

Corporate Social Responsibility and Lawsuit Settlement: Evidence from Special Items

Christopher J. Skousen

Utah State University

Li Sun

The University of Tulsa

huntzman.usu.edu

Corporate Social Responsibility and Lawsuit Settlement: Evidence from Special Items

Outline

- Background – CSR
- Motivation
- Introduction
- Literature Review and Hypotheses Development
- Research Design
- Sample Selection and Descriptive Statistics
- Main Tests
- Additional Tests
- Conclusion

Background – CSR

- Corporate social responsibility (CSR) has become an important research topic in business (e.g., Malik, 2005).
- Definition of CSR – integration of social practices such as environmental, ethical, and legal practices into a company's business model.
- The number of CSR studies has been increasing in accounting research (Moser and Martin, 2012).

Background – CSR

One critical theory of CSR is known as the stakeholder view/theory.

1. Money is not everything. Shareholders are not the only stakeholders.
2. Companies must care for other stakeholders such as suppliers, customers, employees, and other parties.
3. If companies try to satisfy the needs of all stakeholders, the stakeholders will support such firms (i.e., CSR firms) as a return.
4. Thus, under the stakeholder view, high CSR firms often receive benefits and favorable outcomes from their stakeholders.

Motivation

1. JUUL Lawsuit in 2019

- Bad products (harmful chemicals to human lungs) -> irresponsible CSR
- False marketing (safer and better than smoking) -> irresponsible CSR
 - The first lawsuit filed on October 16, 2019; JUUL is in process of settling lawsuits.

2. General expectations and anecdotal evidence -> good companies are less likely to be sued.

3. Any empirical evidence on the legal outcomes of CSR in accounting research?

Introduction

- The purpose of this study is to examine the impact of CSR on corporate lawsuit characteristics (i.e., the probability of lawsuit and the magnitude of lawsuit settlement).
- We rely on the account of lawsuit settlement (SETP, Compustat Item #372) in the special items, which is nonrecurring in nature and is reported as a component of other income within *income from continuing operations* on an income statement.
- A company can either report a settlement gain (i.e., usually the plaintiff in a lawsuit) or a loss (i.e., usually the defendant in a lawsuit).

Introduction

In testing H1 – (CSR and the likelihood of lawsuit)

- Using a large panel sample with 21,761 observations from 1991 to 2016, we find a significant negative relation between CSR performance and the probability of lawsuit, which suggests that socially responsible firms are less likely to be involved in lawsuits.
- We also find that the significant negative relation becomes weaker for firms with more cash, consistent with anecdotal evidence that firms with more money are more likely to be sued.



Introduction

In testing H2 – (CSR and the magnitude of lawsuit settlement)

- Using a panel sample with 4,307 observations reporting settlement gains or losses from 1991 to 2016, we find a significant positive relation between CSR and the magnitude of settlement, which suggests that socially responsible firms are more likely to receive favorable outcomes (i.e., larger settlement gain or smaller settlement loss).
- We find that the significant relation between CSR and the settlement size is largely driven by firms with settlement loss (i.e., firms being sued).

Contributions

- This study provides empirical evidence that not only supports the stakeholder view of CSR but is also consistent with anecdotal evidence and general expectations.
- This study not only answers the call in Johnson, Lopez and Sanchez (2011) but also raises new research questions about special items.
- Practical implications
 - If managers are risk averse, engaging in CSR activities can effectively mitigate legal risks;
 - CSR firms receive favorable settlement outcomes - larger(smaller) settlement gain(loss).
 - Lowering the level of corporate cash holdings might help reduce legal risks.

Literature Review on CSR

- The first category examines the impact of CSR activities on firm performance and outcomes.
 - The association between CSR performance and financial performance of a firm
 - The impact of CSR on other variables
- The second category investigates factors that can influence a firm's CSR activities and performance.

Literature Review

The first category

The association between CSR performance and financial performance

- A large body of prior research documents a significant positive association between social performance and financial performance of a firm (e.g., McGuire, Sundgren, and Schnessweis, 1988; Smith, 1994; Porter and Van der Linde, 1995; Waddock and Graves, 1997; Berman, Wicks, Kotha, and Jones, 1999; Margolis and Walsh, 2003; Smith, 2003; Orlitzky, Schmidt, and Rynes, 2003; Carmeli, Gilat, and Waldman, 2007; Beurden and Gossling, 2008; Brammer and Millington, 2008; and many others).
- win-win

Literature Review

The first category

The impact of CSR performance on other variables

- CSR can increase **firm value** (e.g., Jo and Harjoto, 2011; Deng, Kang, and Low, 2013; Malik, 2015), improve **bond credit ratings** (e.g., Attig, Ghouli, Guedhami, and Suh, 2013; Jiraporn, Jiraporn, Boeprasert, and Chang, 2014), increase the value and the level of **cash holdings** (e.g., Aroui and Pijourlet, 2017; Cheung, 2016), improve the **quality of earnings** (e.g., Kim et al., 2012), reduce **information asymmetry** (e.g., Cho, Lee, and Pfeiffer, 2013), constrain **tax avoidance** activities (e.g., Hoi, Wu, and Zhang, 2013; Lanis and Richardson, 2015), reduce **firm risks** (e.g., Godfrey, Merrill, and Hansen, 2009), reduce **cost of capital** (e.g., Dhaliwal, Li, Tsang, and Yang, 2011; Dhaliwal et al., 2014), increase **analyst forecast** accuracy (e.g., Dhaliwal, Radhakrishnan, Tsang, and Yang, 2012), influence seasoned **equity offerings** (e.g., Dutordoir, Strong, and Sun, 2018), lower **debt financing** costs (e.g., Ye and Zhang, 2011), and reduce **stock price crash risks** (e.g., Kim et al., 2014).
- This stream suggests that CSR firms can bring benefits.

