## Corporate Sociopolitical Activism and Firm Value

## Web Appendix

## WEB APPENDIX W1 – ARCHIVAL SEARCH GENERIC TERM DICTIONARY

# TABLE W1 Time Specific Archival Search Items for Corporate Sociopolitical Activism Events

Sociopolitical F	ACTIVISHI EVEHUS
Abortion	LGBT
Bathroom Bill	LGBTQ
Black Lives Matter	Mass shooting
BLM	Marriage Equality
Border Security	Minimum Wage
Censorship	North Carolina HB2
Climate Change	NSA data collection
Confederate Flag	NSA Tracking
Confederate Statue	Planned Parenthood
<b>Environmental Regulations</b>	Police Brutality
Equal Pay	Pride Month
Equality Act	Pride Week
Gender Equality	Racial Discrimination
Georgia House Bill 757	Refugees Employment
Gun Control	Religious Freedom Act
Illegal Immigrants	Second Amendment
Immigration Enforcement	Sexual Discrimination Bill
Immigration Reform	Women Equality

## WEB APPENDIX W2 - Q-SORT SURVEY DETAILS AND STATISTICS

We ran a Q-sort survey to validate further that our events objectively qualify as CSA and are separate from CSR and CPA. We have reviewed 119 articles on CSR and 25 articles on CPA from the top tier journals of marketing, management, and political science literature from 1985 to 2019<sup>1</sup>: Journal of Marketing, Journal of Marketing Research, Journal of the Academy of Marketing Science, Academy of Management Review, Journal of Management, Management Science, Strategic Management Journal, Journal of Public Relations Research, American Political Science Review

We gathered the most comprehensive and recent definition for the two constructs and provided the definitions along with the definition of CSA according to our paper to two research assistants blind to our research question and the categories. We then provided the research assistants with 318 examples of CSA, CSR, and CPA. We asked each research assistant to classify the 318 events A, B and C. Section below provides the definitions and the sources for the examples provided for Q-sort survey:

## Definitions and References

Research assistants received the definitions for three groups (A, B, C), which correspond to CSA, CSR, and CPA respectively:

TABLE W2
Panel A: Definitions for the three constructs

	Definition	Common Characteristics
Group A	Company activities related to support of or opposition to one side of a controversial sociopolitical issue	<ul> <li>motivated by an ideological perspective on how society "should be"</li> <li>always publicized</li> <li>makes some people in society feel supported, but might anger others (i.e., divisive in nature)</li> </ul>
Group B	Company activities related to its obligations to society and its stakeholders to advance societal good	<ul> <li>motivated by a general consensus on what's morally appropriate and desirable</li> <li>generates positive outcome for a wide range of people</li> <li>typically, publicized</li> <li>makes most people in society "feel good" about a company</li> </ul>

<sup>&</sup>lt;sup>1</sup> The complete list of the journals is available upon request.

Company activities related to influencing politicians and political processes in order to increase business performance.

- motivated by profit
- generates positive outcomes for the company that might not be beneficial to society
- rarely publicized
- makes politicians more likely to enact laws and policies that help a company

#### Events

We provided 318 events to the research assistants, 281 events from our sample, 25 CSR examples, and 12 CPA examples. The CPA and CSR examples are collected from the papers in our comprehensive literature review<sup>2</sup> (Aguilera et al. 2007; Barnett 2007; Biehal and Sheinin 2007; Brown and Dacin 1997; Brown, Waltzer, Waltzer<sup>3</sup> 2001; Chatterji et al. 2016; Chen 2007; David, Kline, and Dai 2005; Du, Bhattacharya, and Sen 2011; Flammer 2015; Flammer and Luo 2017; Grier, Munger, and Roberts 1994; Hansen and Mitchell. 2000; Hawn and Ioannou 2016; Hillman, Keim and Schuler 2004; Homburg, Stierl, and Bornemann 2013; Kim and Choi 2012; Koschate-Fischer, Huber, and Hoyer 2016; Lenz, Wetzel, and Hammerschmidt 2017; Lichtenstein, Drumwright, and Braig 2004; Luo and Bhattacharya 2006; Lux, Crook, and Woehr 2011; Maignan and Ferrell 2004; McWilliams and Siegel 2001; 2011; Peloza and Shang 2011; Sawant 2012; Schuler, Rehbein, and Cramer 2002; Schuler et al. 2017; Tonin and Vlassopoulos 2014; Vlachos et al. 2009; Wagner, Lutz, and Weitz 2009; Werner 2017)

The CSA examples are directly extracted from our sample. We have provided only 281 out of 293 events because the events are provided eliminating the name of the company, therefore, some similar events conducted by firms from similar industries which were worded similarly, transformed into completely similar examples. Consider the two events below:

- 1. Alphabet urges the Supreme Court to rule for marriage equality.
- 2. Apple urges the Supreme Court to rule for marriage equality.

We provided the research assistant with one example for the two events:

A company in the computer and software industry urges the Supreme Court to rule for marriage equality.

<sup>2</sup> We only have used 12 examples of CPA because numerous examples of CPA are fundamentally similar: A company donating money to a political party. We have tried to collect CPA examples that are different and can address each similarity and distinction between CPA and CSA (e.g., advertorial, donations, lobbying, government affairs, etc.)

<sup>&</sup>lt;sup>3</sup> Although this paper is not part of the top 50 business journals in Financial Times or top 50 political science journals in Scimago Rankings, it has been included due to its unique examples for advertorial which we could not find in any of the other journals.

### **Q-Sort Survey Results**

We follow previous Research (Landis and Koch 1977; Nahm et al. 2002) to calculate the level of agreement between the two research assistants and the validity of the sample classification. Table W2 Panel B shows the inter-judge raw scores. The diagonal line indicates the events where the two research assistants have agreements, and the off-diagonal figures are results of which they have classified events in different groups. For example, the table shows that the two participants had an agreement on 253 of the events and have classified similarly 220 of the events as CSA, ten as CPA, and 23 as CSR. However, they had disagreements on the remaining 60 events. The overall agreement between the two assistants is 79.5%.

