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Investor Reactions to Concurrent Positive and Negative Stakeholder News

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Abstract This paper examines the impact on firm value created by investor reaction to same day news of corporate social responsibility (CSR) and corporate social irresponsibility (CSiR) activities. First, using trading volume, the authors establish that the perceived value of moral capital generated by news involving institutional (e.g., environmental and community) stakeholders is less clear to investors than that of the news involving technical (e.g., customers and employees) stakeholders. Subsequently, the authors analyze abnormal returns from 565 unique firm events—each comprising at least one positive and one negative stakeholder news item. Using signaling theory, the authors demonstrate that news of the number of CSR activities involving institutional groups counteracts the effects of same day CSiR news in an *inverted U-shaped* fashion. In contrast, they find that news of the number of CSR activities involving technical groups mitigates the effects of same day CSiR news in a *U-shaped* fashion.

Keywords Corporate social responsibility · Event study · Signaling theory · Trading volume · Technical CSR · Institutional CSR

One of an organization's primary goals is to provide value to a variety of stakeholders, while at the same time creating value for the firm (American Marketing Association 2013; Duncan and Moriarty 1998). Past research (e.g., Luo and Bhattacharya 2009) has shown that a firm could enhance its organizational status in the eyes of its stakeholders through engaging in corporate social responsibility (CSR) and subsequently improve its short-term and long-term financial performance (Davidson and Worrell 1988; Orlitzky et al. 2003).

The motivation for a firm to engage in CSR stems from the notion that CSR enhances the impression of a firm in the eyes of its stakeholders (Neu et al. 1998), thereby positively affecting its reputation and legitimacy (e.g., Doh et al. 2010), and creating a more munificent environment in which the firm may conduct business (Fombrun and Shanley 1990; Murray and Vogel 1997). On the other hand, a firm's association with corporate social irresponsibility (CSiR) creates a negative impression in the eyes of its stakeholders, adversely affecting a firm's reputation and operating environment, and decreasing value in the eyes of investors (Davidson and Worrell 1988; Frooman 1997).

While the bulk of previous literature has studied either the effects of CSR news *or* CSiR news[1] on firm value, scholars only recently have begun to broaden their investigations to examine the interplay between news of CSR and CSiR (e.g., Godfrey et al. 2009). In that line of inquiry, scholars have investigated whether creating a positive CSR profile can mitigate negative outcomes from *future* CSiR news both conceptually (e.g., Peloza 2006; Porter and Kramer 2006) as well as empirically (e.g., Godfrey et al. 2009; Luo and Bhattacharya 2009; Vanhamme and

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[1] We use the terms news and announcements to refer to items sourced through (1) direct contact with the company, (2) a global network of CSR research firms, (3) news media sources, (4) annual reports and proxy statements, and (5) government and non-governmental organizations.

Grobben 2009). While this stream of work offers rich insights, the focus largely has been on the *long-term* value building capabilities of CSR news in cases when CSR is announced long *before* news of CSiR (Barnett and Salomon 2012; Godfrey et al. 2009; Peloza 2006).

However, there is little insight into the short-term financial values of *both* CSR and CSiR news appearing in public sources on the *same day*, albeit evidence that same day positive and negative news frequently appear in the business press.[2] For instance, Dedman and Lin (2002) investigate the concurrent appearance of positive announcements along with CEO departures. Graffin et al. (2011) also investigate the simultaneous occurrence of CEO succession news and information that is positively construed by the firm's stakeholders. Likewise, guidance on firm earnings has been observed to concurrently appear with other firm activities (Han 2013), or significant unrelated firm events (Bowen et al. 1992). Similarly, concurrent positive stakeholder news has been observed around CEO stock option granting dates (Aboody and Kasznik 2000; Yermack 1997), which may constitute CSiR, if excessive. In addition, news regarding divestment of holdings of businesses in stigmatized industries (e.g., tobacco and firearms) has appeared with news criticizing the same firms for doing business in these industries (Durand and Vergne 2014). Announcements of CSR initiatives have occurred concurrently with institutional reforms (Arya and Zhang 2009) and times of need for individual stakeholder groups (Madsen and Rodgers 2015). Lastly, scholars have studied news of CSiR in the context of *past* CSR achievements (Janney and Gove 2011; Vanhamme and Grobben 2009).

Consequently, our research develops a framework that employs signaling theory to understand how investors view the impression of the firm created by the valence, quantity (Jensen 2001) and the type of stakeholder group (Godfrey et al. 2009) concerning *same day* news of CSR and CSiR (Connelly et al. 2011; Stiglitz 2000).

In keeping with previous literature, we adopt two main types of stakeholder groups addressed by CSR. The first group is *technical* in nature (Godfrey et al. 2009; Mattingly and Berman 2006) and includes primary stakeholders such as consumers, employees, and investors, all of whom interact closely with the firm's value chain (Hillman and Keim 2001; Mitchell et al. 1997). The second group is *institutional* in nature (e.g., environment, human rights, and community issues), and not as entwined with the firm's supply chain as the primary stakeholders (Mattingly and Berman 2006). Because institutional stakeholders are more focused on social issues, we purport that CSR targeted at this group (i.e., institutional CSR) is more likely to be viewed by investors as altruistic and creating moral capital. In contrast, engaging primary stakeholders through technical CSR may be viewed by investors as a firm's attempt to address its value chain. Due to this conceptual distinction, we posit that investors are likely to treat news of institutional CSR (ICSR) and technical CSR (TCSR) as conveying different properties regarding the organization's status. However, we do not think that this distinction extends to CSiR because it is more difficult to understand the *mens rea*, or state of mind, behind a firm's CSiR activities (Godfrey 2005; Lange and Washburn 2012). In other words, investors are much more likely to view institutional and technical CSiR as similar activities with negative valence (Forehand and Grier 2003; Godfrey et al. 2009) whereas CSR has more clearly attributable intent (Lev et al. 2010; Saiia et al. 2003).

To establish this conceptual distinction between the two stakeholder groups in terms of CSR, we first examine the firm's stock trading volume, which conveys investor sentiment surrounding the firm's activities (Tetlock 2007). Abnormal increases in trading volume are observed when the financial impact of an event, such as the news of CSR, is associated with greater uncertainty with respect to its impact on future cash flows (e.g., Beaver 1968; Orlitzky 2013; Woolridge and Snow 1990). In keeping with this line of thinking, we theorize and subsequently find evidence that investors have greater certainty about the financial impact of CSR news related to activities that more directly affect the firm's value chain (i.e., TCSR), than activities that are more distal (i.e., ICSR) from affecting a firm's cash flow. In other words, management should understand that CSR can affect the level of firm value and the extent to which investors agree on the information contained in the CSR news.

Building on this finding, our next area of study addresses the impact of *same day* CSR and CSiR news on the abnormal stock return of a firm. We demonstrate that news of a low number of ICSR activities will boost the moral reputation of a firm and produce a positive abnormal return. However, news of too many ICSR activities will be viewed by investors as a misallocation of resources creating an inverted U-shaped effect on abnormal return. In contrast, news of a low number of TCSR activities signals the self-serving nature of a firm, which will trigger a negative stock market reaction. This negative reaction will be counteracted with news of an increasing number of TCSR activities demonstrates the firm's commitment to its value chain, increasing the positive stock market reaction (i.e., a U-shaped effect).

This paper makes a number of significant contributions to CSR theory and practice, using a dataset of 565 same

[2] As a specific example, the security company Brinks, in 2008, had news regarding OSHA penalties (CSiR) become public on the same day that news of charitable donations (CSR) was made public.

day news of CSR and CSiR. First, we add to the literature on CSR, impression management, and signaling theory in terms of how investors process *same day* CSR and CSiR news. Next, we introduce trading volume to the CSR literature as a means to measure investor agreement regarding the firm-value effect of CSR in the presence of CSiR. For the first time, the *short-term* consequences of announcements of *same day* CSR and CSiR news on a firm's stock returns are presented with generalizations across multiple types of CSR activities. Examination of immediate reactions to firm CSR news helps to isolate the specific effects of CSR. Our findings show that, dependent on the number of activities, TCSR and ICSR can be an immediate counterweight to CSiR. Lastly, this paper provides guidance that may allow a firm to manage the impression that their stakeholder activities provide and therefore investor reaction to stakeholder news (Kotler and Levy 1969; Smith 2009).

Theory

CSR: Definition and its Strategic Value

There are varied definitions of CSR, but most center on the idea of discretionary expenditures designated to improving social and environmental conditions (e.g., Mackey et al. 2007; Margolis and Walsh 2003; Pride and Ferell 2012). These definitions acknowledge the positive and negative consequences of a firm's actions on its stakeholders (e.g., employees, environmental groups, and customers). In addition, by definition, CSR exceeds existing regulations and societal expectations (Kotler and Lee 2004) and CSiR falls short of existing legislation or other societal or transactional norms (McWilliams and Siegel 2000).