Literature Review

The first category

The impact of CSR performance on other variables

- Christensen (2016) is closely related to our study. He examines and finds that companies reporting their accountability activities (e.g., CSR activities) are less likely to engage in misconducts such as bribery and kickbacks. Our study is different from Christensen (2016) as we focus on CSR performance.
- Our study belongs to the CSR Performance stream.

Literature Review

The second category

Factors that influence the level of CSR

A few recent studies

- Chen, Zhou, and Zhu (2018) find that CEOs with shorter (longer) tenure engage in more (fewer) CSR activities.
- Bouslah, Linares-Zegarra, M’Zali, and Scholtens (2018) find that risk-taking CEOs are more likely to engage in irresponsible CSR activities.
- Sun, Walkup, and Wu (2019) find that firms with high sales order backlog engage in more irresponsible CSR activities.

Hypotheses Development

- Moser and Martin (2012) encourage accounting researchers to adopt the stakeholder view of CSR.
- Doing good things for stakeholders -> good relationships with stakeholders
- More ethical – do the right things -> lower legal risks
- CSR firms often receive benefits and favorable outcomes.

H1: CSR firms are less likely to be involved in lawsuits.

H2: CSR firms are more likely to receive favorable lawsuit settlement outcomes.

Research Design

Measuring CSR performance

- Following the large body of prior research, we use the CSR ratings from the MSCI's ESG database. [7 CSR dimensions]

CSR Components	Example (Company XYZ)		
	Positive / Strengths	Negative / Concerns	Net
1. Community Relations	9	8	1
2. Corporate Governance	7	6	1
3. Diversity	5	4	1
4. Employee Relations	3	2	1
5. Environment	1	0	1
6. Human Rights	0	1	-1
7. Product	0	2	-2
		TOTAL CSR =	2

Research Design

Measuring CSR performance

- $CSR = (Total\ strengths\ of\ Community\ Relations - Total\ concerns\ of\ Community\ Relations) + (Total\ strengths\ of\ Corporate\ Governance - Total\ concerns\ of\ Corporate\ Governance) + (Total\ strengths\ of\ Diversity - Total\ concerns\ of\ Diversity) + (Total\ strengths\ of\ Employee\ Relations - Total\ concerns\ of\ Employee\ Relations) + (Total\ strengths\ of\ Environment - Total\ concerns\ of\ Environment) + (Total\ strengths\ of\ Human\ Rights - Total\ concerns\ of\ Human\ Rights) + (Total\ strengths\ of\ Product - Total\ concerns\ of\ Product)$
 - $CSR_STRENGTH = Total\ strengths\ of\ Community\ Relations + Total\ strengths\ of\ Corporate\ Governance + Total\ strengths\ of\ Diversity + Total\ strengths\ of\ Employee\ Relations + Total\ strengths\ of\ Environment + Total\ strengths\ of\ Human\ Rights + Total\ strengths\ of\ Product$
 - $CSR_CONCERN = Total\ concerns\ of\ Community\ Relations + Total\ concerns\ of\ Corporate\ Governance + Total\ concerns\ of\ Diversity + Total\ concerns\ of\ Employee\ Relations + Total\ concerns\ of\ Environment + Total\ concerns\ of\ Human\ Rights + Total\ concerns\ of\ Product$

Research Design

Measuring Lawsuit Settlement

- In the section of special items, companies report lawsuit (or legal) settlement (SETP).
 - LAWSUIT - an indicator variable that equals one if a firm is involved in (at least) one lawsuit in a given year.
 - LAWSUIT_GL - the magnitude or size of settlement gain or loss, scaled by total firm assets.

An example - Comcast Corporation 2018 10-K report – income statement

Year ended December 31 (in millions)	2018	2017	2016
Adjusted EBITDA	\$ 30,165	\$ 27,956	\$ 26,257
Adjustment for legal settlement	(125)	(250)	—
Adjustment for Sky transaction-related costs	(355)	—	—
Depreciation	(8,281)	(7,914)	(7,464)
Amortization	(2,736)	(2,216)	(1,962)
Other operating gains	341,442	—	—
Interest expense	(3,542)	(3,086)	(2,942)
Investment and other income (loss), net	(225)	421	437
Income before income taxes	\$ 15,242	\$ 15,353	\$ 14,326

Research Design

Empirical Specification

- Corporate Lawsuit_{i,t} = $\beta_0 + \beta_1 \mathbf{CSR}_{i,t} + \beta_2 \mathbf{SIZE}_{i,t} + \beta_3 \mathbf{MTB}_{i,t} + \beta_4 \mathbf{LEV}_{i,t} + \beta_5 \mathbf{ROA}_{i,t} + \beta_6 \mathbf{CASHFL}_{i,t} + \beta_7 \mathbf{LOSS}_{i,t} + \beta_8 \mathbf{ZSCORE}_{i,t} + \beta_9 \mathbf{TOBINQ}_{i,t} + \beta_{10} \mathbf{FIRMAGE}_{i,t} + \beta_{11} \mathbf{ASSETAGE}_{i,t} + \beta_{12} \mathbf{MGR_ABILITY}_{i,t} + \beta_{13} \mathbf{ACCRUAL}_{i,t} + \beta_{14} \mathbf{SALE_VOL}_{i,t} + \beta_{15} \mathbf{SPE_ITEM}_{i,t} + \beta_{16} \mathbf{BIG4}_{i,t} + \beta_{17} \mathbf{HIGH_RISK}_{i,t} + \text{Industry Indicators} + \text{Year Indicators} + \varepsilon_{i,t}$

