

## THE RELATIONSHIP BETWEEN CORPORATE SOCIAL RESPONSIBILITY AND SHAREHOLDER VALUE: AN EMPIRICAL TEST OF THE RISK MANAGEMENT HYPOTHESIS

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*Do shareholders gain when managers disperse corporate resources through activities classified as corporate social responsibility (CSR)? Strategy scholars have recently developed a theoretical model that links such activities to shareholder value when a firm suffers a negative event; we test key portions of this theory of the ‘insurance-like’ property of CSR activity. We posit that such activity leads to positive attributions from stakeholders, who then temper their negative judgments and sanctions toward firms because of this goodwill. We extend the risk management model by theorizing that some types of CSR activities will be more likely to create goodwill and offer insurance-like protection than other types. We delineate several firm and event specific characteristics that we expect to influence the link between CSR activities and an insurance effect. We then test our model using an event study of 178 negative legal/regulatory actions against firms throughout the 11 years from 1993–2003. We find that participation in institutional CSR activities—those aimed at a firm’s secondary stakeholders or society at large—provides an ‘insurance-like’ benefit, while participation in technical CSRs—those activities targeting a firm’s trading partners—yields no such benefits. We conclude by considering the implications of our findings for future theorizing and research into the economic value of CSR engagement. Copyright © 2008 John Wiley & Sons, Ltd.*

### INTRODUCTION

What does it mean to say that the corporate executive has a ‘social responsibility’ in his capacity as businessman? If this statement is not pure rhetoric, it must mean that he is to act in some way that

is not in the interest of his employers—Friedman (1970:33)

In practice, corporate managers and fundraisers agree that corporate transfers to charity represent a calculated purchase of advertising services or goodwill.—(Knauer, 1994: 11)

**Keywords:** insurance; risk management; event study; corporate social responsibility

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Do shareholders gain when a firm’s strategies include disbursing corporate resources through participation in social initiatives, commonly

referred to as corporate social responsibility (CSR)? Since the original debate between Adolph Berle (1931) and Merrick Dodd (1932) jump-started inquiry, scholars across several business disciplines—accounting, finance, management, and marketing—have taken up this question and offered both positive (Berle-sympathetic) and normative (Dodd-sympathetic) accounts of CSR. The depth of research is significant. For example, Margolis and Walsh (2001) review almost 100 studies attempting to quantify a CSR-Corporate Financial Performance (CFP) link. Likewise, the *Socially Responsible Investing Studies* Web site (srstudies.org), lists over 225 studies discussing elements of the CSR-CFP relationship.<sup>1</sup> The overall orientation has been to argue and show that CSR activities *generate* CFP. Most often the generation of financial performance occurs through some type of resource-based process, such as the creation of stronger exchange relationships with customers (Brown and Dacin, 1997) or employees (Turban and Greening, 1997), the co-option or forestallment of government intervention (Neiheisel, 1995), or the enhancement of future revenue growth (Lev, Petrovits, and Radhakrishnan, 2006).

Our work begins with the general question that opened the article and moves to a more informative question ‘*when* do shareholders gain if a firm’s strategies include disbursing corporate resources through participation in social initiatives?’ In particular, we investigate when participation in some types of CSR activities creates a form of goodwill or moral capital for the firm that acts as ‘insurance-like’ protection when negative events occur (Gardberg and Fombrun, 2006; Godfrey, 2005) that preserves shareholder value (CFP). Thus, this article investigates a different aspect of the CSR-CFP relationship; namely, that CSR activities can provide an insurance mechanism to *preserve*—rather than *generate*—CFP.

Within the CSR-CFP empirical literature, a few empirical studies employed constructs and variables germane to the insurance perspective

(e.g., Blacconiere and Patten, 1994; Blacconiere and Northcutt, 1997; Freedman and Stagliano, 1991; Orlitzky and Benjamin, 2001; Schnietz and Epstein, 2005; Williams and Barrett, 2000). Richardson, Welker, and Hutchinson (1999) provide a thorough review and thoughtful commentary on much of this literature. While these studies have contributed to our growing understanding of when and how CSR activities preserve CFP, they invite further research that would address three significant, related limitations.

First, several of the studies lack a theoretical explanation (e.g., Blacconiere and Patten, 1994) or offer underspecified and broad theoretical rationales to explain precise responses (e.g., Schnietz and Epstein [2005] invoke the generalized notion of a reputation to explain why some firms suffer smaller losses during a crisis). We review, extend, and test a detailed, theoretical rationale for why CSR should preserve CFP. In particular, we propose that certain types of CSR activities can generate moral capital or goodwill (Godfrey, 2005) that tempers punitive sanctions by stakeholders during a negative event (i.e., an insurance effect). We propose that the resultant moral capital may have little to do with *generating* economic value, but plays a substantial role in *preserving* economic value.

Second, extant studies use relatively coarse-grained measures for CSR (e.g., usually a single, monolithic measure of CSR or a single proxy such as disclosure or philanthropic giving). We continue a trend in the literature toward modeling CSR activities as a set of heterogeneous firm actions (e.g., Godfrey, Hatch, and Hansen, 2008; Hillman and Keim, 2001; Mattingly and Berman, 2006)—thereby avoiding the trap of aggregating what may be different things into a single monolithic construct (Entine, 2003).

Third, many of these earlier studies focused on industry- or economy-wide events as the dependent ‘negative event.’ The role of firm-specific characteristics in the face of common events clearly yields illumination; however, matching firm-specific characteristics to firm-specific events may allow us to deepen insight and understanding into the mechanisms whereby CSR can preserve CFP. We match firm-level CSR activities with firm-specific, negative events—permitting insight into different event types. Indeed, Schnietz and Epstein (2005) in their investigation of the signal value of CSR during the Seattle World Trade Organization conference failure, conclude that their ‘result

<sup>1</sup> Given the number of excellent large-scale literature reviews in this area, and in view of limited journal space, we suggest that interested readers consult the in-text citations for a sense of this work, as well as the meta-analytic work of Griffin and Mahon (1997), Roman, Hayibor, and Agle (1999), or Orlitzky, Schmidt, and Rynes (2003). The studies by Griffin and Mahon (1997) and Roman *et al.* (1999) provide a sense of the tension in the literature as these authors use the same data to arrive at different conclusions.

applies only to this specific event. More research is needed to test whether similar reactions have occurred in response to other crises' (Schnietz and Epstein, 2005: 342). The current article addresses this important call for research that investigates more than one event.

The article proceeds as follows. The first section describes the theoretical model and contains hypotheses for empirical testing. The second section outlines the empirical method used to investigate the hypotheses. The third section presents the results of the empirical analysis. The fourth and concluding section discusses the limitations and interesting implications of the findings.

## THEORY AND HYPOTHESIS DEVELOPMENT

We begin this section by describing the relationship between risk management activities and shareholder value. Next, we discuss how CSR activities may create moral capital as the activities signal the firm's intentions to engage stakeholders in an 'other-regarding' manner. Then, we consider how this moral capital could provide insurance-like protection for the firm in the face of a negative event. We also outline three sets of characteristics that could mitigate the insurance-like value of CSR activities: (1) *stakeholder characteristics* that influence whether or not CSR engagement will create moral capital; (2) *firm-specific characteristics* that determine the potential loss during a negative event and may modify the insurance value of CSR activities, and (3) different *event-specific characteristics* that should determine the insurance value of CSR.

### CSR and shareholder value

#### *Insurance and shareholder value*

In the theoretical perfect capital markets modeled by the capital asset pricing model (Markowitz, 1952; Sharpe, 1964), profit-maximizing managers do not invest in risk management. In the theory, expenditures in excess of expected losses made by the firm to reduce idiosyncratic risks reduce expected returns (the value of the firm), while offering no risk reduction beyond that attainable by investors holding a diversified portfolio of securities.

Yet in the real world, firms invest in risk management (such as fire insurance) even though these investments come at a price in excess of expected loss. Smith and Stulz (1985) and Stultz (2002) show that, because violations of the perfect market assumptions occur, risk reduction adds value to shareholders. One example is that risk reduction protects shareholders against the deadweight costs<sup>2</sup> of severe financial distress in a way that investors could not accomplish in the market. Specifically, if managers can reduce the firm's exposure to firm-specific risks that give rise to deadweight costs in a way that investors cannot diversify away, then value is added through risk management.

#### *CSR and moral capital*

CSR has been defined in the literature as voluntary corporate actions designed to improve social conditions (Mackey, Mackey, and Barney, 2007), or as corporate actions not required by law that attempt to further some social good and extend beyond the explicit transactional interests of the firm (McWilliams and Siegel, 2000). The voluntary nature of CSR means that these activities can be viewed, broadly, as gifts or grants from the corporation to various stakeholder groups.<sup>3</sup>

That does not mean, however, that CSR represents a gift with no strings attached. Sociologists and anthropologists note that a gift's 'strings' come through the process of 'intangible requirement,' or 'unspecified reciprocity' where gift giving is seen as buying respect (Kennett, 1980; Tonkiss and Passey, 1999). CSR activities also play a 'rules maintenance' role by sending information about the firm to other social actors that reduces search and evaluation costs (Kennett, 1980). In this case we argue that CSR signals a willingness to act *altruistically* (other considering) as opposed to purely *agonistically* (self considering) (Sherry, 1983).

<sup>2</sup> Deadweight costs associated with financial distress occur when other real, not merely opportunity, costs are imposed on the firm as a result of the loss event. Such costs may include legal costs associated with distress, refinancing costs, the diversion of managerial time and attention, tighter supplier terms, loss of key employees, or the diminution of brand equity or reputation. Stulz (2002) reports estimates of the expected value of these, and other, deadweight costs at around 3 percent of asset value.