Thus, CSR covers a wide range of stakeholder activities beyond common environmental issues (e.g., Buysse and Verbeke 2003; Rugman and Verbeke 1998). For instance, firms may direct CSR resources to the community through philanthropy (Porter and Kramer 2002), or assistance in education and job creation (Boehm 2002). Firms also may strive to achieve diversity in their work force (Richard et al. 2007), or address human rights issues (e.g., Waddock 2008), such as whether to do business in South Africa during apartheid (Wright and Ferris 1997). And, of course, CSR activities can be directed toward customers (e.g., Brown and Dacin 1997) and employees (Maignan and Ferrell 2004).

Together, news of CSR and CSiR can create a signal or firm impression in order for investors to make a determination of the firm's social standing and intent (Highhouse et al. 2009; Podolny 1993), because this news illustrates how a firm treats stakeholders, whose aggregate opinions contribute to a firm's overall standing. Social standing, in addition to a firm's actions, influences the financial success of the firm (e.g., Malter 2014). Yet, we next illustrate that not all types of CSR affect social standing in the same manner, making it important to understand how investors perceive a firm's social standing through publicly available news of CSR and CSiR.

Social Standing Perceptions and Firm Value Implications of CSR and CSiR News

It is difficult to argue that investors view all CSR endeavors as purely altruistic, or having no self-serving intent (Fry et al. 1982). CSR can affect the long-term health of a firm in a number of ways beyond building moral capital (Godfrey et al. 2009); for example, it can increase firm reputation (e.g., Schnietz and Epstein 2005), create a competitive advantage (e.g., Weigand 2007), enhance productivity (Richard 2000), enhance a firm's attractiveness to job candidates (Turban and Greening 1997), and create a more welcoming regulatory environment (Murray and Montanari 1986). In contrast, CSiR can produce firm-devaluing reactions to news of corporate illegalities (Davidson et al. 1994b), OSHA penalties (Davidson et al. 1994a), negative employee morale (Branco and Rodrigues 2006), consumer boycotts (Smith 2003), brand switching (Smith et al. 2010), governmental oversight or fines (Windsor 2006), or reduced quality of the potential pool of employees (Turban and Greening 1997).

Even though CSR news may not provide evidence that a firm is altruistic, it *signals* to investors that the firm takes into account its stakeholders' perspectives, enhancing the firm's social standing. CSR news may serve as an observable action to unobservable characteristics of the firm (Spence 1973). For instance, CSR news may signal the quality of its work environment (Turban and Greening 1997). Therefore, as CSR news represents a signal of firm management practices (Su et al. 2014), it can create a well of moral capital with external stakeholders, or affect relationships with internal stakeholders contingent on the *number of CSR activities* and *type of information conveyed by the announcements* (Godfrey 2005; Godfrey et al. 2009). CSiR news, on the other hand, sends an opposing signal—that the firm may have weakened its stakeholder relationships. CSiR outcomes then may affect a firm's social standing negatively, as well as directly affect its future cash flow.

The capability of CSR to counter negative news regarding a firm (e.g., CSiR) may depend on the *type of CSR*. Previously, Godfrey et al. (2009) noted that not all forms of CSR provide mitigating effects against *future* instances of CSiR. They found that the characteristics of the stakeholder groups represented by the CSR news

determined whether moral capital could be created. Specifically, consumer, employee, and investor groups comprise TCSR, whereas issues pertaining to the community, diversity, human rights, and the environment comprise ICSR. Henriques and Sadorsky (1999) adopt a similar division of stakeholders, partitioning them into community and regulatory groups. Porter and Kramer (2002) also classify a firm's philanthropic activities based on whether they pertain to conditions affecting the internal value chain (e.g., factories, infrastructure, andhuman resources) or to external contexts. These classifications also align neatly with Post et al. (2002) ordering of stakeholder activities based on proximity to the firm's technical core. In this schema, actions directed toward employees are relatively more internal, while actions directed toward the community are more external. In keeping with this accepted line of stakeholder delineation, we separate CSR into technical (primary) and institutional (secondary) categories (Du et al. 2013; Luo et al. 2015).

Institutional stakeholders (e.g., environmental and community groups), due to their distance from the firm's central value chain, often are viewed with less importance or urgency by investors (Mitchell et al. 1997). Resources directed to these groups are more likely to be considered discretionary or altruistic by investors, who may find the direct link to firm value more difficult to ascertain. On the other hand, financial results from directing resources to technical or primary stakeholders (e.g., employees and customers) are easier for investors to measure. Thus, a firm is more likely to address technical stakeholders in order to ensure its financial viability. Therefore, CSR directed to these stakeholders may be viewed by investors as more strategic, with less of an altruistic intent than CSR directed to institutional or secondary stakeholders (Mattingly and Berman 2006).

While both technical and institutional stakeholders may make legitimate claims on the firm, institutional stakeholders lack the urgency and power to enforce their claims, which are not as essential to the firm's survival (Maignan et al. 2005). Therefore, ICSR, since it addresses the common good to a greater extent, is seen as more altruistic than TCSR (Lantos 2001). Firms with TCSR activities are likely to be seen as acting in their own best interests. In other words, the closer the recipients of CSR are to the firm's value chain, the more likely such CSR is perceived as self-serving, while the more distal the recipients of CSR are from the firm value-chain, the more likely the CSR is viewed as altruistic (Menon and Menon 1997).

There is a question of whether there could be a differential effect of technical CSiR (TCSiR) and institutional CSiR (ICSiR), the answer to which depends on how investors perceive news of TCSiR compared with ICSiR. CSR and CSiR are conceptually and empirically distinct constructs (Mattingly and Berman 2006). While stakeholders and investors may view TCSR and ICSR as deliberate acts (Matten and Moon 2008) with underlying firm intent (Godfrey et al. 2009; Lev et al. 2010; Saiia et al. 2003), the same may not be true of TCSiR and ICSiR. Specifically, Lange and Washburn (2012) argue that stakeholders usually perceive CSiR as less deliberate than CSR. Furthermore, it is difficult to ascertain a firm's intentional signals to stakeholders with CSiR (Godfrey 2005). Investor reaction to TCSiR compared to ICSiR should only occur when investors attribute differing motives to CSiR activities (Forehand and Grier 2003). However, it is difficult to ascertain how investors would perceive differences in CSiR activities (Lange and Washburn 2012). The signal that CSiR sends is determined by the *mens rea* condition behind the action; that is, what was the level of deliberateness behind the act rather than whether the CSiR activity was institutional or transactional in nature (Godfrey et al. 2009). Thus, it makes theoretical sense that previous research has *not* differentiated between TCSiR and ICSiR because it is difficult to "assess the action and the *mens rea* condition" (Godfrey et al. 2009, p. 428). Therefore, our paper will concentrate on dichotomizing CSR, but not CSiR, into TCSiR and ICSiR. Study 2; however, it does perform this subdivision as an alternative model to test the integrated classification of CSiR adopted by the previous literature.

Hypotheses

Our hypotheses center around the proposition that the type (i.e., TCSR and ICSR) and the quantity of CSR activities determines investors' interpretations of the impact on a firm's future cash flows. The first hypothesis addresses the type of CSR news, while the second and third hypotheses address the effect of the quantity of each type of CSR activity.

Investor Debate Surrounding News of ICSR and TCSR

A major difference between news that has a greater effect on the moral capital of a firm (ICSR) and news that has a greater effect on the firm's value chain (TCSR) is the directly traceable effect of the CSR activity on future firm cash flows. The more distal a stakeholder is from affecting a firm's cash flows, the more uncertain is the outcome from activities directed to these stakeholders (Woolridge and Snow 1990). The term investor sentiment refers to such situations where investors are making decisions that are not justified by existing knowledge (Baker and Wurgler 2007). This investor sentiment may be widespread in reaction to

investor decisions based on CSR news because of its psychological dynamics and socially desirable aspects in addition to its potential to affect cash flow (Orlitzky 2013). As the uncertainty of the effect of stakeholders and their responses to a firm's cash flow increases, so should the investor uncertainty surrounding the possible effects. In effect, CSR news introduces noise that can *increase* trading behavior (Mendel and Shleifer 2012).

Since TCSR affects stakeholders closer to the firm's value chain, it is likely that the resulting effects on future firm cash flow will be clearer and more certain to investors than the resulting effects surrounding ICSR news. When investors receive information that reduces their search costs (regarding effects on firm value) there is a decreased chance of increases in trading volume (Lackmann et al. 2012). Hence, there may be more heterogeneity in investor reaction to ICSR compared to TCSR news. Thus, we hypothesize:

H1 The trading volume of a firm's stock is positively associated with news of TCSR compared with news of ICSR.