Research Design

Empirical Specification – control variables

SIZE	total assets
MTB	market to book ratio
LEV	leverage ratio
ROA	return on assets
CASHFL	operating cash flos
LOSS	loss indicator
ZSCORE	altman Z score
TOBINQ	tobin's q
FIRMAGE	firm age
ASSETAGE	asset age
MGR_ABILITY	managerial ability
ACCRUAL	discretionary accrual
SALE_VOL	sales volatility
SPE_ITEM	special items
BIG4	BIG4 auditor
HIGH_RISK	industries with high litigation risk

Sample Selection and Descriptive Statistics (Table 1)

			Observations
CSR data from MSCI's ESG database (1991-2016)			53,168
Less: Observations with insufficient data to construct independent variable of interest and control variables			(28,295)
Less: Observations in highly regulated industries (SIC 4000-4999 & 6000-6999)			(3,112)
Number of firm-year observations			21,761
Number of unique firms			2,437

Sample Selection and Descriptive Statistics

Year	Number of Observations	Percentage	Cumulative Percentage
1991	199	0.91%	0.91%
1992	204	0.94%	1.85%
1993	205	0.94%	2.79%
1994	205	0.94%	3.74%
1995	207	0.95%	4.69%
1996	216	0.99%	5.68%
1997	229	1.05%	6.73%
1998	233	1.07%	7.80%
1999	246	1.13%	8.93%
2000	269	1.24%	10.17%
2001	447	2.05%	12.22%
2002	471	2.16%	14.39%
2003	1,218	5.60%	19.99%
2004	1,282	5.89%	25.88%
2005	1,247	5.73%	31.61%
2006	1,262	5.80%	37.41%
2007	1,239	5.69%	43.10%
2008	1,358	6.24%	49.34%
2009	1,440	6.62%	55.96%
2010	1,502	6.90%	62.86%
2011	1,447	6.65%	69.51%
2012	1,443	6.63%	76.14%
2013	1,361	6.25%	82.40%
2014	1,421	6.53%	88.93%
2015	1,223	5.62%	94.55%
2016	1,187	5.45%	100.00%
	21,761	100.00%	



Sample Selection and Descriptive Statistics (Table 2)

Variable	Obs.	Mean	Std Dev	25th Pctl	50th Pctl	75th Pctl
LAWSUIT	21,761	0.198	0.398	0.000	0.000	0.000
CSR	21,761	-0.019	2.544	-1.000	0.000	1.000
SIZE	21,761	7.201	1.579	6.025	7.101	8.280
MTB	21,761	3.426	5.025	1.586	2.502	4.018
LEV	21,761	0.178	0.178	0.005	0.147	0.278
ROA	21,761	0.033	0.126	0.014	0.052	0.090
CASHFL	21,761	0.096	0.103	0.059	0.101	0.148
LOSS	21,761	0.203	0.402	0.000	0.000	0.000
ZSCORE	21,761	4.850	5.084	2.259	3.624	5.785
TOBINQ	21,761	2.173	1.404	1.304	1.732	2.504
FIRMAGE	21,761	3.140	0.617	2.639	3.091	3.714
ASSETAGE	21,761	0.478	0.153	0.373	0.470	0.580
MGR_ABLITY	21,761	0.560	0.296	0.300	0.600	0.800
ACCRUAL	21,761	0.057	0.057	0.018	0.041	0.075
SALE_VOL	21,761	0.744	0.546	0.356	0.602	0.974
SPE_ITEM	21,761	-0.015	0.050	-0.013	-0.002	0.000
BIG4	21,761	0.905	0.293	1.000	1.000	1.000
HIGH_RISK	21,761	0.250	0.433	0.000	0.000	0.000

Sample Selection and Descriptive Statistics

	LAWSUIT = 1		LAWSUIT = 0			
Variable	Obs.	Mean	Obs.	Mean	Diff. in Mean	p-value
CSR	4,307	-0.108	17,454	0.003	-0.111***	0.001
SIZE	4,307	7.610	17,454	7.100	0.510***	<0.0001
MTB	4,307	3.170	17,454	3.489	-0.319***	0.000
LEV	4,307	0.196	17,454	0.174	0.022***	<0.0001
ROA	4,307	0.032	17,454	0.033	-0.001	0.592
CASHFL	4,307	0.095	17,454	0.096	-0.001	0.545
LOSS	4,307	0.213	17,454	0.201	0.012*	0.070
ZSCORE	4,307	4.085	17,454	5.039	-0.954***	<0.0001
TOBINQ	4,307	1.944	17,454	2.230	-0.286***	<0.0001
FIRMAGE	4,307	3.224	17,454	3.119	0.105***	<0.0001
ASSETAGE	4,307	0.474	17,454	0.480	-0.006**	0.029
MGR_ABLITY	4,307	0.549	17,454	0.563	-0.014***	0.006
ACCRUAL	4,307	0.053	17,454	0.058	-0.005***	<0.0001
SALE_VOL	4,307	0.674	17,454	0.761	-0.087***	<0.0001
SPE_ITEM	4,307	-0.018	17,454	-0.014	-0.004***	<0.0001
BIG4	4,307	0.928	17,454	0.899	0.029***	<0.0001
HIGH_RISK	4,307	0.236	17,454	0.253	-0.017**	0.019