TABLE W2
Panel B: Q-Sort Survey Inter-Judge Raw Agreement Scores

			Judge 1	
		CSA	CPA	CSR
2	CSA	220	8	24
Judge	CPA	3	10	6
<del>-</del> 5	CSR	17	7	23

Total Placements: 318; Number of Agreements: 253; Agreement Ratio: .795

We then calculate the Cohen's Kappa which calculates the proportion of agreement after eliminating the chance agreement:

$$\begin{aligned} & \textbf{Cohen's Kappa} = \frac{\sum_{i} P \text{ii} - \sum_{i} P \text{i} + P + \text{i}}{1 - \sum_{i} P \text{i} + P + \text{i}} \\ & = \frac{\left[\frac{220 + 10 + 23}{318} - \left[\left(\frac{3 + 6}{318} \times \frac{8 + 7}{318}\right) + \left(\frac{8 + 24}{318} \times \frac{3 + 17}{318}\right) + \left(\frac{24 + 6}{318} \times \frac{17 + 7}{318}\right)\right]\right]}{\left[1 - \left(\frac{3 + 6}{318} \times \frac{8 + 7}{318}\right) + \left(\frac{8 + 24}{318} \times \frac{3 + 17}{318}\right) + \left(\frac{24 + 6}{318} \times \frac{17 + 7}{318}\right)\right]} = \frac{.78}{.98} = 79.6\% \end{aligned}$$

According to the guideline provided for Cohen's Kappa:

- 1. Excellent Agreement: Kappa = .76 1.00
- 2. Fair to Moderate Agreement: Kappa = .40 .75
- 3. Poor Agreement: Kappa = .39 or less

The agreement level for the two research assistants is in the excellent range and is not due to chance.

In the next step, we use the overall Hit Ratio to estimate the validity of the definitions and classification (Moore and Benbasat 1991; Nahm et al. 2002). The item placement ratio or the "Hit Ratio" is an indicator of how many events overall have been placed in the category intended by our research and definition.

Table W2-Panel C provides the details for overall placement. The research assistants have classified 86% of the CSA events from our sample as Group A (CSA). Also, they have correctly placed 88% of the CSR examples in Group B (CSR) and 75% of the CPA examples in group C (CPA). The overall Hit Ratio is 85%, which confirms that our sample of events indeed is consistent with the definition we have provided for CSA.

TABLE W2
Panel C: Q-Sort Survey- Items Placement Ratios

		Actual				
	Definitions	CSA	CPA	CSR	Total	% Hit
	CSA	481	25	56	562	0.86
Theoretical	CSR	5	1	44	50	0.88
The	CPA	4	20	0	24	0.83
Total number	of placements: 636; Num	ber of hits: 545		Ov	erall % Hit	0.86

## WEB APPENDIX W3-CONTROL VARIABLE DETAILS AND OPERATIONALIZATION

TABLE W3
Operationalization of the Control Variables

			tion of the Control variables	
	Variable Name	Variable Description	Variable Operationalization	Source
	Corporate Social Responsibility -Firm_CSR (continuous)	To disentangle the effect of corporate activism from corporate social responsibility	We followed Mishra and Modi's (2016) procedure and used Kinder, Lydenberg, and Domini Research and Analytics Inc.'s publicly available firm ratings to create six indexes that reflect various types of responsibility:	Kinder, Lydenberg, and Domini Research and Analytics Inc.
bles			<ul><li>corporate governance</li><li>employee relations</li><li>environment</li><li>community</li><li>product quality</li><li>diversity</li></ul>	
trol varial			We use the total summation of the indices as the <i>Firm_CSR</i> Index for the firm	
Firm specific control variables	Corporate Political Activities - Firm_CPA (continuous)	To account for the firm's political activities to advance the business of the firm	For a given firm, we collected <i>Firm_CPA</i> as: (Total donations to the Republican party- Total donations to the Democratic party) / Total firm donation	The Center for Responsive Politics' public database (searchable via www.opensecrets.or g)
	B2B_B2C (dummy)	Firms' primary operating markets	Dummy coded according to their four-digit SIC codes (Srinivasan, Lilien, and Sridhar 2011); equal to 1 for the B2B firms and 0 for B2C firms	COMPUSTAT
	CMO (dummy)	To control for the potential effect of a marketing leader on CSA's effectiveness	Dummy coded according to the composition of the firm's C-suite. (CMO) is equal to 1 if the firm has a CMO in its top management team in the year of the CSA and 0 otherwise.	BoardEx

## TABLE W3-Continued Operationalization of the Control Variables

	Variable Name	Variable Variable Operationalization		Source
	ROA (continuous)	Financial performance of the firm	Return on assets as the firm's earnings before extraordinary items in relation to its total assets (Rego, Billett, and Morgan 2009)	COMPUSTAT
Firm specific control variables	Firm_Size (continuous)	Financial performance of the firm	Natural logarithm of total assets (Lin and Chang 2012)	COMPUSTAT
	Leverage (continuous) Financial performance of t firm		Firm's long-term debt relative to total assets (Luo, Homburg, and Wieseke 2010)	COMPUSTAT
	Advertising_Expenditure (continuous)	To account for the brand's communication with the market, measured as the dollar amount spent on advertising in the previous year.	Firm's advertising expenditure in total million USD.	COMPUSTAT
	Marketing_Capability (continuous)	To control for the efficiency of the firm to operate in the turmoil period after the activism	We collect the firm's patents, sales, general, and administrative expenses, and account receivables for year <sub>t-1</sub> as input resources and revenue <sub>t-1</sub> as output. We collect firm's receivables, sale, and industry identifier form COMPUSTAT and firm's patent stock from AcclaimIP.com to run the input-output frontier model and construct the marketing capability.	COMPUSTAT Www. AcclaimIp.com