<sup>3</sup> It is the largesse, or gift element, of CSR that so troubles Friedman (1970) in the opening quote. The attached strings we describe below serve as the lens through which Knauer (1994) sees the reciprocal value.

CSR activities will be only one among multiple signals that stakeholders use to determine the extent of a firm's altruistic orientation (Goffman, 1997) and there are very few purely altruistic gifts (Kennett, 1980). Further, the macro-institutional norm for business is profit making (Friedland and Alford, 1991), which is known and accepted by public actors in a capitalistic society. Profit making requires a high degree of self-serving, self-dealing, and self-considering behaviors. These realities belie the notion that CSR activities can create a signal that a firm is *completely or substantially* altruistic in its orientation.

We assert that the effect of CSR is *not* to send a signal of complete altruism (lack of a profit motive or a wholly other-regarding orientation) toward stakeholders, but rather CSR activities signal that the firm is *not* completely self-interested, that its leaders can, do, and will consider impacts on others or the social good in their decisions; in short, that managers and their firms possess an 'other-considering' disposition toward their various stakeholders. When such signals are received and accepted by external stakeholders, firms accrue positive attributions or moral capital (Simon, 1995; Van Herpen, Pennings, and Meulenberg, 2003) to the extent these outsiders see the firm engaging in activities they deem socially or morally desirable (Godfrey, 2005).

Two features of CSR activity work to determine the strength, and hence potential value, of this other-considering signal. First, the activity must be public knowledge, be it through firm self-reporting or the reports and analysis of others. Second, CSR engagement must be substantial enough to create a credible and reasonable declaration of unselfish intention. CSR activity that captures the attention of media or outside evaluators (e.g., industry groups such as The Conference Board or investment rating analysts) represents an investment substantial enough to be noticed and seen as a credible commitment. CSR activity meeting these two criteria could be referred to as substantial or noteworthy CSR. We use the simple term CSR engagement for ease of use in what follows.

### *Moral capital as insurance*

Even under the best of circumstances, business activity sometimes creates negative impacts among important stakeholder groups. Some negative impacts may be relatively benign, such

as discontinuing products or services; some consequences may be local in their effect, such as a plant closure. Other negative events may have global ramifications, such as market-destabilizing fraud or environmental disasters. When negative events occur, stakeholders respond by punishing the firm with sanctions ranging from mild (boycotts or badmouthing) to severe (revoking the right to do business). Such sanctions, Godfrey (2005) theorizes, follow a legalistic approach in their derivation and application. Stakeholders mete out punishments based on both the negative effects of the act *and* the perceived state of mind and intentions of the offender. Punishments will be more severe when bad acts are committed by bad actors. The attribution of the state of mind is the *mens rea* determination in law (LaFave, 2000).

Theorists argue that CSR engagement generates economic value because the moral capital derived from CSR provides a mitigating factor in this *mens rea* attribution process (Fombrun, Gardberg, and Barnett, 2000; Godfrey, 2005); the goodwill generated should reduce the overall severity of sanctions by encouraging stakeholders to give the firm 'the benefit of the doubt' when ambiguity over motive exists (Uzzi, 1997). Put another way, CSR-based moral capital creates value *if* it helps stakeholders attribute the negative event to managerial maladroitness rather than malevolence, and temper their reactions accordingly. Measuring stakeholders' mental processes proves difficult, perhaps even impossible; however, we can observe whether stakeholder groups behave in a manner consistent with a theorized attribution process. Such consistency would imply that CSR activity provides 'insurance-like' protection (Friedman, 1953; Godfrey, 2005).

### **Theory testing: the effects of CSR engagement**

Based on the preceding logic, it is reasonable to propose that the economic value of CSR activity is contingent: engagement sends a signal of a non-self-serving orientation that argues for a lack of *mens rea* only in the context of a negative event. In the face of a negative event, investors must anticipate the potential actions of other stakeholder groups. How will affected stakeholders (customers, suppliers, regulators, employees, etc.) react? How will they assess the action and the *mens rea* condition? What sanctions may occur and at what level

of severity?<sup>4</sup> Negative events, to the extent they are unanticipated or partially anticipated (Malatesta, 1985), should generate negative stock price reactions as investors anticipate negative stakeholder reactions; we posit that CSR activity will signal to investors the presence of moral capital that may temper potential sanctions. Firms with no CSR activity lack this form of buffering goodwill and stand exposed to potentially greater impacts. In this case, CSR activity serves as a signal to investors about the probable reactions of other key stakeholders. Based on this logic we assert

*Hypothesis 1: In the context of a negative event, the decline in shareholder value is smaller for firms that engage in CSR activities than for firms that do not.*

### Extending theory: stakeholder characteristics

Scholars writing in both the academic (Mitchell, Agle, and Wood, 1997) and practitioner (Freeman, Harrison, and Wicks, 2008) literature seek to differentiate the stakeholder groups that firms interact with. Freeman *et al.* (2008) create a parsimonious classification: *primary* stakeholders—those who are essential to the operation of the business—and *secondary* stakeholders—those who can influence the firm's primary stakeholders. Primary stakeholders make legitimate claims on the firm and its managers and have both urgency and power (utilitarian, coercive, or normative) to enforce those claims. In contrast, secondary stakeholders have legitimate claims on the firm, but lack both urgency and power to enforce those claims (Mitchell *et al.*, 1997).

Because primary stakeholders possess both power and urgency to press their claims for CSR activities, these activities are highly likely to induce these stakeholders to engage in increased exchanges with the firm (e.g., utilitarian power), to placate stakeholders and forestall negative economic consequences (e.g., coercive power), or

create flexibility for managers to pursue strategies that may not be in the direct interests of those primary stakeholders (e.g., normative power within the nexus of contracts; see Fama and Miller, 1972). CSR activities targeting primary stakeholders should produce *exchange capital* among those groups—the potential to create more advantageous exchanges between the firm and its primary stakeholders. Such CSR activities, however, are less likely to produce *moral capital*; indeed, precisely because these actions can be viewed through a power-exchange lens they may be seen as wholly consistent with the firm's profit-making interest and viewed as merely self-serving, rather than other-regarding, behaviors.

CSR activities directed toward secondary stakeholders have the opposite profile. Because these stakeholders lack both urgency and power to press their claims on the firm, it seems implausible that such activities will be viewed as purely self-interested actions by managers designed to enhance the exchange prospects with primary stakeholders. These acts are more likely to be viewed as voluntary acts of social beneficence, based on normative or pragmatic appeals, and thus provide evidence of an 'other-regarding' orientation by the firm's managers when compared to CSR activities targeting primary stakeholders.

Support for this theoretical distinction is found empirically; Mattingly and Berman (2006) performed exploratory factor analysis on the Kinder Lydenburg Domini (KLD) investment firm social ratings dataset. They uncover a pattern in the data similar to the above distinction regarding CSR activities that target the firm's primary stakeholders, which they refer to as technical CSR (TCSR), and those activities that target the firm's secondary stakeholders, which they refer to as institutional CSR (ICSR). We maintain that CSR activities are not inherently different but that because stakeholder recipients of CSR activities differ in critical ways, the perception of other-regarding motivations for the behaviors should also differ according to the preceding logic. Based on this distinction and logic we present

*Hypothesis 2: In the context of a negative event, the shareholder value-loss mitigating property of CSR engagement is greater for institutional CSR activities than for technical CSR activities.*

<sup>4</sup> We thank an anonymous reviewer for bringing to our attention the different ways in which stakeholder sanctions may affect shareholder value. Sanctions may reduce expected cash flows to the firm, reducing the numerator in the share price equation, or by increasing the level of risk—the discount rate or denominator in the equation. We do not seek to differentiate, theoretically or empirically, between the ultimate drivers of a loss in shareholder value, but rather focus on the role of CSR activities in mitigating the aggregate price reaction.

**Extending theory: firm characteristics***Intangible assets*

The link between risk management activities and shareholder value outlined above suggests that the level of intangible assets held by the firm will impact the value of its CSR activity. Stulz (2002) reminds us that insurance—as a form of risk management—becomes more valuable the higher the costs of financial distress. Negative events that reduce a firm's cash flows or raise its risk level may create greater levels of financial distress to the extent that they cause stakeholders to react in ways that destroy intangible assets and future cash flows (or raise risk levels) beyond the direct impact of the negative event (e.g., customers devalue the brand, key employees leave or work less productively, suppliers tighten terms, increased costs of capital preclude otherwise profitable investments, etc.). CSR activities that dissuade stronger punitive responses should prove more valuable for firms when stakeholder relationships and the resulting intangible assets play a larger role in creating value. Given this logic, we offer

*Hypothesis 3: In the context of a negative event, the shareholder value-loss mitigating property of CSR engagement is greater for firms with higher levels of intangible assets than for firms with lower levels of intangible assets.*

*Size*

We theorize that size plays a role in the value of CSR activities in that firm size influences the risk level faced by a firm. Simply put, firms with a larger market presence incur more risk than smaller firms. Kimberly (1976) notes that size can be considered as either a dimension, or feature, of an organization or as a context within which managers operate. When viewed as a feature of the organization, larger market presence (size) translates into more transactions (both internal and external) and more transactions, *ipso facto*, lead to a higher probability of negative events; there are simply more opportunities for negative outcomes. As a consequence, larger firms should be more willing to engage in CSR to cover the increased risk than smaller firms.