Sample Selection and Descriptive Statistics

Variable	Obs.	Mean	Std Dev	25th Pctl	50th Pctl	75th Pctl
LAWSUIT_GL	4,307	-0.002	0.021	-0.004	0.000	0.003
CSR	4,307	-0.108	2.867	-2.000	0.000	1.000
SIZE	4,307	7.617	1.560	6.492	7.510	8.725
MTB	4,307	3.198	7.341	1.539	2.360	3.688
LEV	4,307	0.196	0.177	0.036	0.172	0.291
ROA	4,307	0.032	0.107	0.011	0.047	0.081
CASHFL	4,307	0.096	0.081	0.056	0.095	0.138
LOSS	4,307	0.213	0.409	0.000	0.000	0.000
ZSCORE	4,307	4.065	4.059	2.023	3.222	4.950
TOBINQ	4,307	1.938	1.117	1.269	1.621	2.205
FIRMAGE	4,307	3.224	0.627	2.708	3.178	3.829
ASSETAGE	4,307	0.474	0.147	0.371	0.466	0.568
MGR_ABLITY	4,307	0.549	0.296	0.300	0.500	0.800
ACCRUAL	4,307	0.053	0.052	0.017	0.039	0.072
SALE_VOL	4,307	0.673	0.501	0.311	0.541	0.894
SPE_ITEM	4,307	-0.018	0.056	-0.021	-0.006	0.000
BIG4	4,307	0.928	0.258	1.000	1.000	1.000
HIGH_RISK	4,307	0.236	0.425	0.000	0.000	0.000

Main Results (H1 Testing)

TABLE 4 – Panel A	Dependent Variable = LAWSUIT							
	Logistic Regression							
	Column 1				Column 2			
Variable	Estimate	Chi-Square	Pr > ChiSq	VIF	Estimate	Chi-Square	Pr > ChiSq	VIF
Intercept	-3.11***	213.95	<.0001		-2.71***	148.12	<.0001	
CSR	-0.04***	35.68	<.0001	1.25				
CSR_STRENGTH					-0.02**	4.53	0.033	1.57
CSR_CONCERN					0.11***	72.53	<.0001	1.70
SIZE	0.25***	249.77	<.0001	2.02	0.19***	98.66	<.0001	2.78
MTB	0.00	0.56	0.454	1.33	0.00	0.52	0.473	1.33
LEV	-0.35***	7.31	0.007	1.61	-0.27**	4.35	0.037	1.62
ROA	1.05***	10.52	0.001	4.60	1.07***	10.83	0.001	4.60
CASHFL	-0.20	0.45	0.502	2.73	-0.15	0.26	0.610	2.73
LOSS	0.25***	17.56	<.0001	1.93	0.23***	15.25	<.0001	1.94
ZSCORE	-0.02***	8.53	0.004	2.47	-0.02***	8.35	0.004	2.47
TOBINQ	-0.10***	17.42	<.0001	2.55	-0.11***	20.80	<.0001	2.56
FIRMEAGE	0.07*	3.46	0.063	1.66	0.05	2.05	0.152	1.67
ASSETAGE	-0.60***	17.04	<.0001	1.53	-0.54***	13.62	0.000	1.54
MGR_ABLITY	0.00	0.00	0.981	1.25	-0.01	0.02	0.892	1.26
ACCRUAL	0.41	1.21	0.272	1.35	0.40	1.18	0.278	1.35
SALE_VOL	-0.12***	8.38	0.004	1.38	-0.11***	7.83	0.005	1.38
SPE_ITEM	-2.08***	19.21	<.0001	1.82	-2.05***	18.56	<.0001	1.82
BIG4	0.09	1.78	0.182	1.16	0.13*	3.26	0.071	1.16
HIGH_RISK	0.10	1.47	0.226	3.54	0.10	1.63	0.201	3.54
Industry Indicators	Yes				Yes			
Year Indicators	Yes				Yes			
Pseudo R ²	0.1092				0.1117			
Observations	21,761				21,761			

Main Results (H2 Testing)

Table 4 – Panel B	Dependent Variable = LAWSUIT_GL							
	Clustered Standard Errors OLS Regression							
	Column 1				Column 2			
Variable	Estimate	t Value	Pr > t	VIF	Estimate	t Value	Pr > t	VIF
Intercept	-0.0007	-0.21	0.833		-0.0019	-0.51	0.613	
CSR	0.0003***	3.33	0.001	1.36				
CSR_STRENGTH					0.0003**	2.38	0.018	1.95
CSR_CONCERN					-0.0005***	-2.77	0.006	1.97
SIZE	-0.0012***	-4.31	<.0001	2.02	-0.0010***	-2.88	0.004	3.19
MTB	0.0000	0.97	0.334	1.13	0.0000	0.98	0.329	1.13
LEV	0.0059**	2.31	0.021	1.64	0.0057**	2.23	0.026	1.66
ROA	-0.0605***	-4.95	<.0001	3.69	-0.0604***	-4.94	<.0001	3.69
CASHFL	0.0498***	5.08	<.0001	2.05	0.0495***	5.05	<.0001	2.05
LOSS	-0.0022	-1.48	0.139	1.88	-0.0021	-1.44	0.151	1.89
ZSCORE	0.0003**	2.04	0.042	2.40	0.0003**	2.03	0.042	2.40
TOBINQ	-0.0024***	-4.41	<.0001	2.29	-0.0023***	-4.37	<.0001	2.31
FIRMAGE	0.0012**	2.15	0.031	1.60	0.0013**	2.21	0.027	1.61
ASSETAGE	0.0045	1.58	0.115	1.54	0.0043	1.49	0.135	1.55
MGR_ABLITY	-0.0002	-0.16	0.876	1.29	-0.0002	-0.17	0.863	1.29
ACCRUAL	-0.0113	-1.05	0.295	1.30	-0.0112	-1.04	0.300	1.30
SALE_VOL	0.0005	0.70	0.487	1.39	0.0005	0.70	0.486	1.39
SPE_ITEM	0.2208***	9.49	<.0001	1.84	0.2206***	9.48	<.0001	1.84
BIG4	0.0018	1.22	0.223	1.15	0.0017	1.15	0.251	1.16
HIGH_RISK	0.0006	0.43	0.669	3.72	0.0006	0.42	0.677	3.72
Industry Indicators	Yes				Yes			
Year Indicators	Yes				Yes			
Adjusted R ²	0.2603				0.2607			
Observations	4,307				4,307			