## TABLE W3-Continued Operationalization of the Control Variables

	Оре	erationalization of	of the Control Variables	
	Variable Name	Variable Description	Variable Operationalization	Source
Firm specific control variables	Brand_Number (continuous)	To account for the differences in the consequences when corporate activism is conducted via a multi-brand firm versus a single-brand firm	We collect the number of corporate brands for each firm-event by examining the company's 10-K report published most recently after the event date. We accessed each 10-K through the firm's investor relations website and searched the text for management specified mentions or lists of the firm's unique brands, trademarks, operating divisions, subsidiaries, etc. We use the natural logarithm of this number in the model.	Archival search
	Institutional_Holdings (continuous)	To differentiate between the reactions of individual investors and institutions.	The relative number of shares held by the institutions divided by the total number of shares	Thomson Reuters
	Firm's previous corporate activism: - Past_CSA (continuous)	To account for the firm's reputation for conducting activism which forms investors' expectations	We record the number of past events (Past_CSA) for each company three years prior to the time of the current event	Archival search
CEO specific control variables	CEO Political Ideology - CEO_Political_Ideology (continuous)	To account for the CEO's political activities to advance the business of the firm.	For a given firm, we collected the CEO's political ideology according to their political donations:  Total donations to the Republican party- Total donations to the Democrat party) / Total CEO donation (Schuler, Rehbein, and Cramer 2002)	The Center for Responsive Politics' public database (searchable via www.opensecrets.org)

TABLE W3-Continued
Operationalization of the Control Variables

	Operationalization of the Control Variables					
	Variable Name	Variable Description	Variable Operationalization	Source		
CEO specific control	CEO demographics: - CEO_Age (continuous) - CEO_Gender (dummy)	To address the differences in the CEO's inclination to take risks and conduct or encourage corporate activism	We collect these two variables through the archival search on the Firm's page, Bloomberg's People, LinkedIn, etc.	BoardEx, Archival search		
Event Specific Factor	Event_Category (categorical)	The general theme of the polarizing issue	These categorical variables include - government scope, - racial discrimination, - gender equality and women rights, - sexual orientation equality, and - others	Archival search		
Industry Specific Factors	High_Tech (dummy)	To address the possibility of prevalence of corporate activism in high-tech industries	Equal to 1 if the firm is from a high-tech industry: We coded firms in the following 4 digit SIC codes as high-tech: 2834–2836, 3570–3572, 3575–3579, 3600, 3612–3613, 3620–3621, 3630, 3634, 3640, 3651–3652, 3661, 3663, 3669–3670, 3672, 3674, 3677–3679, 3821–3829, and 3841–3845 (Sridhar, Narayanan and Srinivasan 2013)	COMPUSTAT		
ıbuI	Industry_dummies (dummy)	To control for industry-specific factors	1 digit SIC codes	COMPUSTAT		
Time Specific Factors	Election_Year (dummy)	To control for possible higher sensitivity to politically polarizing statements during election years	Dummy equal to 1 if the event occurred in a U.S. presidential election year for years 2012 and 2016.	Archival search		
Time S	Year dummies (dummy)	To control for time- specific factors	Year dummies	Archival search		

#### SECTION W4 - HECKMAN SELECTION CORRECTION MODEL

## TABLE W4-1 Results of the First-Stage Heckman Correction Model

Panel Data	Panel Data Probit Model				
	Dependent Variable:				
Variables	Choice to Conduct				
(2,231 Firms)	Corporate				
(2,231 1411118)	Sociopolitical				
	Activism				
Average Industry Activism	3.69 ***				
	(.40)				
Average State Activism	9.24 ***				
	(2.15)				
Institutional Holdings	21				
	(.16)				
ROA	.020 **				
	(.15)				
Firm Size	.78 ***				
	(.07)				
Leverage	.12 ***				
	(.04)				
Advertising Expenditure	.00021 ***				
	(.00)				
Election Year	6.73 ***				
	(.33)				
High-Tech	048				
6	(.23)				
Wald $\chi^2$	4381.19				
Log-Likelihood	-462.57				
Pseudo-R <sup>2</sup>	.72				

p < .10, \*\*p < .05, \*\*\*p < .01.

Notes: Year and industry dummies are omitted from the table because of limited space.

## Relevance and Exclusion Restriction for the First-Stage Heckman Correction Model

We propose two variables to satisfy the first-stage assumptions for the Heckman correction model: the average of CSA incidents in the same industry and the same state; Average\_Industry\_CSA and Average\_State\_CSA. In terms of relevance, it is reasonable to assume that firms in the same industry or the same geographic region face similar conditions related to activism. If a large number of competitors engage in activism, managers of the focal firm may feel pressured to engage in activism as well, to avoid a "silence penalty" (Edelman 2018). Similarly, if a state regulation (e.g., Georgia's religious freedom bill) or other regional sociopolitical incidents induce CSA in the state, managers of the firm are likely to face the pressure or need to engage.

To check whether the variables meet the exclusion restriction, the selected variables should not be correlated with the omitted variables that influence investors' reactions to the focal firm's activism.

We argue that these variables are not related to or will systematically affect firm-specific omitted variables for three reasons. First, we exclude the focal firm from the calculation of the instrument. Second, most endogenous firm-specific factors that can guide investors' reactions to the firm's activism can be unique to the relationship between the firm and its shareholders and other stakeholders and therefore, may not be included in the competitors' decision-making process for CSA and subsequently in the first-stage selection variables. However, there might be unobservable exogenous shocks that affect the likelihood to engage in activism and investors' reactions in the stock market. For example, all high-tech firms in Silicon Valley, CA, have been more vocal about equality issues. Therefore, these firms are more expected to conduct a liberal CSA, and investors (1) have a higher expectation of these firms to do so, and (2) expect the state of California to be more accepting of such liberal CSA. Both of these possibilities can influence investors' reactions to all CSAs conducted by firms in this industry, which will violate the exclusion restriction. We account for such systematic exogenous factors, by following Germann, Ebbes, and Grewal's (2015) recommendation in calculating *Average\_Industry\_CSA*.