Investor Reactions to Same-day CSR and CSiR News: A Signaling Theory Approach

An investor's reaction to news is contingent upon whether the news is perceived to affect the firm's future cash flows (Xiong and Bharadwaj 2013). If the result of CSR (CSiR) activity is such that the affected stakeholder group is able to directly or indirectly increase (decrease) future cash flows, then investors will increase (lower) the value of the firm such that the firm experiences a positive (negative) abnormal stock return. However, it is difficult for investors to distinguish the intent (e.g., malevolent or accidental) of the CSiR activity (Godfrey 2005). One way the investors decipher a firm's intentions is through analysis of specific types of CSR activities. In particular, the type (i.e. ICSR or TCSR) and quantity of CSR activities should help investors to differentiate between genuine and disingenuous CSR activities (Orlitzky 2013). In turn, this differentiation may assist investors in determining the degree to which news of CSiR activities should be punished.

To bolster our understanding of how investors determine the value of the CSR signals and informational content in CSR news, we turn to signaling theory (Connelly et al. 2011). Research using signaling theory contends that news regarding firms' activities can communicate underlying firm intentions (Heil and Robertson 1991; Milgrom and Roberts 1986; Weigelt and Camerer 1998). However, to be effective, the signal should possess various key properties (Connelly et al. 2011; Kirmani and Rao 2000). First, a strong signal must *reduce the information asymmetry* between the firm and other stakeholders (Reuer et al. 2013). Second, there must be *payoff transparency* (Weigelt and Camerer 1998). That is, it must be clear whether both the sender and the receiver of the signal are aware of the benefits of the signal (Erdem and Swait 1998). Lastly, it must be *credible* (Stiglitz 2000). This characteristic is realized through negative consequences to false signals (Cohen and Dean 2005).

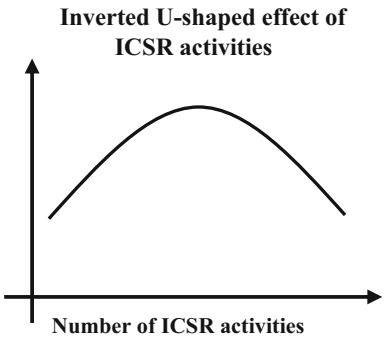
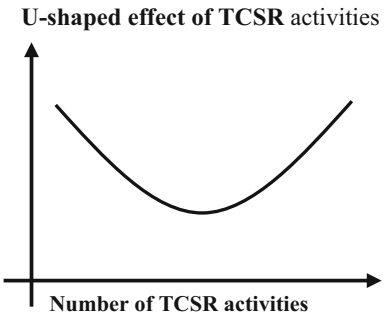
The signal of interest to us is the juxtaposition of the news of CSR and CSiR activities pertaining to a single firm in a trading day. While CSiR news is salient through its public nature, it is unlikely that CSiR activities frequently are implemented intentionally by firms. Therefore, the information asymmetry, credibility, and even payoff transparency aspects of CSiR news may not be strong. Consequently, given the base-level negative signal of CSiR news, it is crucial to understand how the information and purpose contained in TCSR and ICSR news creates the overall signal of CSR and CSiR. Table 1 presents a conceptual flow of the logic for hypotheses 2 and 3.

News of a single ICSR activity[3] is credible in that it can be verified whether the firm actually engaged in ICSR. It also reduces the information asymmetry between the firm and the investment community because investors can ascertain the depth of the firm's commitment to secondary stakeholders (Godfrey 2005; Van Herpen et al. 2003). In addition, the payoff transparency, in this case, is moral capital building. Overall, news of a single ICSR activity has the characteristics of a strong positive signal and hence, should be able to mitigate the negative outcomes of CSiR news (Fombrun et al. 2000; Godfrey et al. 2009).

However, as with any business practice, devoting too many resources to ICSR may be viewed by investors as a misallocation of finite resources (McWilliams and Siegel 2001). Previous studies have shown that investors reward firms for CSR activities only if investors perceive that such activities as strategic investments that will improve a firm's financial performance (Barnett and Salomon 2012; Jensen 2001; McWilliams and Siegel 2001). However, as noted earlier, because of institutional stakeholders' distance from the value chain, they are perceived to be less influential by shareholders. Hence, investors may view too many resources diverted toward this stakeholder category as less strategic. In keeping with this argument, Wang et al. (2008) found an inverted U-shape when looking at the relationship between a form of ICSR—corporate philanthropy—and firm financial performance. Therefore, news of increasing amounts of ICSR activities for the same firm on the same

[3] It should be noted that we are *not* interested in the number of news articles regarding CSR, rather the number of concurrent CSR activities.

Table 1 Investors' interpretation of ICSR and TCSR news given a base level of CSiR

Characteristic	ICSR News		TCSR News	
	Few activities	Many activities	Few activities	Many activities
Information asymmetry (Reuer et al. 2013)	(+) Decreases because investors can ascertain the depth of the firm's commitment to secondary stakeholders	(−) Increases because investors cannot ascertain firm's motives in devoting too many resources toward moral capital building	(−) Increases because investors attribute these to the power and urgency exercised by primary stakeholders	(+) Decreases because investors view the firm's investments not as a consequence of power and urgency but as genuine concern toward primary stakeholders
Payoff transparency (Weigelt and Camerer 1998)	(+) Increases because investors perceive these as moral capital building	(−) Decreases because of possible doubts about misallocation of a firm's valuable resources	(−) Unclear due to the contrasting nature of self-serving versus altruistic endeavors	(+) Sustained focus on a firm's value chain makes the payoff transparency very clear to investors
Credibility (Stiglitz 2000)	(+) Increases because investors attribute these to the altruistic nature of the firm	(−) Decreases because investors fear that these investments might back fire because of possible misallocation	(−) Decreases because investors fear that this will be seen as an attempt to distract or green-wash CSiR	(+) Increases because investors foresee fewer negative and more positive consequences from enhancing a firm's value chain
Net effect	(+)	(−)	(−)	(+)
Expectation of total effects on abnormal returns (*y* axis)				

day may have a diminishing positive effect on stakeholders, even in the presence of CSiR news.

In sum, as the news of the quantity of ICSR increases, at some point, the payoff transparency aspect of the signal decreases. In addition, information asymmetry also may be reduced. Investors may begin to question a firm's motives in devoting so many resources to ICSR. Consequently, the credibility of ICSR news also might deteriorate, because the potential benefits to the firm may be less than the resources involved in implementing it. Thus, the signal strength of ICSR news, concurrent with CSiR news, diminishes as news of the number of ICSR activities increases beyond a certain point, creating an overall U-shaped investor reaction. Formally, we hypothesize that:

H2 The number of distinct ICSR news publicly available on the same day as CSiR news will have an inverse U-shaped association with firm financial performance.

From an investor's viewpoint, TCSR news does not have the same moral capital building capability as ICSR news (Godfrey 2005; Godfrey et al. 2009). News of fewer TCSR activities do not serve to reduce the information asymmetry between the firm and investors *vis-a-vis* the firm's altruistic intentions because TCSR may be perceived as a consequence of primary stakeholders' power and urgency (Freeman et al. 2008; Mitchell et al. 1997). In other words, because technical stakeholders have greater enforcement claims compared with institutional stakeholders, investors may view news of fewer TCSR activities in the context of CSiR as conflicting or confusing firm intentions. Similarly, the payoff for the firm, in light of same day CSiR news, is unclear due to the contrasting nature of self-serving versus altruistic endeavors. In other words, the *intent* of news of fewer TCSR activities may be unclear to investors (Stiglitz 2000). Finally, since TCSR is viewed as self-serving, news of one or two such activities may be seen as an attempt by the firm to distract from or green-wash the CSiR news (Kärnä et al. 2003; Laufer 2003). Thus, news regarding limited TCSR activities is insufficient to counteract concurrent news of CSiR, producing a negative impact on firm performance.

However, as news of the number of distinct TCSR activities increases, the signal sent becomes clearer. First, news of additional TCSR provide more evidence of the firm's intentions, thus reducing the information asymmetry with investors (Stiglitz 2000). Investors would be reassured that these TCSR activities are evidence of the firm's committed engagement with primary stakeholders. Hence, credibility concerns are reduced, and it becomes clearer that the firm is trying to enhance its value chain. Finally, the payoff from a clear, sustained focus on the primary stakeholders becomes increasingly transparent to investors. Overall, while news of fewer TCSR activities are unlikely to mitigate CSiR news, at a certain point the signal sent by news of multiple TCSR activities on the same day will become stronger and override the negative impact of CSiR news. Therefore:

H3 The number of distinct TCSR news publicly available on the same day as CSiR news will have a U-shaped association with firm financial performance.