Additional Test #1 – Alternative CSR Measures

- Two alternative measures
 1. Prior research including Kim et al. (2012) suggests excluding the **corporate governance** and the **human rights** components from the net CSR score because the former focuses on a firm's governance mechanism and the latter does not have sufficient data.

$$\text{CSR_ALT} = (\text{Total strengths of Community Relations} - \text{Total concerns of Community Relations}) + (\text{Total strengths of Diversity} - \text{Total concerns of Diversity}) + (\text{Total strengths of Employee Relations} - \text{Total concerns of Employee Relations}) + (\text{Total strengths of Environment} - \text{Total concerns of Environment}) + (\text{Total strengths of Product} - \text{Total concerns of Product})$$

2. H_CSR which equals one if an observation's net CSR score (CSR) is above the median and zero otherwise.

Additional Test #1 – Alternative CSR Measures

Table 5	Dependent Variable = LAWSUIT						Dependent Variable = LAWSUIT_GL					
	Logistic Regression						Clustered Standard Errors OLS					
	Column 1			Column 2			Column 3			Column 4		
Variable	Estimate	Chi-Square	Pr > ChiSq	Estimate	Chi-Square	Pr > ChiSq	Estimate	t Value	Pr > t	Estimate	t Value	Pr > t
Intercept	-3.13***	214.58	<.0001	-3.01***	202.56	<.0001	-0.0003	-0.08	0.936	-0.0014	-0.40	0.690
CSR_ALT	-0.04***	23.57	<.0001				0.0004***	3.26	0.001			
H_CSR				-0.18***	17.73	<.0001				0.0015**	2.50	0.012
SIZE	0.25***	244.59	<.0001	0.24***	237.90	<.0001	-0.0013***	-4.48	<.0001	-0.0012***	-4.22	<.0001
MTB	0.00	0.54	0.461	0.00	0.49	0.485	0.0000	0.95	0.342	0.0000	0.98	0.325
LEV	-0.35***	7.27	0.007	-0.34***	7.02	0.008	0.0059**	2.32	0.020	0.0060**	2.35	0.019
ROA	1.06***	10.79	0.001	1.09***	11.25	0.001	-0.0605***	-4.96	<.0001	-0.0609***	-4.99	<.0001
CASHFL	-0.21	0.52	0.472	-0.27	0.81	0.367	0.0498***	5.08	<.0001	0.0504***	5.15	<.0001
LOSS	0.25***	17.63	<.0001	0.25***	17.95	<.0001	-0.0022	-1.49	0.137	-0.0022	-1.53	0.126
ZSCORE	-0.02***	8.77	0.003	-0.02***	8.57	0.003	0.0003**	2.05	0.040	0.0003**	2.05	0.041
TOBINQ	-0.10***	17.27	<.0001	-0.10***	17.57	<.0001	-0.0024***	-4.44	<.0001	-0.0024***	-4.41	<.0001
FIRMAGE	0.06*	3.24	0.072	0.06*	3.11	0.078	0.0012**	2.19	0.029	0.0013**	2.27	0.023
ASSETAGE	-0.60***	17.23	<.0001	-0.58***	16.09	<.0001	0.0046	1.60	0.109	0.0043	1.51	0.132
MGR_ABLITY	0.00	0.00	0.965	-0.01	0.01	0.926	-0.0002	-0.17	0.862	-0.0001	-0.09	0.927
ACCRUAL	0.41	1.19	0.274	0.38	1.03	0.309	-0.0114	-1.05	0.293	-0.0111	-1.03	0.304
SALE_VOL	-0.11***	8.02	0.005	-0.11***	7.86	0.005	0.0005	0.68	0.495	0.0005	0.65	0.514
SPE_ITEM	-2.10***	19.67	<.0001	-2.12***	19.98	<.0001	0.2210***	9.50	<.0001	0.2216***	9.51	<.0001
BIG4	0.09	1.79	0.181	0.10	1.96	0.161	0.0018	1.22	0.224	0.0018	1.19	0.235
HIGH_RISK	0.09	1.40	0.237	0.08	1.14	0.285	0.0006	0.41	0.683	0.0007	0.52	0.606
Industry Indicators	Yes			Yes			Yes			Yes		
Year Indicators	Yes			Yes			Yes			Yes		
Pseudo R ² / Adj. R ²	0.1084			0.1080			0.2602			0.2596		
Observations	21,761			21,761			4,307			4,307		