If each firm in our sample belongs solely to a single industry, then the *Average\_Industry\_Activism* only contains firms from that one particular industry, which could lead to a problematic correlation between IMR and the second stage error term. Following Germann, Ebbes, and Grewal (2015), we first identify all the industries that the firm is a member of in each year (each firm has a broad spectrum of activities and is a member of multiple industries. We list from COMPUSTAT all the 4-digit SIC codes that the focal firm "primarily" belongs to, and we collect all the firms in these multiple industries to calculate the average of activism occurrence for all these firms. As Germann, Ebbes, and Grewal (2015) argue, it is highly unlikely that all the industries that the firm is a member of, systematically go through the same exogenous shocks or follow similar patterns which can affect the investors' reaction to all firms across industries.

Average\_State\_CSA is a cross-industry variable, which makes it even less likely that firm decisions relate to those of nonpeer same-state firms. For the exclusion restriction to be violated, all firms in one state should not only be treated in the same way by the same legislature but should also have the same employee base and the same customer base, which is highly unlikely. Additionally, due to the heterogeneity in a legislature's reach and control over the different industries in the state, the aftermath of a CSA highly deviated from the legislature, conducted by

a firm in one industry can be different from another.

Furthermore, to confirm that the exclusion restriction proposal above is statistically sound, we follow Certo et al. (2016) to provide statistical evidence for the exclusion restriction: In Table W4-2, we provide the correlation table between the inverse Mills ratio and the independent variables. High correlations between *IMR* and the independent variables indicate a poor exclusion restriction (Bushway, Johnson, and Slocum 2007; Certo et al. 2016). The correlations between IMR and variables in our model are lower than ±.1 and non-significant. Although previous research does not provide a benchmark for the correlation, it suggests diagnosing the strength of the exclusion restriction using the IMR correlation in conjunction with other statistics such as pseudo-R-square of the first stage (Certo et al. 2016). The first-stage Heckman correction model for our sample has a pseudo-R-square of .72. The "a combination of institutional knowledge and ideas about processes" determining the investors' reactions to CSA (Angrist and Pischke (2009, p.117), along with the low correlation between *IMR* and main variables and the high pseudo-R-square confirms that our first-stage model does not suffer from a weak exclusion restriction.

TABLE W4-2 Correlation Between IMR and Main Independent Variable

Correlation Between Hill	una ma	in macpena	ciic variabi	
Variables	1.	2.	3.	4.
1. IMR	1			
2. CSA Customer Deviation	.10	1		
3. CSA Employee Deviation	.09	.43 ***	1	
4. CSA Government Deviation	.05	.44 ***	.33 ***	1

<sup>\*\*\*</sup>p < .01, \*\*p < .05, \*p < .10

## **Results for the First Stage Model:**

The coefficient for *Average\_Industry\_CSA* is positive and significant ( $\beta$  = 3.69, p < .01), indicating that firms indeed are more likely to engage in activism if activism is more common in their industry. The coefficient for *Average\_State\_CSA* is positive and significant ( $\beta$  = 9.24, p < .01), which confirms that firms are more likely to engage in activism if their headquarters are located in a state where activism is more prevalent. Furthermore, the results show that firms are more likely to engage in activism if they have higher ROA ( $\beta$  = .20, p < .01), are larger ( $\beta$  = .78, p < .01), have higher leverage ( $\beta$  = .12, p < .01), and spend more on advertising ( $\beta$  = .00021, p < .01). Finally, firms are more likely to engage in activism in election years ( $\beta$  = 6.79, p < .01), when political topics and controversial issues are spotlighted more.

#### SECTION W5 - ROBUSTNESS TESTS

## W5-1: Alternative sociopolitical stance variables:

We did not have access to the respondents at the time when activism occurred. Therefore, the *Event\_Stance* and *Customer\_Stance* variables are based on respondents' perceptions of what the stances would have been at the time of the event. Although most sociopolitical issues and most of the firms in our sample have not had a considerable change in their customer base during the sample period, two concerns may arise: (1) Does the *Event\_Stance* measure vary with time during our sample (i.e., the same event might have been perceived as more liberal in 2011 than in 2013), (2) Does the "perceived" *Event\_Stance* and *Customer\_Stance* measures yield biased results?

To address the first concern, we regress the Stance measure over the year period in our sample to test whether there is a systematic change in the *Event\_Stance* measure through time. None of the year dummies are significant, which shows that most sociopolitical issues did not considerably change partisanship controversy between 2011 to 2016. Although we believe that CSA's stance and level of partisanship are inextricably time-dependent, it is reasonable to observe no systematic changes in sociopolitical partisanship of the events over a short period such as the five years in our sample.

To answer the second question, we use alternative operationalization for  $Event\_Stance$  and  $Customer\_Stance$ . First, we use Pew Research Center's guidance (2014) to create a dichotomized variable ( $D\_CSA\_Stance$ ) which is 1 if the issue has a conservative sociopolitical stance (i.e., pro-life, anti-gun control, anti-LGBT, etc.) and 0 if the issue has a liberal sociopolitical stance (i.e., pro-choice, pro-gun control, pro-LGBT, etc.) Subsequently, we use dummy variables for stakeholder stances ( $D\_Stakholder\_Stance$ ) as conservative (1) if the value for the stakeholder stance is positive and liberal if the value is negative. The cutoff allows us to create dummy deviation variables that are equal to 0 if the  $D\_CSA\_Stance = D\_Stakholder\_Stance$  and 1 if  $D\_CSA\_Stance \neq D\_Stakholder\_Stance$ . We run the model for Equation (9) using the alternative variables. The results are similar to the main models and are provided in Table W5-1:

TABLE W5-1: Equation (9) with Alternative Event Stance Variables

Dependent Variable: Short-Term Stock Market Reaction to CSA

Vouightee <sup>9</sup>	Model 1	:	Model	2:
Variables <sup>a</sup>	Without Cor	itrols	Control	Rich
N = 293	α	(SE)	α	(SE)
<b>Dummy</b> - CSA - Customer Deviation	012 ***	(.004)	0084 **	(.004)
<b>Dummy</b> - CSA - Employee Deviation	0069 **	(.003)	0081 **	(.005)
<b>Dummy</b> - CSA - Government Deviation	0092 *	(.005)	0099 **	<b>(.006)</b>
CSA - Brand Deviation	0049	(.005)	0040	(.005)
Action	012 **	(.006)	011 **	(.004)
CEO Announcement	012 **	(.008)	012 **	(.006)
Business Communication				
Coalition Size	.00026 **	(000.)	.00022 **	(000.)
Firm CSR Score	-		.00072	(000.)
Firm Political Activity	-		.0072	(.010)
CEO Political Ideology	-		.0090 **	(.006)
CEO Gender	-		.045 **	(.014)
CEO Age	-		000084	(000.)
CMO	-		.021 ***	(.007)
Past CSA	-		.000012	(.006)
B2B_B2C	-		0072	(.006)
ROA	-		022	(000.)
Firm Size	-		0012 *	(.020)
Leverage	-		-9.15e-07	(000.)
Advertising Expenditure	-		-2.10e-06	(000.)
Marketing Capability	-		.00031	(000.)
Brand Number	-		.0013	(000.)
Institutional Holdings	-		.0038	(.007)
High-Tech	-		.011 **	(.007)
Election year	-		.0047	(800.)
Inverse Mills Ratio	00030	(.004)	0014	(.003)
Prob > F	.015		.0001	
$\mathbb{R}^2$	.19		.28	

<sup>\*\*\*</sup>p < .01, \*\*p < .05, \*p < .10

Notes: Event, year, and industry dummies are omitted from the table because of limited space.

W5-2: Next, we use an alternative measure to address both the self-report bias and the retrospective measure. We checked the validity of Customer Stance measure with an independent survey. We provided respondents in Survey 3 with another set of 20 randomly selected firms and asked them how liberal or conservative they believed the customers of the firms are (seven-point scale). We cross-matched the responses for customers' general knowledge

of the company's customer base with the purchase responses from Survey 3 and found no significant difference in the means of customer base ideology from this study with *Customer\_Stance*. Additionally, we incorporated secondary data acquired from EquiTrend, which provides the political ideology of the customers of the firms biennially. We collected the most recent measure immediately before the event from this database. Although the EquiTrend database only provides measures for two-thirds of our sample, the correlation between the *Customer\_Stance* and *EquiTrend\_Stance* is .51 and significant. The results using the alternative customer deviation variable are consistent with those in our main models and are available as Model 1 in Table W5-2.

The *Employee-Stance* measure in our main model can suffer from another form of bias. We calculate employees' political ideology by collecting their political donations through the Center for Responsive Politics. Our main *Employee\_Stance* variable is based on the ratio of the dollar value of donations to the Republican and Democrat parties. While the relative dollar value of the donations can convey the monetary power of politically active citizens' ideology, it will not show what percentage of the employees are, in fact, politically active Republican or Democrat citizens. For robustness, we use the employees' "number of donation transactions" to each party:

```
\begin{aligned} & \text{Alt1\_Employee\_Stance}_{it} = \\ & \underbrace{ (\textit{Number of donations to Republican party}_{iT}) - (\textit{Number of donations t to Democratic party}_{iT}) }_{ \textit{Total Number of donations to Republican and Democratic party}_{iT}) \end{aligned}
```

To account for the number of politically active employees relative to the total number of firms' employees we use a second alternative measure as follows:

```
\label{eq:allower} \begin{aligned} & Alt2\_Employee\_Stance_{it} = \\ & \underline{ (\textit{Number of donations to Republican party}_{iT}) - (\textit{Number of donations to Democratic party}_{iT}) } \\ & & \underline{ \\ & & Total \ \textit{Number of firms' employees}_{iT}} \end{aligned}
```

The results, using the alternative operationalization are consistent with the main results and are available as Model 2 and 3 in Table W5-2.