Study

Data Description

Our dataset contains *same day* news of CSR and CSiR regarding the *same* firm. In keeping with the prior CSR literature, the data for our study were obtained from Kinder, Lydenberg & Domini (KLD 2011). KLD employs a large team of researchers who gather measures of CSR actions through (1) direct contact with the company, (2) a global network of CSR research firms, (3) monitoring news sources, (4) evaluating annual reports and proxy statements, and (5) contacting government and non-governmental organizations. Because it uses a consistent methodology, KLD provides comparable and consistent measures of CSR across companies and industries. These measures of actual firm activities have been shown to be accurate, empirically valid and reliable (e.g., Mattingly and Berman 2006; Sharfman 1996) and have great precedence in academic research (e.g., Godfrey et al. 2009; Hillman and Keim 2001; Turban and Greening 1997). In fact, KLD notes on its website that the sources it uses to collect CSR data are scrutinized regularly by investment portfolio managers and other investment firms (KLD 2011; MSCI 2014).

Upon request, KLD provided us with a subsample of their dataset consisting of *concurrent* CSR and CSiR news regarding publicly traded firms for the years 2005–2008. Our dataset is unique because typically KLD sells only CSR data aggregated at the firm level from firms in the Russell 3000 Index. Such aggregated data lack specifics on the dates the CSR news occurred, crucial for our study.

Specifically, our dataset contains the exact date of the public announcement of the CSR event, as well as the category and affected stakeholder group. KLD broadly classifies stakeholder group announcements into four categories: add strength, delete concern, add concern, and delete strength. In keeping with the prior literature, we classify add strength and delete concern announcements as CSR, whereas add concern and delete strength announcements as CSiR (Groening and Kanuri 2013; Mattingly and Berman 2006). The stakeholder news examined in our study include activities determined by KLD that affect customers, employees, investors, communities, as well as diversity, human rights, and environmental issues. Each CSR or CSiR event is binary coded (0, 1) by KLD using proprietary guidelines.[4]

Next, it is important to note that the CSR and CSiR news are not differentiated by their level of importance and magnitude. Rather each news event must reach a certain level of significance before it can be recorded in the KLD

[4] However, our dataset does not supply the order of the announcements, the source, nor the reasons for the announcements. Thus, we are unable to determine whether the CSR announcements preceded CSiR announcements or vice versa on a given day. In addition, we are unable to ascribe intent to firm management. For instance, we do not know if a firm deliberately has been withholding CSR to counteract CSiR announcements or even if the firm was responsible for the announcements on any particular day.

database (KLD 2011). For example, environmental strengths include a measure of recycling, while an environmental concern may address the severity of issues related to climate change policies and initiatives of the firm. KLD provides its employees with specific instructions to determine which announcements warrant entry into the database and which do not.

We also note that it was extremely difficult to determine the actual cost incurred by the firm for each CSR event, for instance, the resources needed to recruit minorities to the executive board. However, we believe that such CSR implementation costs are evaluated carefully by investors and subsequently, are reflected in the abnormal returns resulting from the announcement of corresponding events.

To measure investor reactions to CSR news concerning different stakeholder groups, we followed prior literature and categorize CSR news as one of two groups. The first group consists of CSR news concerning institutional stakeholders (ICSR) namely, community, diversity actions, environmental, and human rights issues (Mattingly and Berman 2006). The second, group of CSR news affects TCSR stakeholders—products (customers), governance (investors), or employee relations (Godfrey et al. 2009). However, following previous literature demonstrating no significant distinction between ICSiR and TCSiR (Godfrey et al., 2009), we aggregated the categories for CSiR. To validate this aggregation, we classified CSiR into ICSiR and TCSiR and reanalyzed our models. We found no significant difference between the model with aggregated CSiR and disaggregated CSiR. Therefore, we retained the classification suggested by previous research.[5]

Removal of Confounding Events

In order to remove news events that also could have an effect on the trading volume or stock return for a firm, we searched three major newspapers (*The New York Times, The Wall Street Journal*, and *The Financial Times*) for news items mentioning the firms in our sample. Observations were removed from the dataset when there was any possibility that other firm-specific events during a period 3 days before to 3 days after the event may confound the analysis. These items include: product releases, mergers and acquisitions, earnings announcements, and changes in management (see McWilliams and Siegel (1997) for a full list). Two professors, a doctoral student, and an MBA student independently analyzed the data using these guidelines. Initial inter-rater reliability was more than 95 %. Discrepancies were resolved through discussion. A total of 21 observations were removed from the original dataset.

Sample Characteristics

The final dataset had 565 firm-event-days consisting of 1730 individual CSR and CSiR announcements. Many of the firms in our samples are from the manufacturing (40.2 %) and finance (19.9 %) sectors, with a few in mining industries (4.7 %), and other sectors too small to separate out (1.8 %). Summary statistics for main variables are given in Tables 2 and 3, dispersion of the number of TCSR and ICSR events are in Table 4, while a table of descriptive variables for the firms by industry is given in Table 5.

Of the 565 events, 124 (21.9 %) had news of more CSR activities than CSiR activities on a given firm-day, 90 (15.9 %) had news of fewer CSR activities than CSiR activities, and 351 (62.1 %) had the same number of CSR and CSiR activities. On average, there was news of slightly more than three (3.07) CSR activities on the same day by the same firm. Moreover, news of the amount of CSR activities were distributed nearly equally between ICSR (51.3 %), TCSR (48.7 %), and slanted slightly more toward CSR (53.7 %) than CSiR (46.3 %).

Models and Estimation Procedures

The hypotheses require two separate models of estimation: the description of trading volume to examine the first hypothesis, followed by an explanation and model of abnormal returns for the second and third hypotheses.

Trading Volume (H1)

Event studies typically center on price changes of an individual stock compared to the market. In other words, the market as a whole either agrees (abnormal return) or disagrees (no abnormal return) that the informational content of the CSR and CSiR announcements is such that

[5] Additional notes on the KLD dataset: We were unable to determine the extent to which news of CSR and CSiR came solely from the firm, solely from other sources, or were made available from both firm and non-firm sources. There is a possibility that news originating from the firm might trigger a stronger investor reaction than news from other media sources. However, stock prices reflect reactions to all of the available public information, and moreover, we are interested only in the stock market reaction to news of simultaneous CSR and CSiR. Therefore, in keeping with the extant CSR literature, we believe that source of announcement does not affect our analysis.

Another possible concern with KLD assigning a CSR activity to only one stakeholder group is that simultaneously another stakeholder group may be negatively affected. In other words, there is a possibility that an activity can affect more than one group. However, careful examination of the KLD definitions for each type of concern and strength by two business professors and a doctoral student revealed that there were no instances when a positive reaction from one stakeholder group directly could produce a negative reaction from another stakeholder group.

Table 2 Summary of main variables

Variable	Mean	Standard deviation	Correlations									
			(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
(A) Standardized cumulative avg. abnormal return	0.12	1.26	1.00									
(B) Trading volume (thousands)	1950	4129	0.02	1.00								
(C) Firm size (log(employees))	1.57	1.7	−0.02	0.36	1.00							
(D) Market-to-book	2.47	2.38	0.03	0.04	−0.03	1.00						
(E) Number of ICSR activities	0.85	0.99	0.08	0.06	0.03	−0.02	1.00					
(F) Number of TCSR activities	0.80	0.91	−0.06	−0.06	−0.02	−0.04	0.12	1.00				
(G) Number of CSiR activities	1.42	0.86	0.04	−0.01	0.00	−0.03	0.34	0.24	1.00			
(H) ICSR profile$_{t-1}$	1.14	1.71	0.01	0.45	0.40	0.01	0.16	−0.05	0.16	1.00		
(I) TCSR profile$_{t-1}$	0.64	0.90	−0.03	0.13	0.18	0.00	0.02	−0.02	0.03	0.44	1.00	
(J) CSiR profile$_{t-1}$	2.41	2.29	−0.01	0.40	0.52	−0.04	0.09	0.14	0.15	0.45	0.27	1.00

Correlations| greater than .07 are significant at $p < 0.10$

NA Not applicable

Table 3 Summary of multiple announcements of CSR and CSiR activities per firm per day

	Number of occurrences	Average number of activities			
		ICSR and TCSR	ICSR	TCSR	CSiR
Number of CSR activities > Number of CSiR activities	124	4.92	1.76	1.70	1.46
Number of CSR activities = Number of CSiR activities	351	2.22	0.58	0.53	1.11
Number of CSR activities < Number of CSiR activities	90	3.78	0.62	0.62	2.54
Total	565	3.07	0.85	0.8	1.42
Total activities = 1730					

CSR corporate social responsibility, *CSiR* corporate social irresponsibility

Table 4 Number of distinct activities per CSR category

Category	0	1	2	3	4	Total (n)
TCSR	225	269	49	11	11	565
ICSR	230	248	58	17	12	565

the value of a stock should materially change. However, price changes do not necessarily reflect the expectations of individual investors. Interpretation of the new information contained in the announcements may differ among investors (Beaver 1968). Thus, an increase in the volume of trading is an indication of an increase in the level of heterogeneous interpretation of the announcements by investors.