But will CSR engagement be more valuable for a larger firm? We assert that it will, when size is viewed as a context within which managers

operate. Rindova, Pollock, and Hayward (2006) note that larger firms face greater scrutiny from media, special interests, and stakeholders than their smaller counterparts; larger firms have higher profiles than their smaller counterparts. Godfrey (2005) further notes that such a high profile should increase the risk of negative actions toward the firm by outside constituents. If larger firms are more likely to experience negative events, either through chance or targeting from constituents, and if those negative events are more likely to attract attention from media, regulators, or other third parties, then the firm's CSR engagements will be considered by more individuals and groups as they determine the firm's *mens rea* condition. CSR engagement by larger firms will be more valuable because it is likely to be used more frequently in generating *mens rea* evidence than for smaller firms, thus

*Hypothesis 4: In the context of a negative event, the shareholder value-loss mitigating property of CSR engagement is greater for larger firms than for smaller firms.*

*Negative social impacts*

Negative social impacts may arise from industry membership (e.g., tobacco, nuclear power, or gaming) or from a firm's own actions over time (e.g., the history of negative union relations at General Motors). The moral capital arising from CSR activities comes from the signal of non-self-serving intentions; engagement in activities with negative effects on stakeholders sends a clear signal of an intention to act self-interestedly rather than considering and accommodating the needs of others or society at large. The juxtaposition of other-considering with self-serving behaviors should weaken the perceived intensity of commitment to the former in the presence of strong evidence of the latter. For firms with negative social impacts, engagement in CSR may be perceived as 'blood money' to either atone for past sins (e.g., Denny's support of African-American issues) or it may be a substitute/complement for other negative practices (e.g., tobacco companies that try to offset their negative product image through generous philanthropy). In these cases, the signal value of CSR may be diminished at best, or seen as ingratiation at worst (Jones, 1964). We advance

*Hypothesis 5: In the context of a negative event, the shareholder value-loss mitigating property of CSR engagement is less for firms with more negative social impacts than for firms with fewer negative social impacts.*

## Extending theory: event characteristics

### Competitive events

The institutional environment of business and hypernorms of competition legitimate aggressive competitive moves, as long as those moves remain within the bounds of the law or custom (Donaldson and Dunfee, 1999). The definition of vigorous and aggressive actions becomes fuzzy at the margin, where interpretations may differ (one firm's aggressive action is another's unfair competition), or boundary conditions may be unclear (whether an action actually constitutes a breach of contract, whether product/process similarity actually constitute patent infringement). When negative events occur that involve interpretations of acceptable competitive behavior and its boundaries, we believe stakeholders should expect firms to be both vigorous and aggressive in defense of their competitive actions throughout the litigation process. Competitive success, necessary for customers to have good products, employees to retain or enhance their jobs, governments and communities to garner tax revenue, and investors to earn returns, depends on a firm's commitment to pursue its interests and act in a decidedly self-serving manner in these cases. In these competition-based negative events, the question turns on whether the act itself was a bad act or simply a misinterpretation of rule or policy. The issue of intention or motivation becomes framed in terms of competitive realities: to be a good actor in this situation means to be self-serving and defend the firm's explicit interests. The other-regarding signal value of CSR activity—a key element in the *mens rea* attribution process—should be irrelevant in this case, as the question does not turn on the other-regarding dispositions of the actors involved. Given this logic, we posit

*Hypothesis 6: In the context of a competitively based negative event, the decline in shareholder value is unrelated to engagement in CSR activities.*

### Stakeholder-based negative events

When negative events arise because the well-being of stakeholders is jeopardized in some way (such as product safety issues or health and safety violations in the workplace), the important elements of the *mens rea* attribution process differ from competitive events. In these events, there is little ambiguity about the badness of the act; the evidence suggests, and may be compelling, that the firm caused either actual or potential negative outcomes for key stakeholder groups. What remain ambiguous, however, are the underlying motivations of the actors involved and the question becomes the classic *mens rea* question outlined above: was the act the deliberate result of a malevolent, self-serving management, or was the act the result of maladapted systems or the maladroitness handling of a situation? In the former case, bad actors caused a bad act; in the latter, good actors got caught in a bad situation. In stakeholder-related negative events, the determination of the intentions of the actors becomes a relevant question in determining the appropriate punishment; we expect the moral capital generated by CSR engagement to play an important role in estimates of negative stakeholder reactions, and we propose

*Hypothesis 7: In the context of a stakeholder-based negative event, the decline in shareholder value is smaller for firms that engage in CSR activities than for firms that do not.*

### Integrity-related negative events

We consider a final set of negative events: those where the integrity or moral character of the firm is in question. Such events would include, but not be limited to, actions by management that violated well-accepted principles of ethical behavior, such as promise keeping, or resulted in the unfair treatment of employees or other key stakeholders. As with stakeholder-based events, the status of the action is relatively unambiguous and negative; the question turns on the, in this case, moral character/intentions of the actors involved.

The ambiguity here surrounds management's core commitment to abide by well-accepted social principles and norms of ethical behavior; in short, stakeholders may doubt the firm's fundamental integrity. Engagement in CSR activities presents stakeholders with two choices for resolving the

ambiguity: (1) they can view the CSR engagement as evidence of good character and the lack of a 'bad mind'; or (2) they can view CSR as evidence of hypocrisy and a 'very bad mind.' We assert that stakeholders should opt for the former interpretation, as Uzzi (1997) finds that one benefit of ongoing relations and goodwill between stakeholders and a firm is the willingness of stakeholders to give the firm the benefit of the doubt in situations of ambiguity of intention. We expect that in this case, similar to stakeholder-based events, the moral capital arising from CSR engagement should play a significant role in assessments of managerial intentions, and we propose

*Hypothesis 8: In the context of an integrity-based negative event, declines in shareholder value are smaller for firms that engage in CSR activities than for firms that do not.*

We have now advanced the theoretical arguments and articulated hypotheses about the expected relationships between a firm's engagement in CSR activities and the impact on shareholder value in the context of a negative event. We now describe our empirical test of these hypotheses.

## METHOD

### Sample construction

We began our analysis with the assumption that legal or regulatory actions against firms may be rare, and that investors may rely on past CSR performance data in factoring in any insurance effect. For practical research reasons, we also wanted to limit the number of firms for which we needed to search out potential events. We settled on a sample consisting of the 160 firms that appear from 1991–2002 in the Socrates dataset constructed and used by the KLD investment firm; this satisfied our assumptions around having a large window to capture events, and having a panel of data to use while limiting the number of firms we researched.<sup>5</sup>

<sup>5</sup> We grant that our initial sample was opportunistically drawn; however, the core issue with a sample should not be randomness, but representativeness. As we report below, we took several steps to insure that our sample is representative of the larger population, relatively large (Standard & Poor's [S&P] 500), publicly traded firms.

The Socrates dataset has been used by a number of researchers in strategy (e.g., Waddock and Graves, 1997), human resources (e.g., Turban and Greening, 1997), business and society (e.g., Mattingly and Berman, 2006), and finance (e.g., Fisman, Heal, and Nair, 2005). Researchers have shown that the dataset exhibits robust construct validity around its underlying measures (e.g., Mattingly and Berman, 2006; Scharfman, 1996; Szwa-jkowski and Figlewicz, 1999). Use of the KLD dataset, however, is not without critics, such as Entine (2003), who notes several credulity problems as the data are stretched to meet the objectives of individual researchers.<sup>6</sup>

### Dependent variable

Our variable of interest is the change in shareholder value, as represented by stock price, surrounding a negative event; we began our research by identifying negative legal or regulatory actions against the firms in our sample. We reviewed *Wall Street Journal* articles published between 1992 and 2003 to match the time frame of available independent variable information. This search yielded 254 possible events, with 99 firms experiencing an event and 61 firms not experiencing an event.<sup>7</sup> Negative events could be the initiation of a lawsuit against the firm by a customer, third party, or competitor, or the announcement of regulatory action

<sup>6</sup> Entine's (2003) primary criticism is that when individual item scores are combined across dimensions into the larger constructs (such as CSP or corporate social performance) often used by researchers, the data become meaningless as agglomeration often destroys the information value contained in finer-grained measures. Similar concerns are found in Hillman and Keim (2001), and Mattingly and Berman (2006). We agree with their reasoning. We strike a balance between measuring an individual item, or category performance and the creation of an overarching, monolithic measure by collapsing individual CSR activities into theoretically relevant, yet mid-range, variables.

<sup>7</sup> We performed a number of sensitivity tests on the 96 firms in our final sample. We compared these firms against the 61 with no event (three firms were dropped for confounding events or because they skewed regression results) and found no statistically significant differences in firm size or CSR activity participation. We also tested these 96 against the S&P 500, the relevant population, for each time period and, again, found no significant differences in either size or CSR activity participation. We feel our sample presents a representative sample of large, publicly held companies. The fact that CSR activity did not differ between the 96 firms sued and the 61 not sued indicates that CSR may have value in insuring against risk but little value in mitigating risk; that is, firms that engage in CSR are neither more, nor less, likely than their nonparticipating competitors to create these types of negative events.



(e.g., investigation, fines, penalties, etc.) by a government entity. We also included the announced resolution of regulatory action (e.g., settling an adverse equal employment opportunity claim) *only* if data on the initiation of such an event could not be found.

We screened each of our 254 potential events for: (1) action against the corporate entity and not one of its directors, officers, or employees individually; and (2) the presence of any material confounding corporate events (e.g., earnings adjustments or forecasts, announcement of major sales, mergers) within a seven-day period preceding the focal event. Management (McWilliams and Seigel, 1997) and finance (Peterson, 1989) scholars reviewing event study protocols caution that material events coincident to the event of interest, such as earnings announcements, new product announcements, major sales, or a merger/acquisition announcement, confound the ability of the event study methodology to assign abnormal share price movements to the focal event. We eliminated events with potentially confounding events within seven days of the event of interest, resulting in a sample of 185 events.