**TABLE W5-2** 

Equation (9) with Alternative Customer and Employee Stance Variables							
DV: CAR <sub>Market-Model</sub> Variables <sup>a</sup>	Model 1		Model 2		Model 3		
	Alternative Customer		Alternative Employee		Alternative		
	Stance:		Stance:		EmployeeStance:		
	EquiTrend_Stance		Alt1_Employee_Stance		Alt2_Employee_Stance		
	$N=218$ $\alpha$ (SE)		N=293 α (SE)		N=293 α (SE)		
CSA - Customer Deviation	α 031 **	(.015)	α 022 *	(.010)	α 031 **	(.011)	
CSA - Customer Deviation CSA - Employee Deviation	020 ***	(.013)	022 **	(.010)	022 ***	(.011) $(.005)$	
CSA - Employee Deviation CSA - Government Deviation	023 **	(.007)	023 **	(.003)	027 ***	(.003)	
CSA - Government Deviation CSA - Brand Deviation	0080	(.010)	0231	(.006)	0050	(.006)	
Action	0083 *	(.007)	0039	(.003)	0030	(.003)	
CEO Announcement	0083	(.009)	0094 **	(.004)	0076 **	(.004) $(.007)$	
Business Communication	.013 ***	(.007) $(.004)$	.0098 **	(.003)	.0085 **	(.007) $(.004)$	
Coalition Size	.00019 *	(.004)	.0098 **	(.003)	.00021 **	(.004)	
Firm CSR Score	.00019	(.000.)	.00023	(.000.)	.00021	(.000.)	
Firm Political Activity	.00073	(.000)	.00034	(.008)	.000	(.000)	
•	.0083 *	(.009)	.0074	` ′	.0045		
CEO Political Ideology CEO Gender	.0083 **	, ,	.0033	(.003)	.0043	(.003) (.014)	
	.00017	(.021)	.0029	(.010)	.00023	` ,	
CEO Age CMO	.00017	(.000) (.006)	.00024	(.000) (.007)	.00023	(.000) (.007)	
Past CSA	.00018	(.000.)	6.32e-06	(.007)	.00018	` ,	
	0084	` ,	0076	. ,	0071	(.000)	
B2B_B2C ROA	0084 035	(.010)	0076	(.005)	0071 045	(.007)	
	035 0011	(.006)		(.030)	043	(.040)	
Firm Size	0011 -3.33e-06	(.003)	00063	(.002)		(.002)	
Leverage		(000.)	-9.06e-07	(.000)	-1.83e-06	(.000)	
Advertising Expenditure	-2.13e-07	(.000)	-7.97e-07	(.000)	-1.64e-06	(.000)	
Marketing Capability	.00041	(.006)	.00020	(.000)	.00024	(.000)	
Log Brand Number	.0022	(.000)	.00099	(.001)	.0016	(.001)	
Institutional Holdings	.0024	(.000.)	.00017	(.007)	.00093	(.006)	
High-Tech	.011	(.006)	.0082	(.006)	.013 **	(.005)	
Election year	.012	(.009)	.0091	(800.)	.0062	(.006)	
Inverse Mills Ratio	.0032	(.005)	.0012	(.003)	.00031	(.004)	
Prob > F	.000		.000		.000		
$\mathbb{R}^2$	.46		.40		.42		

<sup>\*\*\*</sup>p < .01, \*\*p < .05, \*p < .10

Notes: Event, year, and industry dummies are omitted from the table because of limited space.

**W5-3:** Finally, we use an alternative operationalization for the *Business\_Communication* variable. This variable is coded based on the judgment of two research assistants. To confirm that our results our not biased due to a subjective judgement, we use text analysis of the public announcement of the CSA and run an automated search for a list of keywords pertaining to a firm's business interest. We use the total number of such words as a proxy for business interests.

The list of keywords are as follows:

- Consumer, customer, client, (and their plurals)
- Employee, employer, employment (and their plurals)
- Name of the firm, "business of [name of the firm]", business
- Name of the home state +legislators or legislature (e.g, California legislature for Intel)
- Investor, shareholder (and their plurals)

The results remain similar to the main model in Equation (9) and are provided in Table W5-3.

TABLE W5-3: Equation (9) with Alternative Business Communication Variable

Dependent Variable: Short-Term Stock Market Reaction to CSA

Dependent variable: Snort-1	Model Model	Model 2:		
Variables <sup>a</sup>	Without Co	Control Rich		
N = 293	α	(SE)	α	(SE)
CSA - Customer Deviation	030 ***	(.010)	022 **	(.012)
CSA - Employee Deviation	012 **	(.006)	015 ***	(.005)
CSA - Government Deviation	019 ***	(.007)	023 ***	(.007)
CSA - Brand Deviation	0038	(.004)	0032	(.004)
Action	0095 **	(.004)	0088 **	(.004)
CEO Announcement	015 **	(.007)	015 **	(.007)
<b>Alternative Business Communication</b>	.00095 **	(.000)	.0011 **	(.000)
(word count variable)		, ,		, ,
Coalition Size	.00024 ***	(000.)	.00021 **	(000.)
Firm CSR Score	-		.00072 *	(000.)
Firm Political Activity	-		.0086	(.007)
CEO Political Ideology	-		.0069 *	(.004)
CEO Gender	-		.029 **	(.013)
CEO Age	-		.00016	(000.)
CMO	-		.021 **	(.007)
Past CSA	-		.00040	(000.)
B2B_B2C	-		0069	(.007)
ROA	-		048	(.004)
Firm Size	-		0015 *	(.010)
Leverage	-		-1.34e-06	(000.)
Advertising Expenditure	-		-1.22e-06	(000.)
Marketing Capability	-		.00024	(000.)
Log Brand Number	_		.0019	(.001)
Institutional Holdings	_		.00032	(.006)
High-Tech	-		.011 **	(.004)
Election year	-		.0041	(.007)
Inverse Mills Ratio	.0011	(.003)	.0011	(.003)
Prob > F	.002		.000	
$\mathbb{R}^2$	.32		.42	

Notes: Event, year, and industry dummies are omitted from the table because of limited space.

### W5-4: Robustness based on Dependent Variables:

In the main models in Equations 9, we use market model estimation in the calculation of CARs. For robustness, we test our model using both the market-adjusted model and Fama–French–Carhart model to estimate the CARs. The results are consistent with the main results (see Models 1 and 2 in Table W5-4).

We followed the common event study methodology in choosing the window of the event to calculate CARs. However, for robustness check, we ran the models on a shorter window: one day before to one day after the event. The results are similar to those in the main models and are provided for Model 3 in Table W5-4.