Daily levels of individual firm trading volume capture the number of stocks that are exchanged, or bought and sold. This information was obtained from the CRSP section of WRDS. For each firm (i), at time (t), normalized abnormal trading volume (NATV) with its mean μ and standard deviation, is defined as follows (Jarrell and Poulsen 1989):

$$\text{Normalized abnormal trading volume } (\text{NATV})_{it} = \frac{TV_{i,t} - \mu_{i,t}^{TV}}{\sigma_{i,t}^{TV}}, \quad (1)$$

where,

$$\mu_{i,t}^{TV} = \frac{1}{\text{NTD}} \sum_{j=0}^{NTD-1} \text{Trading volume}_{i,t-j}, \quad (2)$$

$$\sigma_{i,t}^{TV} = \sqrt{\frac{1}{\text{NTD}} \sum_{j=0}^{\text{NTD}-1} \left(TV_{i,t-j} - \mu_{i,t}^{TV}\right)^2} \quad (3)$$

number of trading days (NTD) = 250.

To test whether an event consisting of same day ICSR and TCSR news explains a portion of trading volume, we

Table 5 Firm characteristics description

Industry name	Number of observations	ln (number of employees)		Market to book		ln (total assets)		Tobin's q		ROA		Firm age	
		Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	((SD)	Mean	(SD)
Mining	27	1.67	(1.22)	2.31	(1.70)	8.80	(1.16)	1.10	(.39)	0.07	(.08)	20.46	(14.74)
Construction	7	0.81	(.54)	1.80	(1.89)	8.11	(.67)	1.11	(.82)	−0.10	(.20)	26.29	(10.50)
Manufacturing	221	1.82	(1.63)	4.28	(18.51)	7.63	(1.63)	1.39	(1.20)	0.03	(.13)	24.64	(15.11)
Transportation, Telecommunications, Gas, Electric and Sanitary Services)	84	1.58	(1.07)	1.80	(1.86)	8.87	(1.04)	0.81	(.31)	0.03	(.04)	33.99	(16.11)
Wholesale Trade	13	1.96	(1.27)	1.26	(.59)	7.58	(1.55)	0.33	(.29)	−0.07	(.19)	34.50	(13.35)
Retail Trade	36	3.21	(1.38)	2.56	(1.50)	7.57	(1.45)	1.35	(1.00)	0.05	(.10)	16.86	(11.56)
Finance, Insurance, and Real Estate	111	0.44	(1.79)	1.63	(1.07)	8.90	(1.76)	0.42	(.50)	0.01	(.03)	17.85	(9.81)
Services	54	1.59	(1.84)	3.32	(4.18)	6.81	(1.57)	1.31	(1.13)	−0.01	(.22)	15.20	(13.27)
Other	12	2.44	(1.68)	3.00	(2.20)	7.67	(1.82)	1.36	(1.25)	0.07	(.06)	31.13	(17.88)

used a mixed model to regress the following variables against NATV: commonly used event study firm and industry-level variables, a firm's prior CSR profile, and the number of CSR and TCSR and ICSR activities, (e.g., Godfrey et al. 2009). We estimated our model with proc mixed in SAS. Mixed models are used for simultaneous specification of random and fixed effects, while accounting for correlation between repeated firm observations. Following recent research using mixed models to study the impact of product and environmental CSR on firm performance (Jayachandran et al. 2013), we specified a model with random intercept, and firm- and year-level fixed effects. A random intercept allows for means of the covariates to vary across the firms while accounting for the unobserved heterogeneity, whereas the fixed effects account for firm and year level heterogeneity. The squared TCSR and ICSR terms were statistically insignificant and thus, were not included in the final model.

Empirical Analysis for H2 and H3: Measuring Stock Market Reactions to CSR Events

Our dependent variable of interest is firm financial performance, which we operationalize with daily cumulative average abnormal stock returns (CAAR). Eventus software was used in order to calculate CAAR. This software, using the four-factor Fama–French model, calculates the systematic risk-adjusted abnormal return during a given time period, between a particular company and the market as a whole. CAAR represents the impact of an event on investor value. For the sake of comparison, the CAARs are standardized to produce the dependent variable, SCAAR ($\mu = 0$, $\sigma = 1$) (Godfrey et al. 2009; Groening and Kanuri 2013; Srinivasan and Bharadwaj 2004). The following equations summarize the computation of CAAR.

$$R_{it} = \alpha_i + \beta_{1i}R_{mt} + \beta_{2i}Val_{mt} + \beta_{3i}Size_{mt} + \beta_{4i}Mom_{mt} + \varepsilon_{it}, \quad (4)$$

$$\varepsilon_{it} = R_{it} - (\alpha_i + \beta_{1i}R_{mt} + \beta_{2i}Val_{mt} + \beta_{3i}Size_{mt} + \beta_{4i}Mom_{mt}), \quad (5)$$

$$\mathrm{CAAR}_i = \sum_{t=1}^{N} \varepsilon_{it}, \quad (6)$$

where R_{it} is firm i's return over the time period of 250 trading days (one year of open market) to two days before the CSR announcement. R_{mt} is the market return, Val_{mt} is an indicator representing a value stock, $Size_{mt}$ is the firm size, Mom_{mt} is the stock momentum, and ε_{it} is the abnormal return for firm i. Thus, $\mathrm{CAAR_i}$ is the summation of the differences of daily expected and actual returns over the time period after controlling for value stocks, firm size, and firm momentum.

Event Window Size

In order to capture the effect of the same day CSR and CSiR news, a two-day window was used (the day of and day prior to the CSR and CSiR news). A longer window might capture a greater number of confounding events, but a one-day window may not account for information leakage that can provide some investors with inside information prior to the official announcements (McWilliams and Siegel 1997). Patell Z values indicate differences between

observed and expected abnormal return values (e.g., Groening and Kanuri 2013). Our choice of the two-day window was confirmed by having higher Patell Z values than those for one-, three-, four-, five-, and six-day windows.

Model to Test H2 and H3

To test whether news of ICSR and TCSR activities explain a portion of the abnormal returns, we regressed the following against SCAAR: commonly used event study firm- and industry-level variables: a firm's prior CSR and CSiR profile; the number of instances of CSiR, TCSR, and ICSR; and their squared values (e.g., Godfrey et al. 2009).

To test our hypotheses, we adopt the following mixed model specification:

$$SCAAR_i = \beta X_i + \delta Y_i + \gamma Z_i + \varepsilon_i, \quad (7)$$

where for each firm i, SCAAR is the standardized cumulative average abnormal return. X is a 4 × 1 vector of the variables: ICSR, $ICSR^2$, TCSR, $TCSR^2$. β is a 1 × 4 vector of the slopes of the four variables. Y is a matrix of control variables, and δ is a matrix of corresponding fixed effect slopes of the control variables. Z is the design matrix of the intercept of various firms and is the corresponding random effect intercept of various firms with mean 0 and variance G. Lastly, ε is the error term with mean 0 and variance R.

We estimated Eq. 7 with proc mixed in SAS as in the NATV model while accounting for unobserved heterogeneity and allowing for fixed and random effects. Subsequently, the parameters of our model were estimated using a residual maximum likelihood (REML) method. The corresponding log-likelihood of REML is given as (Lindstrom and Bates 1988):

$$l_R(G,R) = -\frac{1}{2}\log|V| - \frac{1}{2}\log\left|X'V^{-1}X\right| - \frac{1}{2}r'V^{-1}r - \frac{(n-p)}{2}\log(2\pi), \quad (8)$$

where $r = \text{SCAAR} - X(X'V^{-1}X)X'V^{-1}\text{SCAAR}$, p is the rank of X and V is the variance of SCAAR, which can be denoted as $ZGZ' + R$. G and R are the variances of and ε.

Control Variables for H2 and H3

A number of control variables, obtained from COMPUSTAT were used in the estimation of Eq. 7. Dummy variables were used for (a) the years (2005-2008) in our sample to control for yearly fixed effects, (b) whether a firm was business-to-business (1) or business-to-consumer (0), (c) operates in a more monopolistic environment (e.g., telecommunications or utilities), and (d) whether a firm was goods or service-based, using their primary four-digit SIC codes (Henriques, and Sadorsky 1999; Srinivasan et al. 2011). In addition, we also included market-to-book, a measure of intangible assets, as its natural logarithm (Godfrey et al. 2009; Villalonga 2004) and firm size, which may indicate availability of resources, through the natural logarithm of the number of employees of the firm (Mizik and Jacobson 2003). The inclusion of these control variables did not change any of our results, nor were they significant, hence they will not be discussed further. We also controlled for a firm's existing CSR and CSiR profile by including three continuous CSR profile variables for a firm's prior year's CSiR, TCSR, and ICSR activities.

