crisis." *Corporate Reputation Review*, 3 (2000), 21–29.
- Karpoff, J. M.; D. S. Lee; and G. S. Martin. "The Cost to Firms of Cooking the Books." *Journal of Financial and Quantitative Analysis*, 43 (2008), 581–611.
- Kim, Y.; H. Li; and S. Li. "Corporate Social Responsibility and Stock Price Crash Risk." *Journal of Banking & Finance*, 43 (2014), 1–13.
- Kim, I., and D. J. Skinner. "Measuring Securities Litigation Risk." *Journal of Accounting and Economics*, 53 (2012), 290–310.
- Kinney, T. P. "Stockholder Derivative Suits: Demand and Futility where the Board Fails to Stop Wrongdoers." *Marquette Law Review*, 78 (1994), 172–189.
- Koh, P. S.; C. Qian; and H. Wang. "Firm Litigation Risk and the Insurance Value of Corporate Social Performance." *Strategic Management Journal*, 35 (2014), 1464–1482.
- Lin, C.; S. Liu; and G. Manso. "Shareholder Litigation and Corporate Innovation." *Management Science*, 67 (2021), 3321–3984.

- Lins, K. V.; H. Servaes; and A. Tamayo. "Social Capital, Trust, and Firm Performance: The Value of Corporate Social Responsibility During the Financial Crisis." *Journal of Finance*, 72 (2017), 1785–1824.
- Liu, C.; C. S. Cheong; and R. Zurbrugg. "Rhetoric, Reality, and Reputation: Do CSR and Political Lobbying Protect Shareholder Wealth Against Environmental Lawsuits?" *Journal of Financial and Quantitative Analysis*, 55 (2020), 679–706.
- Martin, J.; W. Petty; and J. Wallace. "Shareholder Value Maximization—Is There a Role for Corporate Social Responsibility?" *Journal of Applied Corporate Finance*, 21 (2009), 110–118.
- Masulis, R. W., and S. W. Reza. "Agency Problems of Corporate Philanthropy." *Review of Financial Studies*, 28 (2014), 592–636.
- Nguyen, P. A.; A. Kecskés; and S. Mansi. "Does Corporate Social Responsibility Create Shareholder Value? The Importance of Long-Term Investors." *Journal of Banking & Finance*, 112 (2020), 105–217.
- Nguyen, H. T.; H. V. Phan; and L. S. Sun. "Shareholder Litigation Rights and Corporate Cash Holdings: Evidence from Universal Demand Laws." *Journal of Corporate Finance*, 52 (2018), 192–213.
- Ni, X., and S. Yin. "Shareholder Litigation Rights and The Cost of Debt: Evidence from Derivative Lawsuits." *Journal of Corporate Finance*, 48 (2018), 169–186.
- Pinkowitz, L.; R. Stulz; and R. Williamson. "Does the Contribution of Corporate Cash Holdings and Dividends to Firm Value Depend on Governance? A Cross-Country Analysis." *Journal of Finance*, 61 (2006), 2725–2751.
- Pritchard, A. C., and H. A. Sale. "What Counts as Fraud? An Empirical Study of Motion to Dismiss Under the Private Securities Litigation Reform Act." *Journal of Empirical Legal Studies*, 2 (2005), 125–149.
- Schnietz, K.E., and M. J. Epstein. "Exploring the Financial Value of a Reputation for Corporate Social Responsibility During a Crisis." *Corporate Reputation Review*, 7 (2005), 327–345.
- Servaes, H., and A. Tamayo. "The Impact of Corporate Social Responsibility on Firm Value: The Role of Customer Awareness." *Management Science*, 59 (2013), 1045–1061.
- Swanson, C. B. "Juggling Shareholder Rights and Strike Suits in Derivative Litigation: The ALI Drops the Bell." *Minnesota Law Review*, 77 (1993), 1339–1392.
- U.S. Chamber Institute for Legal Reform. "Containing the Contagion: Proposals to Reform the Broken Securities Class Action System" (2019), available at <https://www.instituteforlegalreform.com/wp-content/uploads/media/Securities-Class-Action-System-Reform-Proposals.pdf> (accessed Feb. 16, 2020).
- Wang, H., and C. Qian. "Corporate Philanthropy and Corporate Financial Performance: The Roles of Stakeholder Response and Political Access." *Academy of Management Journal*, 54 (2011), 1159–1181.
- Whited, T. M., and G. Wu. "Financial Constraints Risk." *Review of Financial Studies*, 19 (2006), 531–559.