Change in shareholder value (our dependent variable) is the unexpected percentage change in the stock price surrounding the event, or the abnormal return. Stock prices change daily, due to market conditions as well as firm specific events. Following Campbell, Lo, and MacKinlay (1997) we regressed stock returns for the firms in our sample against returns on a broad market portfolio for a period of 128 to eight trading days prior to the event window, using

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}$$

In this model  $\alpha$  captures the average return for the  $i^{\text{th}}$  firm's stock with no market movement and  $\beta$  measures that stock's performance relative to the market.<sup>8</sup>  $R_{it}$  captures the expected return for the  $i^{\text{th}}$  firm's share price on that day controlling for market-based fluctuations.  $\varepsilon_{it}$  is the abnormal return as represented in

$$\varepsilon_{it} = R_{it} - (\alpha_i + \beta_i R_{mt})$$

<sup>8</sup> We used the *Eventus* package offered with the Wharton Research Data Service. We used the equally weighted market index of stock returns to create the benchmark market returns.

Using stock price data from the Center for the Research on Stock Prices, we calculated the abnormal return over the sixteen days (eight days before and eight days after) surrounding the event interest—legal or regulatory action against a firm. The cumulative abnormal return (CAR) is the summed difference of actual return versus expected return

$$CAR_i = \sum_{t=1}^N \varepsilon_{it}$$

for the  $i^{\text{th}}$  firm over the event window centered on  $t$  ( $t = 0$  represents the event day) and bounded by  $n$  (the window on either side). CAR captures the sum of the day-to-day differences between the firm's actual and expected returns. We relied on the interpretation of the Patell  $z$  test statistic to determine the appropriate event window. The Patell  $z$ , a restrictive parametric test, examines the likelihood, for each day of the sample period, that the difference between the observed sample mean and the expected sample mean values (for each firm individually) differs from 0 (Patell, 1976). The Patell  $z$  values suggest a two-day ( $t_{-1}$ ,  $t_0$ , the day before and the day of the announcement) window where observed returns differed significantly from expected returns.<sup>9</sup> Our primary dependent variable is *cumulative abnormal return*, the cumulative abnormal stock return (as a percentage) accruing over the two-day event window.

## Independent variables

### CSR variables

The Socrates dataset contains the raw social initiative participation measures we used in the study. The Socrates ratings are publicly available and known to all interested market participants. While not a reputation rating per se, the Socrates data provide inputs for individual stakeholder groups (investors and others) in their formulation of a firm's reputation for social involvement or social responsibility, an important indicator of other-considering conduct (Fombrun, 1996; Orlitzky and Benjamin, 2001). Inclusion in the Socrates database also means that a firm's activities meet

<sup>9</sup> We also used the generalized sign  $z$  test, a nonparametric test with less stringent assumptions about independence and variance than the Patell test. This test corroborates the results of the Patell  $z$  scores that the appropriate measurement window is the event day and the day preceding (Cowan, 1992).

the criteria for material, noteworthy, or substantial; activity becomes publicly and widely known and carries an assessment of being substantial in nature (judged either by quantity or quality).

To better understand the nature and timing of the data, we spoke with KLD staff members about how these scores are calculated. KLD staff indicated that the rating criteria are robust across firms and that firms are given an opportunity to respond to a potential rating before it is made public. The data collection process for each company follows no rigid annual schedule, but the calendar year-end data for any year represents all ratings collected during the year. To control for the possibility that a KLD rating in any year chronologically followed a focal event, we lagged our measures by one year to insure that the ratings for each firm were public knowledge at the time of the event (Brealey, Myers, and Marcus, 1995).

The Socrates data contain 41 separate binary item measures of firm engagement along six social dimensions (community involvement, corporate governance, employee relations, environmental stewardship, diversity, and product quality), with a firm scoring one for the observed presence of the measure, zero for its absence. Socrates captures data on activities seen as both positive and negative. Since our theoretical interest surrounds the qualitative choice of engagement in CSR activities, we coded an overall *CSR participation* variable one if, for any one of the positive items, a firm scores greater than zero, zero otherwise. Following Mattingly and Berman (2006), we coded *ICSR participation* one if the firm scored greater than zero on any of the positive items under the community or diversity dimensions, zero otherwise. We coded *TCSR participation* one if the firm scored greater than zero on any of the positive items under the governance, employee relations, or product relations, zero otherwise (Mattingly and Berman, 2006).<sup>8</sup> We calculated *CSR negative level*

by summing the total negative individual item scores across the six major dimensions.<sup>9</sup>

### Other variables

We collected data on *firm size*, measured as the natural logarithm of sales for the fiscal year before the event, and the natural logarithm of the *market-to-book* ratio of each firm the day before the event of the event, from the Compustat data tapes. *Market-to-book* has been shown in the literature to correlate strongly with Tobin's *q*, the theoretical standard for measuring intangible assets (Vilalunga, 2004). We parsed the sample according to *event specific characteristics* as well. To define the characteristics, we reviewed the original *Wall Street Journal* articles for each event and coded the events according to keywords in the articles describing the nature of the event, which resulted in an initial classification of six event categories. We then collapsed the six into three larger categories, legal/regulatory actions arising from *competitive* behaviors, *health/safety* violations, and *integrity*-based events. Moving from six clear categories to three broader categories was necessary to have samples large enough for meaningful analysis. Details on these event types appear in the Appendix.

Our theoretical model contains four constructs: (1) CSR activity, (2) the moral capital or goodwill arising from that activity, (3) attribution of the *mens rea* during a negative event, and (4) shareholder value. CSR activity and shareholder value easily map onto observable variables, and we assert that a defensible link between CSR activity and goodwill has been established both theoretically (Gardberg and Fombrun, 2006; Godfrey, 2005) and empirically (Turban and Greening, 1997; Simon, 1995; Van Herpen *et al.*, 2003; Williams and Barrett, 2000). The *mens rea* attribution process remains as an unobserved, and most likely unobservable, variable (Godfrey and Hill, 1995); unobservable because it is intrapsychic and may be a tacit or semiconscious process (Gladwell, 2005; Winter, 1987). Investors or other stakeholders may have difficulty explaining why they make rapid judgments giving a firm 'the benefit of the

<sup>8</sup> Over the 11-year period we investigated, KLD added two new item measures that affected our institutional CSR participation variable: community support of education (1993), and the provision of benefits to gay/lesbian partners (1995). We included these measures in our counts in the relevant years. To test whether the inclusion of these new items skewed the data, we examined the mean values of all of our CSR variables, year by year. Over the 11 years, the mean values of each variable increased; however, for each year-over-year period, the means do not differ significantly. The growth in CSR participation does not seem to be an artifact of including more measures, but rather an increase in underlying participation rates by firms.

<sup>9</sup> We would have preferred a participation variable in negative CSRs to create a symmetrical variable with our ICSR and TCSR variables; however, 94 percent of the firms in the sample engaged in some negative CSR activity, and a participation variable would create no variance for analysis.

doubt' (Uzzi, 1997). In light of this, our empirical work cannot provide a definitive, but at best a consistent and plausible, test of our theoretical model (Godfrey and Hill, 1995; Popper, 1962).

### Model specification

Based on our theoretical arguments—the ability of CSR engagement to protect shareholder value in the face a negative event—we employed the event study method, well established in the strategy literature (e.g., Hoskisson, Harrison, and Dubofsky, 1991; Kumar, 2005; Lee, 2001; Mahoney and Mahoney, 1993; Reuer, 2001) as well as the financial economics literature (see Peterson, 1989, for a review). Event studies provide a systematic procedure for examining the impact of a variety of business events on the value of the firm (shareholder value) as all losses in a stock's price have a permanent effect and represent a tangible loss in the earnings value of a security to investors (Orlitzky, Schmidt, and Rynes, 2003). While event studies utilize efficient markets hypothesis (EMH) assumptions, the notion that the stock prices adjust to reflect new information (Peterson, 1989) about a firm and its prospects is well accepted even by critics of the EMH such as Shleifer (2000), who notes that the basic assumptions guiding event studies produce robust results, and that these studies have significantly enhanced understanding of stock market reactions to events.

Well-established methodological rules exist for event studies (Peterson, 1989). The procedures for event studies are straightforward. First, identify the event of interest, and its timing. Second, control for other announcements or events that may cause investors to alter their valuations of the firm in addition to the focal event of interest. Third, predict the stock return in the absence of the event of interest. Fourth, observe how the actual return differed from the predicted return. Fifth, use regression analysis to test whether or not the variables of interest are related to the changes in stock price.

Consistent with the event study protocol, we used regression analysis to test our hypotheses. Because we had multiple events from the same companies,<sup>10</sup> a number of discrete variables, and concerns about the underlying distribution structure of our dependent variable, we used the

bootstrap estimation procedure in STATA 9/SE (Chernick, 1999, StataCorp., 2005) to provide us with a better estimate of the underlying standard errors in our analysis. The events we collected occurred over several years, and we regressed abnormal return on dummy variables representing each year to test for any time-specific effect on abnormal returns across the sample (Hsiao, 2003). None of these regressions yielded significant parameter estimates, providing corroboration that any effects we find are time independent. We ran regression diagnostics to look for outliers and removed seven observations that substantially skewed regression results, consistent with normal practice.<sup>11</sup> Thus, our final sample includes 178 observations. Analysis also indicated that the dependent variable, abnormal return, was not normally distributed. To test for any adverse effects, we also performed median quantile regression. The median (50-percentile quantile) and mean regression results are consistent with the ordinary least squares results reported here and available from the authors upon request.