Correction for Sample Selection Concerns, and Check for Multicollinearity

A possibility exists that some firms might self-select to approach CSR activities in a manner that differs from other firms. In addition, CSR and CSiR may be contingent upon firm characteristics such as return on assets, sales, market to book value, and industry. To address these possible sources of sample selection concerns, we employed Heckman's two-stage correction model (Heckman 1979). From the standard maximum likelihood probit models, inverse Mills lambdas were derived and added to the model. However, these corrections were insignificant and the results will not be discussed further. In addition, in our final working model, all the VIFs were under 2, indicating that multicollinearity is also not an issue.

Results

Results for H1

The first hypothesis states that because moral capital is an intangible quality that may be difficult to quantify, there may be more uncertainty as to the effect on future cash flows of news of ICSR compared with the more quantifiable, value-chain centered TCSR. The results in Table 6 support H1: TCSR news significantly decrease NATV ($b = -.095$, $p < .05$), while ICSR announcements have no statistically significant effect on NATV ($b = .016$, n.s.). Therefore, we find initial evidence that investors better understand the future cash flow impact from firm investments in TCSR than investments in ICSR. We will leverage this finding to build our arguments for H2 and H3.

A number of other variables were statistically significant and merit some discussion. First, if there is more CSR than CSiR, then NATV increases ($b = .403$, $p < .10$). Similarly, a prior profile of CSiR significantly increases NATV ($b = .049$, $p < .05$). These increases may be due to the ephemeral nature of CSiR. While some studies have shown

the potential negative impact of CSiR on a firm's finances (e.g., Sen and Bhattacharya 2001; Worrell et al. 1991), these downturns may have been viewed by investors as short-term, rather than long-term concerns. Therefore, the presence of *past* CSiR appears to create dissent among investors as to its effect on a firm's future cash flows. In addition, a CSR profile of prior TCSR was found to have a marginally significant negative effect on NATV ($b = -.087$, $p < .10$), implying a positive carry over effect of TCSR.

In summary, firms investing in TCSR (value-chain activities) experience lower trading volumes than firms that that invest in more altruistic activities (i.e., ICSR). This result provides evidence that the financial implications of TCSR activities are easier for investors to discern than the financial implications from ICSR activities.

Results for H2 and H3

As expected, the SCAAR average is near zero (.12; Table 2). The results of our models are presented in Table 7. The first model contains only the control variables. Only one variable reached any level of significance: goods ($b = -.160$, $p < .10$). This model explains very little of the variance ($R^2 = .005$) in SCAARs. Addition of the CSR variables improved the model in terms of variance squared ($R^2 = .059$), AIC (from 2576.1 to 1921.7), and −2 Log likelihood (2564.1 to 1909.7, $\Delta\chi^2 = 654.4$, Δd.f. $= 10$, $p < .01$). While the R^2 value may appear to be small, it is within the range of values obtained in previous CSR event studies; Godfrey et al. (2009) found .03 and Groening and Kanuri (2013) found .12. In the complete model, the control variables (e.g., firm size and B2B) were all statistically insignificant. In addition, none of the CSR control variables were statistically significant, meaning that prior CSR profile, amount of CSiR activities, and the ratio of CSR to CSiR did not statistically explain the variance in SCAARs.

The ICSR ($b = .179$, $p < .05$) and ICSR^2 ($b = -.049$, $p < .05$) variables are both statistically significant. These results support H2 which states that ICSR news will have a positive effect of abnormal returns, but with diminishing returns as the amount of ICSR activities increases. The TCSR ($b = -.257$, $p < .05$) and TCSR^2 ($b = .067$, $p < .05$) variables also are both statistically significant. These results support H3 which states that fewer TCSR activities will have a negative effect of abnormal returns, but with increasing returns. The results determined by the two ICSR and two TCSR variables are plotted in Fig. 1. The positive effect of ICSR peaks at about news of two activities, and by news of three activities the positive effect is less than that with one announcement. The negative

Table 6 Results: the effect of news of ICSR and TCSR on trading volume

Variable	DV = Normalized abnormal trading volume $_t$			
	Coefficient	Standard error	Coefficient	Standard error
Intercept	0.059	0.171	0.100	0.130
Number of ICSR activities$_t$			0.016	0.045
Number of TCSR activities$_t$ (H1)			−0.095**	0.046
Market to book$_t$	0.000	0.000	0.000	0.000
Firm size$_t$	0.076***	0.021	0.043***	0.028
Business-to-business$_t$ (dummy = 1 if B2B)	−0.019	0.090	−0.038	0.104
Goods industry$_t$ (dummy = 1 if goods)	−0.035	0.068	−0.027	0.089
Utilities industry$_t$ (dummy = 1 if utilities)	−0.158	0.113	−0.174	0.130
Year 2005 (dummy = 1 if year = 2005)	−0.333***	0.087	−0.316***	0.121
Year 2006 (dummy = 1 if year = 2006)	0.103	0.684	0.010	0.640
Year 2007 (dummy = 1 if year = 2007)	0.054	0.095	0.057	0.124
ICSR profile$_{t-1}$			0.019	0.027
TCSR profile$_{t-1}$			−0.087*	0.047
CSiR profile$_{t-1}$			0.049**	0.022
Number of CSiR activities$_t$			−0.011	0.034
Number of CSR activities$_t$ < Number of CSiR activities$_t$ (dummy)$_t$			0.403*	0.219
Number of CSR activities$_t$ > Number of CSiR activities$_t$ (dummy)$_t$			−0.078	0.102
Pseudo R^2	0.032		0.056	

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

Table 7 The effect of ICSR and TCSR announcements on abnormal returns

Variable	Coefficient	Standard error	Coefficient	Standard error
Intercept	0.238	0.224	0.150	0.345
Number of ICSR activities$_t$			0.179**	0.110
Number of ICSR activities$_t^2$ (H2)			−0.049**	0.021
Number of TCSR activities$_t$			−0.257**	0.123
Number of TCSR activities$_t^2$ (H3)			0.067**	0.028
Market to book$_t$	0.001	0.001	0.001	0.001
Firm size$_t$	0.006	0.025	−0.006	0.044
Business-to-business$_t$ (dummy = 1 if B2B)	−0.068	0.122	0.108	0.148
Goods industry$_t$ (dummy = 1 if goods)	−0.160*	0.093	−0.139	0.119
Utilities industry$_t$ (dummy = 1 if utilities)	−0.058	0.152	−0.161	0.190
Year 2005 (dummy = 1 if year = 2005)	−0.224	0.146	−0.163	0.175
Year 2006 (dummy = 1 if year = 2006)	−0.786	1.252	−0.827	1.296
Year 2007 (dummy = 1 if year = 2007)	−0.232	0.182	−0.299	0.206
ICSR profile$_{t-1}$			−0.015	0.040
TCSR profile$_{t-1}$			−0.029	0.066
CSiR profile$_{t-1}$			0.018	0.029
Number of CSiR activities$_t$			0.060	0.048
Number of CSR activities$_t$ < Number of CSiR activities$_t$ (dummy)			0.046	0.314
Number of CSR activities$_t$ > Number of CSiR activities$_t$ (dummy)			0.074	0.153
AIC	2576.1		1921.7	
−2 Log	2564.1		1909.7	
Pseudo R^2	0.005		0.059	

* $p < 0.10$; ** $p < 0.05$

effect of TCSR peaks at about two activities, and by three activities, the negative effect is less than that with one activity.