Additional Test #2 – Alternative Sample Periods

Table 6	Dependent Variable = LAWSUIT						Dependent Variable = LAWSUIT_GL					
	Logistic Regression						Clustered Standard Errors OLS					
	Column 1			Column 2			Column 3			Column 4		
	1991-2002			2003-2016			1991-2002			2003-2016		
Variable	Estimate	Chi-Square	Pr > ChiSq	Estimate	Chi-Square	Pr > ChiSq	Estimate	t Value	Pr > t	Estimate	t Value	Pr > t
Intercept	-3.85***	16.67	<.0001	-3.03***	221.59	<.0001	-0.0390**	-2.06	0.041	0.0027	0.75	0.451
CSR	-0.04*	3.35	0.067	-0.05***	39.01	<.0001	0.0004	0.66	0.513	0.0003***	3.13	0.002
SIZE	0.47***	50.77	<.0001	0.25***	232.26	<.0001	-0.0001	-0.07	0.940	-0.0014***	-4.63	<.0001
MTB	0.01	0.46	0.498	0.00	0.51	0.476	0.0001**	2.02	0.045	0.0000	0.44	0.659
LEV	0.03	0.00	0.963	-0.34***	7.02	0.008	0.0046	0.26	0.797	0.0051**	1.97	0.048
ROA	0.04	0.00	0.975	0.98***	8.74	0.003	-0.1133***	-2.83	0.005	-0.0486***	-4.02	<.0001
CASHFL	-3.96***	8.60	0.003	-0.11	0.14	0.710	0.1079***	3.00	0.003	0.0452***	4.57	<.0001
LOSS	0.29	1.93	0.165	0.24***	15.34	<.0001	-0.0105*	-1.72	0.086	-0.0009	-0.56	0.576
ZSCORE	0.03	2.09	0.148	-0.02***	9.55	0.002	0.0008	1.30	0.194	0.0002	0.85	0.398
TOBINQ	0.00	0.00	0.973	-0.10***	17.48	<.0001	-0.0032	-1.04	0.298	-0.0025***	-4.65	<.0001
FIRMAGE	-0.35**	5.29	0.022	0.06	2.52	0.112	0.0052	1.64	0.103	0.0012**	2.17	0.030
ASSETAGE	-2.13***	8.04	0.005	-0.58***	15.39	<.0001	0.0351	1.59	0.113	0.0038	1.34	0.181
MGR_ABLITY	-0.51**	4.54	0.033	0.00	0.00	0.945	-0.0084	-1.58	0.116	0.0006	0.49	0.621
ACCRUAL	2.64*	2.78	0.095	0.33	0.76	0.383	0.0052	0.14	0.891	-0.0112	-1.03	0.305
SALE_VOL	-0.27	2.42	0.120	-0.11***	7.51	0.006	0.0030	0.65	0.514	0.0005	0.61	0.539
SPE_ITEM	-3.72**	4.24	0.040	-1.45***	8.75	0.003	0.2069***	2.85	0.005	0.2178***	8.66	<.0001
BIG4	-0.25	0.24	0.624	0.12*	3.05	0.081	-0.0070	-0.99	0.323	0.0019	1.26	0.209
HIGH_RISK	-0.10	0.07	0.795	0.10	1.49	0.222	-0.0078	-0.87	0.386	0.0008	0.56	0.578
Industry Indicators	Yes			Yes			Yes			Yes		
Year Indicators	Yes			Yes			Yes			Yes		
Pseudo R ² / Adj. R ²	0.1386			0.0710			0.2968			0.2532		
Observations	3,131			18,630			279			4,028		

Additional Test #3 – Lagged CSR Measures in H1

Table 7	Dependent Variable = LAWSUIT								
	Logistic Regression								
	Column 1			Column 2			Column 3		
Variable	Estimate	Chi-Square	Pr > ChiSq	Estimate	Chi-Square	Pr > ChiSq	Estimate	Chi-Square	Pr > ChiSq
Intercept	-3.02***	151.17	<.0001	-2.95***	130.83	<.0001	-2.79***	105.38	<.0001
LAG_CSR1	-0.04***	17.35	<.0001						
LAG_CSR2				-0.04***	17.99	<.0001			
LAG_CSR3							-0.03***	15.18	<.0001
SIZE	0.22***	143.22	<.0001	0.21***	122.49	<.0001	0.20***	98.12	<.0001
MTB	0.01*	3.13	0.077	0.01*	3.43	0.064	0.01*	2.90	0.089
LEV	-0.33**	4.36	0.037	-0.36**	4.40	0.036	-0.55***	9.31	0.002
ROA	1.25**	6.03	0.014	1.20**	4.89	0.027	1.30**	5.15	0.023
CASHFL	-0.73*	2.83	0.093	-0.75	2.67	0.102	-0.66	1.86	0.173
LOSS	0.18**	6.08	0.014	0.21***	7.16	0.007	0.24***	8.22	0.004
ZSCORE	-0.02***	6.75	0.009	-0.03***	7.25	0.007	-0.04***	13.62	0.000
TOBINQ	-0.14***	16.60	<.0001	-0.12***	12.86	0.000	-0.12***	11.09	0.001
FIRMAGE	0.10**	5.82	0.016	0.09**	4.05	0.044	0.10*	3.79	0.052
ASSETAGE	-0.40**	5.16	0.023	-0.39**	4.40	0.036	-0.37*	3.54	0.060
MGR_ABLITY	0.02	0.04	0.843	-0.01	0.01	0.925	-0.01	0.02	0.901
ACCRUAL	1.32**	6.48	0.011	1.36**	6.10	0.014	1.20**	4.20	0.041
SALE_VOL	-0.13**	6.60	0.010	-0.16***	8.12	0.004	-0.14**	5.47	0.019
SPE_ITEM	-2.91***	17.83	<.0001	-2.77***	14.29	0.000	-2.36***	9.02	0.003
BIG4	0.14	2.62	0.106	0.14	2.54	0.111	0.12	1.64	0.200
HIGH_RISK	0.02	0.04	0.847	0.05	0.23	0.633	0.05	0.28	0.600
Industry Indicators	Yes			Yes			Yes		
Year Indicators	Yes			Yes			Yes		
Pseudo R ²	0.1044			0.1020			0.0976		
Observations	16,099			14,452			12,915		