The discrete variables we used to measure CSR engagement provided us with the ability to further analyze the data based on a 'treatment groups' approach. Using the ICSR and TCSR engagement variables as a basis, we classified firms into one of four 'treatment' categories: (1) participation in neither type of CSR activity (*neither*), (2) participation in ICSR activity, (3) participation in TCSR activity, or (4) participation in both types of CSR activity (*both*). Using this approach we compared the abnormal returns for the entire sample and the sample split by the mean values of market-to-book, firm size, negative social impacts, and the three event-specific categories.

We used the Mann-Whitney test to analyze the data in this treatment group regime. The test is nonparametric and useful for estimating small samples (Rice, 1988). The Mann-Whitney test calculates a test statistic based on the rank-ordered

<sup>10</sup> The average was just under two (1.86) with a maximum of eight events by one firm.

<sup>11</sup> We chose to remove the few outliers rather than Winsorize the data for two reasons. First, the very small number of events lost did not significantly affect the power of our study (Cohen, 1988). Second, one advantage of dummy variable regression is the ability to use the parameter estimates to calculate average predicted losses (gains). This ability would have been lost by Winsorizing the variables (Hardy, 1983). Thus, given the focus of this study on predicting the loss/gain, we followed the practice of outlier removal.

measurements of the variable of interest, abnormal return, by treatment group membership. The test compares an expected rank distribution with the actual distribution of the ranks. Because the test focuses on the ranks rather than the values of the variable of interest, it is nonparametric (distribution free) and can be used with small (and unbalanced) test samples. The relevant test statistic is normally distributed and the resulting z-scores can be used to assess the probability that the values of the variable of interest differs across groups.

## RESULTS

Table 1 presents the Pearson product moment and tetrachoric correlations for the measures used in the study. Tetrachoric correlations are the appropriate method for measuring the pairwise correlations between the discrete (dummy) variables used in the study (Stata, 2005). The correlations indicate that the discrete variables have been properly constructed (e.g., ICSR participation correlates perfectly with CSR participation because a one on the first variable by definition leads to a one on the second). The results of both tables show that multicollinearity among the variables is unlikely to present problems. We note the positive correlation between CSR participation and ICSR participation with abnormal return, but the lack of correlation between size, market-to-book, CSR negative level with abnormal return.

### CSR participation (Hypotheses 1 and 2)

Table 2 presents the results of our regression tests, while Table 3 displays the results of the Mann-Whitney tests. Table 3 reads similar to a correlation matrix for each set of firm-specific characteristics we examined. The initial columns contain the moment data for each treatment group, followed by the sample size. The next four columns present the key test statistic (the z-score) comparing the CAR values for each treatment groups.

Column 1 of Table 2 shows that the control variables have no independent effects on abnormal return, consistent with the EMH hypothesis. Column 2 indicates a positive and statistically significant value for the CSR parameter estimate, providing support for Hypothesis 1: the presence of an insurance effect for firms that engage in CSR. Column 3 decomposes CSR participation into its

Table 1. Pairwise Pearson product moment and tetrachoric correlations (N = 178)

Variable	Mean	St. dev.	Abnormal	Size	Market/ book	CSR participation	CSR negative	ICSR participation	TCSR participation	Competitive	H/S	Integrity
Abnormal return	-0.0121	0.0432	1.0									
Size	9.2669	1.099	0.0824	1.0								
Market-to-book	1.2655	0.8348	-0.0082	0.0126	1.0							
CSR	0.8146	0.0292	.02190***	0.2945***	0.1270*	1.0						
participation												
CSR negatives	3.5786	2.6333	0.0172	0.4274***	-0.0133	0.1051	1.0					
ICSR	0.6292	0.4844	0.1734**	0.4005***	0.2187**	1.0000***†	0.1426	1.0				
participation												
TCSR	0.5000	0.5014	0.0490	0.2713***	0.0755	1.0000***†	0.0492	0.3299***†	1.0			
participation												
Competitive	0.3146	0.0349	0.0369	-0.0178	-0.0078	0.2097†	-0.0986	-0.1743†	0.2363†	1.0		
Health/safety	0.2977	0.0344	-0.0019	-0.1002	0.1002	-0.1279†	0.1981***	-0.0575†	-0.1419†	0.0000†	1.0	
Integrity	0.3876	0.0366	-0.0334	0.0867	-0.0867	-0.0657†	-0.0919	0.2177†	0.0918†	0.0000†	0.0000†	1.0

\* p < 0.05, \*\* p < 0.025, \*\*\* p < 0.01, † = tetrachoric correlation, controlling for categorical variables

Table 2. Overall model and firm-level effects (standard errors in parentheses)

Regression	1	2	3	4	5	6	7
Constant	−0.0437** (0.0228)	−0.0379** (0.0214)	−0.0241 (0.0270)	−0.0222**** (0.0059)	−0.0196**** (0.0075)	−0.0266* (0.0176)	−0.0218** (0.0107)
CSR participation		0.0241** (0.0127)					
Institutional CSR participation			0.0158** (0.0088)	0.0152**** (0.0062)	0.0161**** (0.0063)	0.0148*** (0.0071)	0.0153**** (0.0059)
Technical CSR participation			0.0010 (0.0064)	0.0011 (0.0049)	0.0013 (0.0067)	0.0009 (0.0049)	0.0011 (0.0063)
Market to book	−0.0005 (0.0032)	−0.0019 (0.0024)	−0.0025 (0.0026)		−0.0025 (0.0027)		
Size	0.0036 (0.0028)	0.0010 (0.0031)	0.0006 (0.0039)			0.0005 (0.0020)	
CSR negative level	−0.0004 (0.0014)	−0.0003 (0.0017)	−0.0003 (0.0019)				−0.0001 (0.0014)
R <sup>2</sup>	0.0073	0.0498	0.0328	0.0462	0.0325	0.0304	0.0303
Wald chi <sup>2</sup>	1.95	11.67***	10.08**	6.15**	6.68*	7.40*	7.92**
ICSR > TCSR (χ <sup>2</sup> )			3.79**	3.10**	3.09**	4.77***	4.24***
N	178	178	178	178	178	178	178

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.025, \*\*\*\* p < 0.01, one-tailed test

Table 3. CAR means by theoretical treatment groups, firm-specific characteristics

Group	Treatment	Mean	St. dev.	N	z  value for mean <sub>col</sub> < mean <sub>row</sub> (mean <sub>col</sub> > mean <sub>row</sub> )
					Neither ICSR TCSR Both
Whole sample N = 178	Neither	−0.0266	0.0648	42	—
	ICSR	−0.0031	0.0327	47	2.346****
	TCSR	−0.0134	0.0275	24	1.093 (1.763)**
	Both	−0.0086	0.0349	65	1.850** 0.961 0.869 —
					Neither ICSR TCSR Both
Hi M2B firms N = 74	Neither	−0.0432	0.0488	8	—
	ICSR	−0.0056	0.0200	17	1.922**
	TCSR	−0.0189	0.0369	8	1.260 (1.282)*
	Both	−0.00084	0.0349	38	2.014*** 0.291 0.667 —
					Neither ICSR TCSR Both
LoM2B firms N = 104	Neither	−0.0221	0.0681	34	—
	ICSR	−0.0017	0.0384	30	1.655**
	TCSR	−0.0107	0.0224	16	0.707 (1.395)*
	Both	−0.0091	0.0364	27	0.864 1.039 0.452 —
					Neither ICSR TCSR Both
Large firms N = 91	Neither	−0.0516	0.0436	7	—
	ICSR	−0.0047	0.032	27	2.385****
	TCSR	−0.0101	0.0037	10	2.342**** 0.342 —
	Both	−0.0065	0.0355	47	2.614**** 0.101 0.010 —
					Neither ICSR TCSR Both
Small firms N = 87	Neither	−0.0215	0.0676	35	—
	ICSR	−0.0009	0.0340	20	1.837**
	TCSR	−0.0158	0.0194	14	0.122 2.345**** —

Table 3. (Continued)

Group	Treatment	Mean	St. dev.	N	z  value for mean <sub>col</sub> < mean <sub>row</sub> (mean <sub>col</sub> > mean <sub>row</sub> )			
	Both	−0.0143	0.0339	18	0.310	1.462*	0.779	—
					Neither	ICSR	TCSR	Both
High CSR negative N = 74	Neither	−0.0253	0.0424	17	—	—	—	—
	ICSR	−0.0097	0.0318	18	0.957	—	—	—
	TCSR	−0.0122	0.0148	6	1.120	(0.200)	—	—
	Both	−0.0115	0.0404	33	1.239	0.197	—	—
					Neither	ICSR	TCSR	Both
Low CSR negative N = 104	Neither	−0.0274	0.0773	25	—	—	—	—
	ICSR	0.0010	0.0331	29	2.221***	—	—	—
	TCSR	−0.0142	0.0309	18	0.480	(2.145)***	—	—
	Both	−0.0057	0.0287	32	1.415*	1.415*	—	—

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.025, \*\*\*\* p < 0.01

Note: A smaller mean value indicates a positive effect on the CAR.

two theoretically relevant components, ICSR and TCSR participation. The parameter estimate for ICSR is positive and significant, while the estimate for TCSR is positive but not significant. We ran a  $\chi^2$  test on the two CSR parameter estimates (reported on the second line from the bottom), and the result indicates that the parameter estimates are statistically different. Because the constant term lacked significance, we present Models 4–7 (considering only the effects of ICSR and TCSR, and these two variables run with each of the controls separately), which indicate that both the parameter estimate for the constant and for the CSR variables are consistent and significant across models.