Robustness Checks for H2 and H3

To ensure that our results for H2 and H3 are robust, we performed numerous checks. First, previous research (Godfrey et al. 2009) has demonstrated a significant impact of past CSR profile on a firm's CAARs. Therefore, to examine the effect of past CSR profile on the hypothesized effects of ICSR and TCSR, we dropped the past CSR profile variables from the model and ran the regressions. The magnitude and direction of the hypothesized effects remained unaltered, thus confirming that the abnormal return fluctuations correspond only to our event of interest—the same day occurrence of CSR and CSiR news. Second, to ensure that the effect of CSiR is not biased by the type of CSiR, we split CSiR into ICSiR and TCSiR and re-estimated the model. Again, the magnitude and direction of the hypothesized effects remained intact, thereby confirming results from previous research that investors do not perceive ICSiR and TCSiR differently (Godfrey et al. 2009). We also included two additional interactions TCSiR× TCSR^2 and ICSiR x ICSR^2 in the model. Both of these terms were insignificant, suggesting that there are no direct cancellation effects between the same type of CSR and CSiR. Third, to further rule out the possibility of a sample selection bias, we re-estimated the model 100 times by dropping 10 % of the observations each time. In addition, we also estimated our model with winsorized data. Our hypotheses held in all cases. Next, to ensure that the

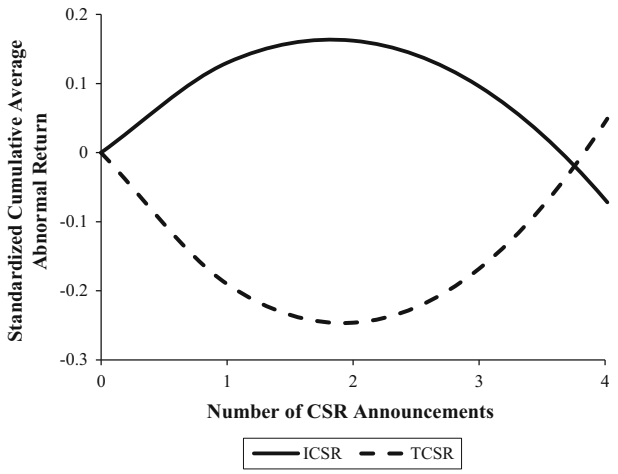


Fig. 1 Investor response of SCAAR to news of TCSR and ICSR activities on the same day as news of CSiR activities

results were not influenced by outliers, we dropped observations with a Cook's D score greater than 4/n ($n = 565$) or a studentized residual score greater than 2. We also used the natural logarithm of sales, instead of number of employees for size of the firm, and the results did not change. Finally, we ran a model excluding observations where both TCSR and ICSR were present in the same event. This reduced model ($n = 455$) produced similar results ($TCSR^2 = .31$, $p < .05$; $ICSR^2 = -.45$, $p < .05$), further attesting the robustness of our findings.

Additional Analyses for H2 and H3

To test whether the $TCSR^2$ or $ICSR^2$ terms both contributed to the model fit, a model with everything but $TCSR^2$ and $ICSR^2$ was run. This model had a −2Log likelihood of 1921.3. Addition of the $TCSR^2$ but not the $ICSR^2$ term reduced −2Log likelihood to 1915.8. $TCSR^2$ maintained the same level of significance, valence, and magnitude as in the final model. Addition of the $ICSR^2$ but not the $TCSR^2$ term reduced −2Log likelihood to 1916.6. $ICSR^2$ maintained the same level of significance, valence, and magnitude as in the final model. The presence of both $TCSR^2$ and $ICSR^2$ in the model reduced −2Log likelihood to 1909.7. Thus, it appears that both $ICSR^2$ and $TCSR^2$ significantly improve the model fit ($p < .05$).

We did not have a theoretical rationale to expect an interaction between TCSR and TCSiR or between ICSR and ICSiR. However, to check for this possibility, we ran a model that included the moderating terms TCSR x TCSiR and ICSR x ICSiR. The coefficients for the two interactions were statistically insignificant, and the model did not show a statistically significant better fit. In addition, we ran a model with $TCSR^2 \times$ TCSiR and $ICSR^2 \times$ ICSiR terms. Again, the coefficients for these two interactions were statistically insignificant. Thus, there appears to be no multiplicative effect between like types of CSR and CSiR. These non-significant results provide further support for the notion that all forms of CSiR send the same signal to stakeholders.

To test the possible argument that previous CSR goodwill generated by a firm can moderate the impact of ICSR and TCSR on SCAARs we ran a model with TCSR x past CSR profile, $TCSR^2$ x past CSR profile, ICSR × past CSR profile, and $ICSR^2$ x past CSR profile. We also ran models with just the past TCSR profile interactions, and just the past ICSR profile separately. The coefficients for these interaction terms were statistically insignificant and the fit of the models did not improve. Therefore, we were unable to confirm that the firm's past CSR profile has a moderating effect on current TCSR and ICSR. In addition, we also ran a model with category specific dummies (e.g., employee and customer) to account for heterogeneity across CSR and CSiR events. The magnitude and significance of our hypothesized effects remained intact.[6]

We examined actual SCAARs, because the control variables were not significant. When there is no news about ICSR activities (ICSR = 0), an increase in the news of TCSR activities impacts SCAARs in a non-linear manner (TCSR = 1, average SCAAR = -.235; TCSR = 2, average SCAAR = .199, TCSR = 3, average SCAAR = .479, and TCSR = 4, average SCAAR = 2.175). Similarly, when there is no news about TCSR activities (TCSR = 0), an increase in the news of ICSR activities impacts SCAARs in a non-linear manner (ICSR = 1, average SCAAR = .364; ICSR = 2, average SCAAR = .431, ICSR = 3, average SCAAR = −0.064, and ICSR = 4, average SCAAR = −1.858). Thus, there is further qualitative evidence, in the face of CSiR, that SCAARs are maximized with news of fewer ICSR activities or a larger number of TCSR activities.

Finally, we examined the average economic impact that the same day news of CSR and CSiR activities had on abnormal returns. These values were calculated by computing the average cumulative abnormal return (not the standardized CAAR) multiplied by the average market value for the firms in each cell. For example, when there is no news of ICSR activities, firms with news of 1 ICSR activity experienced an increase in firm value by an average of $25.9 M, firms with news of 2 ICSR activities gained $34.8 M, while firms with news more than 2 ICSR activities experienced a decrease in firm value by an average of −$69.1 M.

Discussion

We introduce to CSR literature the use of trading volume to examine the anticipated impact of two different types of CSR (Beaver 1968). Examination of trading volume surrounding news of CSR suggests that investors find greater uncertainty over the potential impact of ICSR (primary stakeholders such as customers, and employees) on firm value compared with TCSR (secondary stakeholders such as environmental and community groups). This result supports the notion that ICSR captures a more altruistic intent than does TCSR. Altruism by its very intangible nature is difficult to quantify, so it is difficult to predict its effect on stakeholder groups. In addition, investors may wonder to what extent altruism actually will influence consumer purchase decisions (Brown and Dacin 1997). These results also add to an information content approach

[6] We thank a reviewer for prompting us to test these additional models.

to CSR news, where stakeholders may find different levels of value from CSR news (Jayachandran et al. 2013).

Next, our study builds on the insurance-like capabilities of CSR. In contrast to previous studies, this study focuses on investor reaction to CSR events that involve news of at least one CSR activity and news of at least one CSiR activity concerning a single firm on the same day. More specifically, we investigate whether investors react differently to CSR directed to primary stakeholders (TCSR) versus secondary stakeholders (ICSR) on the same day CSiR regarding the firm is made publicly available. We operationalize investor reaction to news of CSR and CSiR as consensus market price (stock market return) as well as investor sentiment (trading volume). The results show that there may be two different avenues through which CSR ameliorates the negative effects of same-day CSiR. The first is that news regarding a small amount of ICSR activities appear to provide a moral buffer against CSiR news. The second is that numerous firm-serving positive news (TCSR) signal to investors that the firm is acting in the best interests of its future cash flows. The results are robust across a broad range of sensitivity analyses with various control variables, and subsets of our dataset.

Theoretical Implications

Our paper contributes to CSR literature in several important ways. First, this study adds to the literature on the impact of stakeholder targeted activities (e.g., celebrity endorsements, corporate philanthropy, and advertising) on stock market performance (Agrawal and Kamakura 1995; McAlister et al. 2007; Srinivasan et al. 2009). We also provide further insight into how firms may use stakeholder activities to signal their intent to investors (Lane and Jacobson 1995). Primarily, we show that investors' perceptions of a firm's CSiR news can be affected by different types of CSR news on the *same* day. Similarly, our research adds to the literature on CSR by validating the findings of Godfrey et al. (2009) and illustrating the differential impacts of responsible moral capital building ICSR and value-chain building TCSR. Yet, while Godfrey et al. (2009) find no mitigating value of TCSR news, we do *find* mitigating value in news of a *large number* of TCSR activities. Thus, TCSR news cannot be dismissed as not mitigating CSiR news, even though its effects may be different from ICSR news (Mattingly and Berman 2006). In addition, our research also extends the work by Luo and Bhattacharya (2009) by providing an in-depth analysis into the impact of various types of CSR news (i.e., ICSR and TCSR) on a firm's stock market returns.