Additional Test #4 – Change Analysis

Table 8	Ordinary Least Squares Regression (OLS)					
	Column 1			Column 2		
	Dependent Variable = Δ LAWSUIT			Dependent Variable = Δ LAWSUIT_GL		
	Full Sample			Lawsuit Sample		
Variable	Estimate	t Value	Pr > t	Estimate	t Value	Pr > t
Intercept	-0.003	-0.13	0.894	0.0019	1.01	0.312
ACSR	-0.006**	-2.41	0.016	0.0001*	1.73	0.083
Δ SIZE	0.048*	1.75	0.081	-0.0044*	-1.84	0.066
Δ MTB	0.000	-0.04	0.971	0.0001*	1.92	0.056
Δ LEV	-0.040	-0.56	0.573	0.0149**	2.29	0.022
Δ ROA	0.231**	2.44	0.015	-0.0506***	-3.11	0.002
Δ CASHFL	-0.029	-0.37	0.708	0.0328***	2.91	0.004
Δ LOSS	0.012	0.98	0.329	0.0007	0.37	0.711
Δ ZSCORE	-0.007**	-2.29	0.022	0.0007	1.61	0.107
Δ TOBINQ	0.009	0.90	0.366	-0.0038***	-2.73	0.006
Δ FIRIMAGE	-0.013	-0.09	0.925	0.0048	0.91	0.361
Δ ASSETAGE	-0.165	-1.58	0.113	0.0162*	1.85	0.064
Δ MGR_ABLITY	-0.023	-1.29	0.197	-0.0009	-0.64	0.522
Δ ACCRUAL	0.203**	2.29	0.022	-0.0066	-0.58	0.564
Δ SALE_VOL	-0.004	-0.22	0.828	0.0002	0.12	0.902
Δ SPE_ITEM	-0.347***	-2.77	0.006	0.2282***	8.92	<.0001
Δ BIG4	0.027	0.62	0.536	-0.0008	-0.20	0.844
Industry Indicators	Yes			Yes		
Year Indicators	Yes			Yes		
Adj. R ²	0.0044			0.2235		
Observations	16,099			2,465		

Additional Test #5 – Two-Stage OLS Regression Analysis H2

Table 9	Dependent Variable = LAWSUIT_GL					
	Lawsuit Sample					
	Ordinary Least Squares Regression (OLS)					
	Column 1			Column 2		
		Stage 1			Stage 2	
Variable	Estimate	t Value	Pr > t	Estimate	t Value	Pr > t
Intercept	-3.048***	-6.67	<.0001	-0.0007	-0.21	0.831
CSR_Mean	0.885***	9.35	<.0001			
CSR_Instrumental				0.0003***	2.98	0.003
SIZE	0.470***	14.11	<.0001	-0.0012***	-4.64	<.0001
MTB	0.008	1.40	0.160	0.0000	0.91	0.362
LEV	-0.326	-1.21	0.228	0.0059***	2.90	0.004
ROA	-1.907***	-2.86	0.004	-0.0605***	-12.02	<.0001
CASHFL	2.151***	3.26	0.001	0.0498***	10.02	<.0001
LOSS	-0.290**	-2.32	0.021	-0.0022**	-2.30	0.022
ZSCORE	0.002	0.12	0.904	0.0003***	3.10	0.002
TOBINQ	0.181***	3.59	0.000	-0.0024***	-6.19	<.0001
FIRIMAGE	0.195**	2.59	0.010	0.0012**	2.13	0.033
ASSETAGE	-1.042***	-3.31	0.001	0.0045*	1.89	0.059
MGR_ABLITY	0.528***	3.69	0.000	-0.0002	-0.16	0.875
ACCRUAL	-0.029	-0.04	0.971	-0.0113*	-1.83	0.067
SALE_VOL	-0.236***	-2.68	0.007	0.0005	0.83	0.409
SPE_ITEM	1.751*	1.92	0.055	0.2208***	32.12	<.0001
BIG4	-0.162	-1.04	0.299	0.0018	1.56	0.119
HIGH_RISK	0.306*	1.80	0.072	0.0006	0.45	0.650
Industry Indicators	Yes			Yes		
Year Indicators	Yes			Yes		
Adj. R ²	0.2817			0.2603		
Observations	4,307			4,307		