The first group of Table 3, the *whole sample*, confirms the results of the regression analysis. The CAR for firms with *ICSR participation* (only) differs significantly from both the *neither* treatment group and the *TCSR participation* (only) group. *ICSR* does not differ from the *both* treatment group; however, examining the mean values leads us to conclude that the primary insurance-like effect is driven by ICSR participation. The evidence in Tables 2 and 3 substantiates the theory underpinning Hypothesis 2. In short, ICSR participation appears to have an insurance-like effect, while TCSR participation does not.

### Firm specific characteristics (Hypotheses 3, 4, and 5)

The data in Table 1, the correlation matrix, indicate that firm size is positively and significantly associated with all types of positive CSR activities, supporting one implication of the insurance

perspective. Examining Table 3, we see that participation in ICSR activities appears to help both firms with higher and lower market-to-book values. The pattern we see in the whole sample repeats itself. *ICSR* activity, as a treatment, leads to statistically significantly lower losses when compared to both the *neither* and *TCSR* treatment groups. To find further evidence to test Hypothesis 3, we calculated Cohen's d (the standardized mean difference), a measure of the effect size, for the *ICSR-neither* treatment group comparison. For the high market-to-book subsample Cohen's d is 1.01—a strong effect (Cohen, 1988)—while the small subsample Cohen's d is 0.37—a moderate effect. This statistic implies that firms with greater levels of intangible assets benefit more by engaging in ICSR activities. Based on the collective evidence, we find support for Hypothesis 3.

Again from Table 3, the large firm subsample displays marked differences between the *neither* treatment group and any of the CSR treatment groups. Firms engaging in *ICSR* activities had the smallest negative abnormal return and the difference between the means for *ICSR* and *TCSR* attains statistical significance. For the small firm subsample, participation in *ICSR* activities also resulted in the smallest loss of shareholder value and is significantly different from both the *neither* treatment group and the *TCSR* treatment groups. The Cohen's d statistic for the larger firms indicates a strong effect for any CSR treatment group (1.34 for *ICSR* versus *neither*, 1.34 for *TCSR* versus *neither*, and 1.13 for *both* versus *neither*). Cohen's d for the ICSR-TCSR comparison, 0.21, implies a small effect difference between the two.

For larger firms, engagement in any CSR activity proved beneficial, while for small firms only engagement in ICSR activities appears to have an insurance effect. Participation in ICSR activities benefited both large and small firms, although the effects for larger firms were more pronounced, and so we find support for Hypothesis 4.

The results in Table 3 for firms with high and low negative CSR levels show that any insurance effect appears limited to firms with lower levels of negative social impact. The CAR losses for all treatment groups in the high negative subsample do not differ, while in the low negative subsample the *ICSR* treatment group displays the pattern found in other firm-specific characteristics—this group experienced statistically significant lower losses than the *neither*, *TCSR*, and *both* treatment groups. Thus, the data supports Hypothesis 5.

#### Event-specific characteristics (Hypotheses 6, 7, and 8)

Tables 4 and 5 present the results of, respectively, the regression and Mann-Whitney analyses for the data subdivided by event characteristics. Column 1 of Table 4 and the first group in Table 5 show that our analysis failed to find a statistically significant effect for either ICSR or TCSR participation when the negative event centered on competitive issues, providing a warrant to not reject Hypothesis 6.

The regression analysis also fails to find strong evidence of an effect for either type of CSR when the negative event arose from the stakeholder concerns of health and safety (while the

ICSR parameter estimate was positive and significant, the overall goodness of fit for the model was poor, and the ICSR estimate did not differ from the TCSR estimate). The health/safety data contained in Table 5 reveal a similar story, albeit somewhat more supportive of Hypothesis 7. The *ICSR* treatment group outperformed the *neither* treatment group by a statistically significant margin; however, the health/safety subsample exhibited no difference from the *TCSR* group. The data provide very tentative support, at best, in regard to the theoretical prediction in Hypothesis 7.

Column 3 of Table 4 sets out the regression results for the integrity-based negative events. The ICSR participation variable is positive, statistically significant from both zero and the TCSR estimate, and the model exhibits strong goodness of fit; indeed, this model has the highest  $R^2$  of any model we estimated. The integrity section of Table 5 corroborates the regression results. The *ICSR* treatment group outperformed all other groups (*neither*, *TCSR*, and *both*) by a statistically significant margin. The data provide a strong warrant for Hypothesis 8; it appears that when a firm's character is in question, character evidence has the greatest value.

In summary the data provide evidence consistent with the theory that drives Hypotheses 1 (the insurance-like role of CSR engagement), 2 (the distinction between types of CSR engagement), 3 (a greater insurance effect for firms with larger values of intangible assets), 4 (a greater effect for larger firms), 5 (an insurance effect for firms with fewer negative social impacts to contend with), 6 (CSR activities provide no insurance protection

Table 4. Event-specific characteristics (standard errors in parentheses)

Regression	1	2	3
	Competitive	Health/safety	Integrity
Constant	−0.0121** (0.0072)	−0.0236*** (0.0088)	−0.0332** (0.0189)
Institutional participation	0.0011 (0.0085)	0.0182** (0.0096)	0.0299** (0.0159)
Technical CSR participation	0.0030 (0.0084)	0.0011 (0.0088)	−0.0042 (0.0092)
$R^2$	0.0026	0.0602	0.0595
Wald $\chi^2$	0.18	3.59	6.10**
ICSR > TCSR ( $\chi^2$ )	0.02	1.91	6.05***
N	56	53	69

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.025$ , \*\*\*\*  $p < 0.01$

Table 5. Mann Whitney test values (significance levels) for CAR means tests, event specific effects

Group	Treatment	Mean	St. dev	N	z  value for mean <sub>col</sub> < mean <sub>row</sub> (mean <sub>col</sub> > mean <sub>row</sub> )			
					Neither	ICSR	TCSR	Both
Competitive actions N = 56	Neither	-0.0118	0.0277	12	—	—	—	—
	ICSR	-0.0114	0.0289	10	0.066	—	—	—
	TCSR	-0.0094	0.0348	13	0.598	(0.124)	—	—
	Both	-0.0079	0.0364	21	0.430	0.254	0.106	—
Health/safety actions N = 53	Neither	-0.0266	0.0419	15	—	—	—	Both
	ICSR	-0.0024	0.0329	15	1.659**	—	—	—
	TCSR	-0.0150	0.0198	6	0.856	1.012	—	—
	Both	-0.0070	0.0397	17	1.605*	0.132	1.260	—
Integrity-based actions N = 69	Neither	-0.0383	0.0981	15	—	—	—	Both
	ICSR	0.0002	0.0349	22	1.949**	—	—	—
	TCSR	-0.0221	0.0087	5	0.218	2.185***	—	—
	Both	-0.0103	0.0317	27	0.932	1.689**	1.168	—

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.025, \*\*\*\* p < 0.01

for firms during competitively based events), and 8 (an insurance-like effect when events challenge the integrity of the firm). The evidence does not support Hypothesis 7. We now consider our findings within the broader context of the CSR-CFP relationship literature.

## DISCUSSION

Before discussing the findings of our study and considering its broader implications, we recognize the limitations of our work and consider a prominent alternative explanation for our findings: that CSR engagement stands merely as a proxy for ‘quality management,’ the underlying driver of any observed relationship between CSR activities and an insurance-like effect. We then highlight our key findings and raise some questions to guide future inquiry.

### Limitations

As with all empirical studies, this study has limitations that potentially constrain the generalizability of the results. First, while the findings are consistent with the proposed theoretical argument, a direct test of the proposed theory is not feasible because a key construct—the *mens rea* attribution process—is unobservable. Developing methods to uncover and understand the actual attribution processes stakeholders use to

assess penalties would facilitate a quantum leap in researchers’ ability to understand the insurance effects observed in this study. Second, the study examined general legal/regulatory actions initiated against a firm. This data collection strategy was consistent with the theoretical model and helped avoid biasing results *ex ante* by categorizing some types of negative events as appropriate (such as negative health/safety outcomes) to include, and some events (such as competitor suits over patent infringement) as inappropriate to include. It is reasonable to believe that social initiatives targeting a firm’s primary stakeholders, such as TCSR activity promoting positive labor relations, may yield insurance-like benefits when the negative event affects employees. Future work is needed that looks at more targeted and specialized types of events to determine the breadth of the insurance effects.

Third, different metrics of social initiatives may yield different results. Again, our theoretical interest lie primarily with the value of engagement in CSR activities at a qualitatively noteworthy level. The Socrates dataset works well because it measures a qualitative, ‘stock’ variable—whether firms participate in activities or not—and facilitates a counting of initiatives. Measures such as the actual dollar amount invested in CSR activities may yield different results. For example, continuous data on actual spending for social initiatives would help provide a finer-grained analysis of the insurance-like value of CSR activities. Although



such data is hard to get and may bias any results by including only firms that voluntarily disclose data, the results of such a study would provide an important replication, generalization, and extension to the results of this research.

Another limitation—and area of interesting, potential future research—concerns the role of managerial intentions. It was not possible to ascertain whether the firms in our study *intended* to use CSR as a strategic, insurance-based initiative, a mechanism to build intangible resources, or as a manifestation of corporate citizenship. Indeed, this study's purpose was to investigate whether CSR *can* provide an insurance effect and not whether managers *seek* such an effect in their decision and allocation processes. While difficult to measure (e.g., if a firm admits it is engaging in CSR for insurance purposes, that admission may or may not dissipate any attributions of an altruistic disposition), future work should focus on revealing the underlying managerial motivations for involvement in CSR activities.