TABLE W5-4

Equation (9) with Alternative Dependent Variables								
	Model 1		Model 2		Model 3			
Variables <sup>a</sup> N=293	Alternative DV: 5 day window CARs Market Adjusted Model		Alternative DV: 5 day window CARs Fama French Carhart Model		Alternative DV: 3 day window CARs Market Model			
	α	(SE)	α	(SE)	α	(SE)		
CSA - Customer Deviation	032 **	(.013)	026 **	(.013)	032 **	(.017)		
CSA - Employee Deviation	016 **	(.006)	020 ***	(.008)	020 ***	(.007)		
CSA - Government Deviation	022 ***	(.005)	021 **	(.010)	030 ***	(.012)		
CSA - Brand Deviation	0030	(.005)	0083	(.005)	011 *	(.006)		
Action	010 **	(.005)	010 *	(.004)	012 **	(.007)		
CEO Announcement	018 **	(.008)	019 **	(.005)	011 *	(.005)		
<b>Business Communication</b>	.0098 ***	(.003)	.011 **	(.005)	.017 ***	(000.)		
Coalition Size	.00026 **	(.000)	.00025 **	(.000)	.00030 **	(000.)		
Firm CSR Score	.00072	(.000)	.0013 *	(.000)	.00092	(.001)		
Firm Political Activity	.0081	(.007)	.013	(.008)	.024 *	(.010)		
CEO Political Ideology	.0075 *	(.004)	.0033	(.005)	.0097	(.010)		
CEO Gender	.031 *	(.018)	.027 *	(.018)	.027 *	(.021)		
CEO Age	.00047	(.000)	.00016	(000)	.00034	(000.)		
CMO	.020 **	(.008)	.016 **	(.009)	.0081 *	(.010)		
Past CSA	.00078	(.000)	.00079	(.001)	.000095	(.002)		
B2B_B2C	011	(.008)	0063	(.007)	013	(.010)		
ROA	055	(.035)	040	(.000)	027	(.070)		
Firm Size	0021 **	(.003)	00092 *	(.002)	00081	(.003)		
Leverage	-2.45e-07	(.000)	-1.52e-06	(000)	-8.83e-07	(000.)		
Advertising Expenditure	-1.74e-06	(.000)	-2.13e-06	(000)	-8.43e-07	(000.)		
Marketing Capability	.000038	(.000)	.00031	(000)	.00047	(000.)		
Log Brand Number	.00096	(.003)	.0014	(.002)	.0016	(.002)		
Institutional Holdings	.00095	(.000)	.00047	(.009)	0066	(.007)		
High-Tech	.0090 *	(.008)	.011 *	(.009)	.016	(.007)		
Election year	.0061	(.009)	.0083	(.009)	.012	(.010)		
Inverse Mills Ratio	.0014	(.003)	.00051	(.000)	.0048	(.005)		
Prob > F	.000		.000		.007			
$\mathbb{R}^2$	.42		.34		.39			

\*\*\*p < .01, \*\*p < .05, \*p < .10Notes: Event, year, and industry dummies are omitted from the table because of limited space.

#### REFERENCES

- Aguilera, Ruth V., Deborah E. Rupp, Cynthia A. Williams, and Jyoti Ganapathi (2007), "Putting the S Back in Corporate Social Responsibility: A Multilevel Theory of Social Change in Organizations," *Academy of Management Review*, 32 (3), 836-863.
- Angrist, Joshua D. and Jörn-Steffen Pischke (2009), *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton, NJ: Princeton University Press.
- Barnett, Michael L. (2007), "Stakeholder Influence Capacity and the Variability of Financial Returns to Corporate Social Responsibility," *Academy of Management Review*, 32 (3), 794-816.
- Biehal, Gabriel J., and Daniel A. Sheinin (2007), "The Influence of Corporate Messages on the Product Portfolio," *Journal of Marketing*, 71 (2), 12-25.
- Brown, Tom J., and Peter A. Dacin (1997), "The Company and the Product: Corporate Associations and Consumer Product Responses," *Journal of Marketing*, 61 (1), 68-84.
- Brown, Clyde, Herbert Waltzer, and Miriam B. Waltzer (2001), "Daring to be Heard: Advertorials by Organized Interests on the Op-Ed Page of *The New York Times*, 1985-1998, *Political Communication*, 18 (1), 23-50.
- Bushway, Shawn, Brian D. Johnson, and Lee Ann Slocum (2007), "Is the Magic Still There? The Use of the Heckman Two-step Correction for Selection Bias in Criminology," *Journal of Quantitative Criminology*, 23 (2), 151-78.
- Chatterji, Aaron K., Rodolphe Durand, David I. Levine, and Samuel Touboul (2016), "Do Ratings of Firms Converge? Implications for Managers, Investors and Strategy Researchers," *Strategic Management Journal*, 37 (8), 1597-1614.
- Certo, S. Trevis, John R. Busenbark, Hyun-Soo Woo, and Matthew Semadeni (2016), "Sample Selection Bias and Heckman Models in Strategic Management Research," *Strategic Management Journal*, 37 (13), 2639-57.
- Chen, Yi-Ru R. (2007), "The Strategic Management of Government Affairs in China: How Multinational Corporations in China Interact with the Chinese Government," *Journal of Public Relations Research*, 19 (3), 283-306.
- David, Prabu, Susan Kline, and Yang Dai (2005), "Corporate Social Responsibility Practices, Corporate Identity, and Purchase Intention: A Dual-Process Model," *Journal of Public Relations Research*, 17 (3), 291-313.
- Du, Shuili, C.B. Bhattacharya, and Sankar Sen (2011), "Corporate Social Responsibility and Competitive Advantage: Overcoming the Trust Barrier," *Management Science*, 57 (9), 1528-1545.
- Flammer, Caroline (2015), "Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach," *Management Science*, 61 (11), 2549-68.
- Flammer, Caroline, and Jiao Luo (2017), "Corporate Social Responsibility as an Employee Governance Tool: Evidence from a Quasi-Experiment," *Strategic Management Journal*, 38 (2), 163-83.
- Germann, Frank, Peter Ebbes, and Rajdeep Grewal (2015), "The Chief Marketing Officer Matters!" *Journal of Marketing*, 79 (3), 1-22.
- Grier, Kevin B., Michael C. Munger, and Brian E. Roberts, (1994), "The Determinants of Industry Political Activity 1978–1986," *American Political Science Review*, 88 (4), 911-26.