Additional Test #6 – Settlement Gain vs. Settlement Loss in H2

Table 10	Dependent Variable = LAWSUIT_GL					
	Lawsuit Sample					
	Clustered Standard Errors OLS Regression					
	Column 1			Column 2		
	Settlement Gain			Settlement Loss		
Variable	Estimate	t Value	Pr > t	Estimate	t Value	Pr > t
Intercept	0.0105**	2.26	0.024	-0.0168***	-3.92	<.0001
CSR	0.0001	0.75	0.456	0.0003***	2.72	0.007
SIZE	-0.0021***	-6.81	<.0001	0.0009**	2.47	0.014
MTB	0.0000	1.37	0.172	0.0001	0.92	0.356
LEV	-0.0022	-0.80	0.425	0.0110***	3.21	0.001
ROA	-0.0473**	-2.58	0.010	-0.0486***	-3.98	<.0001
CASHFL	0.0424***	3.01	0.003	0.0352***	3.37	0.001
LOSS	0.0037**	2.13	0.033	-0.0062***	-3.39	0.001
ZSCORE	-0.0003	-1.42	0.157	0.0004**	1.98	0.048
TOBINQ	0.0000	-0.07	0.948	-0.0030***	-4.13	<.0001
FIRIMAGE	0.0010	1.34	0.181	0.0008	1.18	0.239
ASSETAGE	0.0012	0.33	0.739	0.0082**	2.21	0.027
MGR_ABLITY	0.0021	1.60	0.111	-0.0007	-0.55	0.582
ACCRUAL	0.0179	1.26	0.208	-0.0371***	-2.89	0.004
SALE_VOL	0.0021**	2.16	0.031	0.0010	1.00	0.315
SPE_ITEM	0.1798***	5.22	<.0001	0.1617***	6.60	<.0001
BIG4	-0.0002	-0.10	0.922	0.0022	1.42	0.156
HIGH_RISK	0.0012	0.66	0.513	0.0003	0.18	0.858
Industry Indicators	Yes			Yes		
Year Indicators	Yes			Yes		
Adj. R ²	0.2876			0.3122		
Observations	2,050			2,257		

Additional Test #7 – High Cash vs. Low Cash in H1

Table 11	Dependent Variable = LAWSUIT					
	Full Sample					
	Logistic Regression					
	Column 1			Column 2		
	High Cash Holdings			Low Cash Holdings		
Variable	Estimate	Chi-Square	Pr > ChiSq	Estimate	Chi-Square	Pr > ChiSq
Intercept	-2.622***	79.69	<.0001	-3.434***	85.90	<.0001
CSR	-0.037***	17.24	<.0001	-0.066***	14.64	0.000
SIZE	0.205***	71.63	<.0001	0.248***	53.00	<.0001
MTB	0.008	2.22	0.136	-0.008	1.13	0.287
LEV	-0.256	1.89	0.169	-0.423**	5.03	0.025
ROA	1.543***	9.46	0.002	0.796*	3.29	0.070
CASHFL	-0.827*	3.38	0.066	0.062	0.02	0.880
LOSS	0.112	1.68	0.196	0.378***	20.20	<.0001
ZSCORE	-0.021**	5.23	0.022	-0.021**	4.76	0.029
TOBINQ	-0.127***	15.16	<.0001	-0.055	2.42	0.120
FIRMAGE	0.036	0.53	0.465	0.153***	7.76	0.005
ASSETAGE	-0.580***	8.06	0.005	-0.494**	5.19	0.023
MGR_ABLITY	0.019	0.05	0.830	0.020	0.03	0.858
ACCRUAL	1.362***	6.75	0.009	-0.566	1.05	0.305
SALE_VOL	-0.218***	14.66	0.000	-0.005	0.01	0.936
SPE_ITEM	-3.403***	21.67	<.0001	-1.072	2.70	0.101
BIG4	0.086	0.46	0.496	0.136	2.50	0.114
HIGH_RISK	0.184*	3.17	0.075	-0.031	0.06	0.806
Industry Indicators	Yes			Yes		
Year Indicators	Yes			Yes		
Pseudo R ²	0.1193			0.1007		
Observations	10,881			10,880		
	Coefficient Comparison Test					
	Coefficient of CSR (-0.037) for Observations with High Cash Holdings vs. Coefficient of CSR (-0.066) for Observations with Low Cash Holdings					
	F-stat. = 16.63; p-value < 0.0001					

Additional Test #8 – Using Individual CSR Components

Table 12		Column 1			Column 2		
		Dependent Variable = LAWSUIT			Dependent Variable = LAWSUIT_GL		
		Logistic Regression			Clustered Standard Errors OLS		
		Full Sample			Lawsuit Sample		
	Variable	Estimate	Chi-Square	Pr > ChiSq	Estimate	t Value	Pr > t
	Intercept	-2.50***	127.04	<.0001	-0.0021	-0.56	0.576
CSR Components	Community Component	0.02	0.33	0.567	-0.0008	-1.38	0.168
	Governance Component	-0.13***	19.26	<.0001	0.0009*	1.76	0.079
	Diversity Component	0.04**	5.41	0.020	0.0007**	2.53	0.011
	Employee Component	-0.03	1.66	0.198	0.0001	0.20	0.845
	Environment Component	-0.06***	8.60	0.003	0.0004	1.49	0.135
	Human Rights Component	0.00	0.00	0.952	-0.0020***	-2.87	0.004
	Product Component	-0.28***	74.25	<.0001	0.0012**	2.49	0.013
	Controls	Yes			Yes		
	Industry Indicators	Yes			Yes		
	Year Indicators	Yes			Yes		
	Pseudo R ² / Adj. R ²	0.1157			0.263		
	Observations	21,761			4,307		

Conclusion

- In this study, we find that socially responsible firms are less likely to be involved in lawsuits. We also find that socially responsible firms receive favorable settlement outcomes (i.e., larger settlement gain or smaller settlement loss).
- Results are consistent with the stakeholder view of CSR.
- Several shortcomings: (1) large sample firms, (2) the lack of data on the nature of lawsuits, (3) other CSR theories exist.



Thank You

huntsman.usu.edu