### Quality of management

Waddock and Graves (1997) invoked a quality of management construct to provide a theoretical explanation for the presence of the CSR-CFP relationship in their work. Over the last decade, the quality of management hypothesis has been used as an alternative explanation for the presence of observed positive CSR-CFP relationships (see Lev *et al.*, 2006). In its strongest form, the quality of management thesis argues that CSR has no inherent value; the apparent value comes as investors interpret CSR engagement as a signal of the quality of the underlying management team. Any positive relationship between CSR and CFP is spurious, because it only represents two other, hypothesized but unobservable, positive relationships between quality of management/CSR and the quality of management/CFP. The logic can be summarized as 'if quality management drives both CSR and CFP, then an observed relationship between CSR and CFP will be positive.'

Our setting offers a solid test of such an argument. In assessing the potential damage due to a negative event, and any subsequent downward revision in share price, it seems logical to us that investors would indeed factor in an assessment of the quality of management, as it pertains to either (1) the ability to do damage control with

affected stakeholders (thus mitigating cash flow losses/increased risk) and/or (2) the ability to efficiently and effectively negotiate a solution to the issue that minimizes exposure to the firm's shareholders. Given this direct relationship between management quality and efficacy of resolution, it seems reasonable to assert that investors would *always* reward the quality of management, or proxies thereof if unobservable, with less negative downward revisions of share price.

Our results, particularly the event-specific characteristics, provide one situation where CSR seems to impact shareholder value (the abnormal return)—the integrity-centered events—and two where there is no observed relationship. If quality of management should always matter, then the lack of an observed relationship between CSR and CFP in these settings casts doubt on the logical structure of the quality of management hypothesis. Our results suggest two theoretical possibilities: (1) Proponents of the quality of management explanation will need to establish why the value of management quality—an arguably generalized skill—should be contingent on the type of event experienced, or (2) CSR activities signal more than merely the quality of a firm's management and create their own economic value through the processes akin to those we outline previously. The second option seems to us both more parsimonious and reasonable.

### Key findings

The event study corroborates the theoretical arguments underpinning this research. In short, participation in CSR activities does seem to yield insurance-like protection to a number of firms, subject to the constraints we identified. In relation to the important, growing research stream on the value of CSR in preserving CFP, this article provides a test of a new, detailed explanation of such phenomena (Godfrey, 2005).

Perhaps a more significant finding than the overall support of the risk management view, however, is the finding that the insurance effect holds for ICSR activities, aimed at secondary stakeholders, but not for TCSR activities focused on the firm's primary transaction partners. Engagement in TCSRs benefited only the large firms in the sample while engagement in ICSRs benefited all groups. The findings prove consistent with the proposed logic that TCSR activities, because they can be

viewed through the lens of power and exchange value, do not create the same type of moral capital and insurance-like protection as ICSR activities.

These results inform future research in two ways. First, studies based on monolithic constructions of CSR—those that collapse different CSR activities into a single construct or those using only a single proxy—may fail to capture significant differential effects. For example, it would be interesting to reinterpret the Schnietz and Epstein (2005) study in this light; does the distinction between ICSR and TCSR activities play a role in an economy-wide crisis? Second, new theoretical opportunities now exist to extend the current study to both finer-grained CSR activities (how do philanthropic CSR activities create value as opposed to diversity-focused CSRs?) and to the larger theoretical argument (CSR is one driver of a firm's reputation, which is in turn a driver of firm-specific resources). Several researchers continue to argue that more is always better (a stronger reputation leads to greater competitive advantages); our findings imply that *only more of certain types of resources* (e.g., moral capital that comes only from ICSR activities) may provide greater advantages. That is, the findings suggest that a Mertonian mid-range conception that bounds the value of CSR may be more appropriate (Merton, 1967). Such an argument has deep implications for both theorists and managers because each must discover the limits of value-producing investments in these activities.

Third, we find it compelling that the strongest effect in our analysis surrounds those events that cast doubt on a firm's fundamental character as an honest, promise keeping entity. In such cases, and only in such cases, does evidence that the firm acts in other-regarding ways provide insurance like protection. The mean market capitalization for the day preceding these integrity-centered events was \$32.6 billion. Firms not engaging in ICSR activities lost, on average, \$72.4 million, while firms that did engage in these activities only lost only \$22.8 million, less than one-third of their counterparts. Almost \$50 million worth of insurance protection from investing in ICSR activities appears as a wise investment to us, and the size of the gap between participants and nonparticipants is striking.

These numbers suggest a straightforward and powerful story; character evidence appears most valuable when it speaks directly to events that

question the character of the firm and its managers. We hope this finding (on firm character and events) will spur researchers to investigate the details and dynamics involved in this process. One such strategy would be to do multiple, firm-event case studies. There is still much to learn from research examining firm character and character events.

## CONCLUSION

CSR activity is often either impugned as *prima facie* evidence of managerial malfeasance or held up as a shining example of enlightened self-interest. This study's findings indicate that CSR, particularly investment aimed at secondary stakeholders, represents a potential method of creating value for shareholders in the face of certain types of negative events. In short, good deeds appear to earn chits. The results indicate that managers of firms who engage in CSR activity can create value at times for their shareholders through the creation of insurance-like protection (i.e., they appear to be acting as wise fiduciaries and agents of their corporate owners), which suggests a rapprochement between the positions espoused in the opening comments by Friedman (1970) and Knaeur (1994).

## ACKNOWLEDGEMENTS

We thank Jim Walsh and the two anonymous reviewers at *SMJ* for their pointed and insightful feedback in improving the manuscript. We also thank Brad Agle, Troy Carpenter, Jennifer Griffin, Jeff Harrison, Shelby Hunt, Robb Jensen, Grant McQueen, Gerry Sanders, Dave Whetten, members of the BYU Strategy group, and the University of Utah Finance faculty—with special thanks to Cal Boardman, Mike Lemmon, and Scott Schaefer for their helpful feedback or research contributions to our work.

## REFERENCES

- Berle AA. 1931. Corporate powers as powers in trust. *Harvard Law Review* **44**: 1049–1074.
- Blacconiere WG, Northcutt WD. 1997. Environmental information and market reactions to environmental legislation. *Journal of Accounting, Auditing, and Finance* **12**(2): 149–178.

- Blacconiere WG, Patten DM. 1994. Environmental disclosures, regulatory costs, and changes in firm value. *Journal of Accounting and Economics* **18**: 357–377.
- Brealey RA, Myers SC, Marcus AJ. 1995. *Fundamentals of Corporate Finance*. McGraw-Hill: New York.
- Brown TJ, Dacin PA. 1997. The company and the product: corporate associations and consumer product responses. *Journal of Marketing* **61**(1): 68–84.
- Campbell JY, Lo AW, MacKinlay AC. 1997. *The Econometrics of Financial Markets*. Princeton University Press: Princeton, NJ.
- Chernick MR. 1999. *Bootstrap Methods: A Practitioner's Guide*. New York: John Wiley and Sons, New York.
- Cohen J. 1988. *Statistical Power for the Behavioral Sciences* (2nd edn). Lawrence Erlbaum: Hillsdale, NJ.
- Cowan AR. 1992. Nonparametric event study tests. *Review of Quantitative Finance and Accounting* **2**(4): 343–358.
- Dodd EM. 1932. For whom are corporate managers trustees. *Harvard Law Review* **45**(7): 1145–1163.
- Donaldson T, Dunfee TW. 1999. *Ties That Bind*. Harvard Business School Press: Boston, MA.
- Entine J. 2003. The myth of social investing: a critique of its practice and consequences for corporate social performance research. *Organization Environment* **16**: 352–368.
- Fama EF, Miller MH. 1972. *The Theory of Finance*. Dryden Press: Hinsdale, IL.
- Fisman R, Heal F, Nair VB. 2005. Corporate social responsibility: doing well by doing good? Working paper, Columbia University Business School, New York. Available at SSRN: <http://ssrn.com/abstract=813286>.
- Fombrun C. 1996. *Reputation*. Harvard Business School Press: Boston, MA.
- Fombrun C, Gardberg NA, Barnett ML. 2000. Opportunity platforms and safety nets: corporate citizenship and reputational risk. *Business and Society Review* **105**(1): 85–106.
- Freedman M, Stagliano AJ. 1991. Differences in social-cost disclosures: a market test of investor reactions. *Accounting, Auditing, and Accountability Journal* **4**(1): 68–83.
- Freeman RE, Harrison JS, Wicks A. 2008. *Managing for Stakeholders: Survival, Reputation, and Success*. Yale University Press: New Haven, CT.
- Friedland R, Alford RR. 1991. Bringing society back in: symbols, practices, and institutional contradictions. In *The New Institutionalism in Organizational Analysis*, Powell WW, DiMaggio PJ (eds). The University of Chicago Press: Chicago, IL; 232–266.
- Friedman M. 1953. *Essays in Positive Economics*. University of Chicago Press: Chicago, IL.
- Friedman M. 1970. The social responsibility of business is to increase profit. *New York Times Magazine* (September 13): , 122, 126 32–33.
- Gardberg NA, Fombrun C. 2006. Corporate citizenship: creating intangible assets across institutional environments. *Academy of Management Review* **31**(2): 329–346.
- Gladwell M. 2005. *Blink: The Power of Thinking Without Thinking*. Back Bay Books: New York.
- Godfrey PC. 2005. The relationship between corporate philanthropy and shareholder wealth: a risk management perspective. *Academy of Management Review* **30**(4): 777–798.
- Godfrey PC, Hatch NW, Hansen JM. 2008. Toward a general theory of CSRs: the roles of beneficence, profitability, insurance, and industry heterogeneity. *Business & Society*, April 24, 2008 DOI: 10.1177/0007650308315494.
- Godfrey PC, Hill CWL. 1995. The problem of unobservables in strategic management research. *Strategic Management Journal* **16**: 519–534.
- Goffman E. 1997. Self-presentation. In *The Goffman Reader*, Lemert C, Branaman A (eds). Blackwell Publishers Ltd.: Oxford, UK; 21–25.
- Griffin JJ, Mahon JF. 1997. The corporate social performance and corporate financial performance debate: twenty-five years of incomparable research. *Business and Society* **36**(1): 5–31.
- Hardy MA. 1983. *Regression with Dummy Variables*. Sage: Thousand Oaks, CA.
- Hillman AJ, Keim GD. 2001. Shareholder value, stakeholder management, and social issues: what's the bottom line? *Strategic Management Journal* **22**: 125–140.
- Hoskisson RE, Harrison JS, Dubofsky DA. 1991. Capital market evaluation of m-form implementation and diversification strategy. *Strategic Management Journal* **12**: 271–279.
- Hsiao C. 2003. *Analysis of Panel Data* (2nd edn). Cambridge University Press: Cambridge, UK.
- Jones EE. 1964. *Ingratiation: A Social Psychological Analysis*. Appleton-Century-Crofts: New York.
- Kennett DA. 1980. Altruism and economic behavior II: Private charity and public policy. *American Journal of Economics and Sociology* **39**(4): 337–353.
- Kimberly Jr. 1976. Organizational size and the structuralist perspective: a review, critique, and proposal. *Administrative Science Quarterly* **21**(4): 571–597.
- Knauer NJ. 1994. The paradox of corporate giving: tax expenditures, the nature of the corporation, and the social construction of charity. *DePaul Law Review* **44**(1): 1–97.
- Kumar MVS. 2005. The value from acquiring and divesting a joint venture: a real options approach. *Strategic Management Journal* **26**(4): 321–331.
- LaFave WR. 2000. *Criminal Law* (3rd edn). West Group: St. Paul, MN.
- Lee PM. 2001. What's in a name.com? The effects of '.com' name changes on stock prices and trading activity. *Strategic Management Journal* **22**(8): 793–804.
- Lev B, Petrovits C, Radhakrishnan S. 2006. Is doing good good for you: yes, charitable contributions enhance revenue growth. Working paper New York University Stern School of Business, New York. <http://archive.nyu.edu/fda/bitstream/2451/27464/2/SSRN-id920502.pdf>.
- Mackey A, Mackey TB, Barney JB. 2007. Corporate social responsibility and firm performance: investor preferences and corporate strategies. *Academy of Management Review* **32**(3): 817–835.