- Hansen, Wendy L., and Neil J. Mitchell (2000), "Disaggregating and Explaining Corporate Political Activity: Domestic and Foreign Corporations in National Politics," *American Political Science Review*, 94 (4), 891-903.
- Hawn, Olga, and Ioannis Ioannou (2016), "Mind the Gap: The Interplay between External and Internal Actions in the Case of Corporate Social Responsibility," *Strategic Management Journal*, 37 (13), 2569-88.
- Hillman, Amy J., Gerald D. Keim, and Douglas Schuler (2004), "Corporate Political Activity: A Review and Research Agenda," *Journal of Management*, 30 (6), 837-57.
- Homburg, Christian, Marcel Stierl, and Torsten Bornemann (2013), "Corporate Social Responsibility in Business-to-Business Markets: How Organizational Customers Account for Supplier Corporate Social Responsibility Engagement," *Journal of Marketing*, 77 (6), 54-72.
- Kim, Yeon Soo and Youjin Choi (2012), "College Students' Perception of Philip Morris's Tobacco-Related Smoking Prevention and Tobacco-Unrelated Social Responsibility," *Journal of Public Relations Research*, 24 (2), 184-199.
- Koschate-Fischer, Nicole, Isabel V. Huber, and Wayne D. Hoyer (2016), "When Will Price Increases Associated with Company Donations to Charity be perceived as Fair?" *Journal of the Academy of Marketing Science*, 44 (5), 608-26.
- Landis, J. Richard, and Gary G. Koch (1977), "The Measurement of Observer Agreement for Categorical Data," *Biometrics*, 33 (1), 159-74.
- Lenz, Isabel, Hauke A. Wetzel, and Maik Hammerschmidt (2017), "Can Doing Good Lead to Doing Poorly? Firm Value Implications of CSR in the Face of CSI," *Journal of the Academy of Marketing Science*, 45 (5), 677-97.
- Lichtenstein, Donald R., Minette E. Drumwright, and Bridgette M. Braig (2004), "The Effect of Corporate Social Responsibility on Customer Donations to Corporate-Supported Nonprofits," *Journal of Marketing*, 68 (4), 16-32.
- Luo, Xueming, and Chitra B.Bhattacharya (2006), "Corporate Social Responsibility, Customer Satisfaction, and Market Value," *Journal of Marketing*, 70 (4), 1-18.
- Luo, Xueming, Sascha Raithel, and Michael A. Wiles (2013) "The Impact of Brand Rating Dispersion on Firm Value," *Journal of Marketing Research*, 50 (3), 399-415.
- Lux, Sean, T. Russell Crook, and David J. Woehr (2011), "Mixing Business with Politics: A Meta-analysis of the Antecedents and Outcomes of Corporate Political Activity," *Journal of Management*, 37 (1), 223-47.
- Maignan, Isabelle, and O.C. Ferrell (2004), "Corporate Social Responsibility and Marketing: An Integrative Framework," *Journal of the Academy of Marketing Science*, 32 (1), 3-19.
- McWilliams, Abagail, and Donald Siegel (2001), "Corporate Social Responsibility: A Theory of the Firm Perspective," *Academy of Management Review*, 26 (1), 117-27.
- McWilliams, Abagail, and Donald Siegel (2011), "Creating and Capturing Value: Strategic Corporate Social Responsibility, Resource-based Theory, and Sustainable Competitive Advantage," *Journal of Management*, 37 (5), 1480-95.
- Moore, Gary C. and Izak Benbasat (1991), "Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation," *Information Systems Research*, 2 (3), 192-222.
- Nahm, Abraham Y., S. Subba Rao, Luis E. Solis-Galvan, and T.S. Ragu-Nathan (2002), "The Q-Sort Method: Assessing Reliability and Construct Validity of Questionnaire Items at a Pre-Testing Stage," *Journal of Modern Applied Statistical Methods*, 1 (1), 114-25.

- Peloza, John, and Jingzhi Shang (2011), "How Can Corporate Social Responsibility Activities Create Value for Stakeholders? A Systematic Review," *Journal of the Academy of Marketing Science*, 39 (1), 117-35.
- Sawant, Rajeev J. (2012), "Asset Specificity and Corporate Political Activity in Regulated Industries," *Academy of Management Review*, 37 (2), 194-210.
- Schuler, Douglas A., Kathleen Rehbein, and Roxy D. Cramer (2002), "Pursuing Strategic Advantage through Political Means: A Multivariate Approach," *Academy of Management Journal*, 45 (4), 659-72.
- Schuler, Douglas A., Wei Shi, Robert E. Hoskisson, and Tao Chen (2017), "Windfalls of Emperors' Sojourns: Stock Market Reactions to Chinese Firms Hosting High-Ranking Government Officials," *Strategic Management Journal*, 38 (8), 1668-87.
- Sridhar, Shrihari, Sriram Narayanan, and Raji Srinivasan (2014), "Dynamic Relationships among R&D, Advertising, Inventory and Firm Performance," *Journal of the Academy of Marketing Science*, 42 (3), 277-90.
- Tonin, Mirco, and Michael Vlassopoulos (2014), "Corporate Philanthropy and Productivity: Evidence from an Online Real Effort Experiment," *Management Science*, 61 (8), 1795-1811.
- Vlachos, Pavlos A., Argiris Tsamakos, Adam P. Vrechopoulos, and Panagiotis K. Avramidis (2009), "Corporate Social Responsibility: Attributions, Loyalty, and the Mediating Role of Trust," *Journal of the Academy of Marketing Science*, 37 (2), 170-80.
- Wagner, Tillmann, Richard J. Lutz, and Barton A. Weitz (2009), "Corporate Hypocrisy: Overcoming the Threat of Inconsistent Corporate Social Responsibility Perceptions," *Journal of Marketing*, 73 (6), 77-91.
- Werner, Timothy (2017), "Investor Reaction to Covert Corporate Political Activity," *Strategic Management Journal*, 38 (12), 2424-44.