- Mahoney JM, Mahoney JT. 1993. An empirical investigation of the effect of corporate charter antitakeover amendments on stockholder wealth. *Strategic Management Journal* **14**(1): 17–31.
- Malatesta P. 1985. Partially anticipated events: a model of stock price reactions with an application to corporate acquisitions. *Journal of Financial Economics* **14**(2): 237–251.
- Margolis JD, Walsh JP. 2001. *People and Profits: The Search for a Link Between a Company's Social and Financial Performance*. Lawrence Erlbaum: Mahwah, NJ.
- Markowitz H. 1952. Portfolio selection. *Journal of Finance* **7**: 77–91.
- Mattingly JE, Berman S. 2006. Measurement of corporate social action: discovering taxonomy in the Kinder Lydenburg Domini ratings data. *Business and Society* **45**(1): 20–46.
- McWilliams A, Siegel D. 1997. Event studies in management research: theoretical and empirical issues. *Academy of Management Journal* **40**(3): 626–657.
- McWilliams A, Siegel D. 2000. Corporate social responsibility and financial performance: correlation or misspecification. *Strategic Management Journal* **21**(5): 603–609.
- Merton RK. 1967. *On Theoretical Sociology*. Free Press: New York.
- Mitchell RK, Agle BR, Wood DJ. 1997. Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. *Academy of Management Review* **22**(4): 853–886.
- Neiheisel SR. 1995. *Corporate Strategy and the Politics of Goodwill: A Political Analysis of Corporate Philanthropy in America (American University Studies Series X, Political Science)*. Peter Lang: New York.
- Orlitzky M, Benjamin JD. 2001. Corporate social performance and firm risk: a meta-analytic review. *Business and Society* **40**(4): 369–397.
- Orlitzky M, Schmidt FL, Rynes SL. 2003. Corporate social and financial performance: a meta-analysis. *Organization Studies* **24**(3): 403–441.
- Patell JM. 1976. Corporate forecasts of earnings per share and stock price behavior: empirical tests. *Journal of Accounting Research* **14**(2): 246–276.
- Peterson PP. 1989. Event studies: a review of issues and methodology. *Quarterly Journal of Business and Economics* **28**(3): 36–66.
- Popper KR (ed). 1962. *Conjectures and Refutations: The Growth of Scientific Knowledge*. Basic Books: New York.
- Reuer JJ. 2001. From hybrids to hierarchies: shareholder wealth effects of joint venture partner buyouts. *Strategic Management Journal* **22**(1): 27–44.
- Rice JA. 1988. *Mathematical Statistics and Data Analysis*. Wadsworth & Brooks: Pacific Grove, CA.
- Richardson A, Welker M, Hutchinson I. 1999. Managing capital market reactions to corporate social responsibility. *International Journal of Management Reviews* **1**(1): 17–44.
- Rindova VP, Pollock TG, Hayward M : A. 2006. Celebrity firms: the social construction of market popularity. *Academy of Management Review* **31**(1): 50–71.
- Roman RM, Hayibor S, Agle BR. 1999. The relationship between social and financial performance: repainting a portrait. *Business and Society* **38**(1): 109–125.
- Scharfman M. 1996. The construct validity of the Kinder, Lydenburg, and Domini social performance ratings data. *Journal of Business Ethics* **15**(3): 287–296.
- Schnietz KE, Epstein MJ. 2005. Exploring the financial value of a reputation for corporate social responsibility during a crisis. *Corporate Reputation Review* **7**(4): 327–345.
- Sharpe WF. 1964. Capital asset prices: a theory of market equilibrium under conditions of risk. *Journal of Finance* **19**(3): 425–442.
- Sherry JF. 1983. Gift giving in anthropological perspective. *Journal of Consumer Research* **10**(2): 157–168.
- Shleifer A. 2000. *Inefficient Markets: An Introduction to Behavioral Finance (Clarendon Lectures in Economics)*. Oxford University Press: Oxford, UK.
- Simon FL. 1995. Global corporate philanthropy: a strategic framework. *International Marketing Review* **12**(4): 20–37.
- Smith CW, Stultz R. 1985. The determinants of firms' hedging policies. *Journal of Financial and Quantitative Analysis* **20**(4): 391–405.
- StataCorp. 2005. *Stata Statistical Software, Release 9*. StataCorp LP: College Station, TX.
- Stultz RM. 2002. *Risk management and derivatives*. Southwestern College Publications: New York.
- Szwajkowski E, Figlewicz RE. 1999. Evaluating corporate performance: a comparison of the Fortune Reputation survey and the Socrates social rating database. *Journal of Managerial Issues* **11**(2): 137–154.
- Tonkiss F, Passey A. 1999. Trust, confidence and voluntary organisations(sic): between values and insitutions. *Sociology* **33**(2): 257–274.
- Turban DB, Greening DW. 1997. Corporate social performance and organizational attractiveness to prospective employees. *Academy of Management Journal* **40**(3): 658–672.
- Uzzi B. 1997. Social structure and competition in interfirm networks: the paradox of embeddedness. *Administrative Science Quarterly* **42**: 35–67.
- Van Herpen HWI, Pennings JME, Meulenbergt MTG. 2003. Consumers' evaluation of socially responsible activities in retailing. Working paper, Maastricht University, Maastricht, The Netherlands.
- Villalonga B. 2004. Intangible resources, Tobin's q, and sustainability of performance differences. *Journal of Economic Behavior & Organization* **54**: 205–230.
- Waddock SA, Graves SB. 1997. The corporate social performance-financial performance link. *Strategic Management Journal* **18**(4): 303–319.
- Williams RJ, Barrett JD. 2000. Corporate philanthropy, criminal activity, and firm reputation: is there a link? *Journal of Business Ethics* **26**(4): 341–350.
- Winter SG. 1987. Knowledge and competence as strategic assets. In *The Competitive Challenge*, Teece DJ (ed). Ballinger Publishing Company: Cambridge, MA; 159–184.

Appendix: Types of Events, Sorted by Final Category

Category	General types of events	N
Competitive actions	<ul style="list-style-type: none"> <li>Competition conspiracy</li> <li>Anti-trust claims</li> <li>Patent infringements</li> <li>Price fixing accusations</li> </ul>	56
Health/safety actions	<ul style="list-style-type: none"> <li>Consumer medical/injury issues</li> <li>Product safety problems</li> <li>Quality control issues</li> <li>Environment/pollution events</li> </ul>	53
Integrity-based actions	<ul style="list-style-type: none"> <li>Discrimination claims</li> <li>Fraud accusations</li> <li>False claims/dishonesty</li> <li>Pension or Investor obligation claims</li> <li>Bribery allegations</li> </ul>	69