Our research also addresses two calls made by Maignan and Ferrell (2004) almost a decade ago that, even today, continue to remain under-represented in the literature: (a) how do organizational members (such as shareholders) perceive responsible and irresponsible corporate social behaviors targeted at stakeholders, and (b) what CSR norms can favor a systematic concern for stakeholders? Leveraging signaling theory, our study helps to answer both questions, and does so using multiple stakeholders in contrast to the bulk of the marketing literature, largely limited to CSR concerning consumers (e.g., Brown and Dacin 1997).

Another contribution our paper makes is in determining the optimal number of CSR activities needed to mitigate CSiR and maximize stock market returns. Relying on stakeholder influence capacity, Barnett and Salomon (2012) find a U-shape relationship between CSR news, and ROA. In other words, firms with either low or high levels of CSR outperform firms with moderate amounts of CSR. In contrast, Groening and Kanuri (2013) find diminishing and possibly even negative abnormal stock returns from over-investment in CSR, a result supported by Wang et al. (2008). By dividing CSR news into TCSR and ICSR, our paper finds a diminishing return from ICSR news but an increasing return from TCSR news. It is possible that the division of more altruistic ICSR and the more firm-serving TCSR explains the contrast in findings between the two aforementioned papers.

From a signaling standpoint, our paper adds further insight into how news appearing in public sources may send signals to investors regarding firms' treatment of stakeholders. We argue that information asymmetry exists between the firm and investors in terms of how much the firm values its primary and secondary stakeholders (Connelly et al. 2011). In this paper, we are concerned with how CSR news signal the intent of the firm to investors (Stiglitz 2000). In addition, we posit that the amount of ICSR and TCSR activities affect the credibility and payoff transparency of the signal sent by the firm (Weigelt and Camerer 1998). That is, as news of the amount of ICSR activities increases, the signal strength decreases. On the other hand, as news of the amount of TCSR activities increases, the signal strength increases. In terms of CSiR, we did not hypothesize or find a difference between ICSiR and TCSiR. Our result corroborates previous theorizing that differential investor reaction would occur only if investors are able to attribute specific motives to the firms irresponsible behavior (Godfrey 2005).

Finally, we also add more insight into how firm hypocrisy (CSiR combined with CSR) may be perceived. Our results shed light on the insurance-like effects of a prior positive level of CSR (Eisingerich et al. 2011; Peloza 2006; Wagner et al. 2009). Our study adds to this literature by showing that same-day CSR news can minimize the negative outcomes of same-day CSiR news.

Managerial Implications

Our empirical analysis also provides a number of managerial implications for firms when addressing multiple stakeholders. The most important implication is the possibility to minimize the negative outcomes from CSiR news, through same-day CSR news, via two different avenues. These methods are in addition to the previous finding that an existing altruistic (ICSR) profile provides moral capital that helps insure against CSiR (Godfrey et al. 2009). Combating CSiR through CSR news comes with a couple of caveats. First, investors may determine that only a certain amount of moral capital is necessary and any excess may not achieve corresponding returns. Second, many TCSR activities are needed to combat news of CSiR, as opposed to the use of only one or two ICSR activities. The findings in this paper also indicate that firms need not necessarily be concerned with maintaining a reserve of moral capital for the purposes of mitigating future, unknown, CSiR news. In other words, if CSiR occurs, a firm immediately can counteract its negative consequences through either TCSR or ICSR. Maintenance of moral capital may provide other advantages, so we are not suggesting that it is completely unnecessary. Rather, we present a case where firms need not have to rely on a reservoir of goodwill to obviate the negative effects of CSiR news. However, it may not be possible for all firms to respond effectively to CSiR news with CSR news in a timely manner.

In addition, we illustrate that management should understand that trading volume can be used to help gauge investor perception of how TCSR and ICSR may affect future cash flows (Beaver 1968). If news contains information uncertainty, then trading volume will increase (Lackmann et al. 2012). Our results find that ICSR has increased trading volume compared with TCSR, suggesting that investors are less clear regarding ICSR's impact on the firm's future cash flow. Management can monitor trading volume to examine investor consensus regarding other strategic decisions.

Finally, this paper adds to the growing literature of how a firm's marketing department may be able to control the deleterious outcomes from negative news. Since we find evidence that investors interpret the meaning of CSiR in the context of CSR, marketers should be aware that their activities are not viewed in isolation, but in the context of other stakeholder activities. Thus, if a firm missteps, there are avenues that they can use to signal to investors the firm's true intentions.

Future Research and Limitations

There are a number of specific areas that could advance the field of CSR. First, there is scant research regarding first-hand investor opinion into the importance of CSR in general and individual CSR activities in particular. Second, discussions with investors may lead to further insight as to the optimal level or type of CSR investment. For example, we reran our base model with dummy variables for each type of CSR category. The substantive results remained the same (see Table 7), but the product and community categories had significant effects on SCAAR. Do investors truly see differences in these CSR categories compared with other CSR categories? Third, it is difficult for a firm to be responsible all of the time; further research could determine other means to build reservoirs of goodwill or other possible strategies to minimize negative outcomes from CSiR. Researchers also could investigate how long goodwill lasts, or whether endorsements from outside entities (e.g., World Wildlife Fund) significantly impact the reservoir in ways meaningful to investors. Of course, there may be other strategies to successfully countervail CSiR news than with CSR, for instance successful crisis management.

The data supplied by KLD does not have intra-day information. Thus, we are unable to determine whether news of CSR has been released in response to CSiR, vice versa, or just a random coincidental occurrence. For this paper, we assume that the news occurs in random order *during a given day*. An interesting study could examine intra-day investor reaction to these announcements. Another possible concern with our dataset is that we were not supplied with the origin of the CSR and CSiR news, which could matter to investors.

Finally, another avenue to investigate would be to examine cases of match or mismatch between CSR and CSiR, that is events with only (1) TCSR and TCSiR, (2) ICSR and ICSiR, (3) TCSR and ICSiR, or (4) ICSR and TCSiR. Unfortunately, our dataset did not have enough observations for any of these cases to allow the econometric models to converge. We suspect that our results would still hold. That is, our framework would suggest that a large amount of TCSR may convince investors that the TCSiR (match) or ICSiR (mismatch) activities were abnormalities, and thus a single TCSR activity would not be sufficient to counteract the CSiR activity. This result would indicate that small amounts of TCSR do not send a clear signal that the firm is addressing its primary stakeholders. In other words, a match or mismatch would confuse investors as to the intent of the firm and lead to a negative abnormal return. An ICSR-ICSiR match with a large quantity of ICSR, may signal to investors the creation of future goodwill. Future research could test these propositions.

Conclusion

We produce two major findings when investigating news of CSR and CSiR occurring on the same day for the same

firm. First, we find that the negative stock market outcomes of CSiR can be ameliorated by modest amounts of ICSR, or by greater amounts of TCSR. Second, we find increased trading volatility for news of ICSR, but not for news of TCSR, since ICSR news is more difficult to link to a firm's future cash flows. Together our findings contribute to the body of knowledge on investor reaction to CSR and how marketing management, in their role of stakeholder communicators, can manage the signals firms sends to investors and other stakeholders.

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Appendices

Appendix 1: Environment

Strengths

Beneficial Products and Services This indicator measures the positive environmental impact of a firm's products and/or services. Factors affecting this evaluation include, but are not limited to, products/services that reduce other firms' and individuals' consumption of energy, production/consumption of hazardous chemicals, and overall patterns of resource consumption.

Pollution Prevention This indicator measures a firm's method of mitigating non-carbon air emissions, water discharges, and solid waste from its operations. Factors affecting this evaluation include, but are not limited to, initiatives to reduce a firm's non-carbon air emissions from its operations; to reduce the release of raw sewage, industrial chemicals, and other regulated substances; to reduce hazardous and non-hazardous waste; and programs to reduce the use of packaging materials, to support recycling; and to recycle old products such as televisions and other consumer electronics.

Recycling This indicator measures a firm's use of recycled materials in its products/services. Factors affecting this evaluation include, but are not limited to assessment of the volume and recycled content of products made with recycled input materials, including paper, metal, plastic; and any certification of its practices by a third party, such as the Forest Stewardship Council for timber product companies.

Clean Energy This indicator measures a firm's policies regarding climate change. Factors affecting this evaluation include, but are not limited to, acknowledgement of direct and/or indirect impacts on operations due to climate change and formal commitments to: reduce greenhouse gas emissions; and initiatives to reduce energy consumption and to increase the use of renewable energy.

Management Systems This indicator measures a firm's monitoring and management of its environmental practices. Factors affecting this evaluation include, but are not limited to, the establishment and monitoring of environmental performance targets, the presence of environmental training and communications programs for employees, and stakeholder engagement.

Other Strength This indicator measures a firm's environmental management policies. Factors affecting this evaluation include, but are not limited to, a stated commitment to: integrate environmental considerations into all operations; reduce environmental impact of operations, products, and services; and comply with regulations.

Concerns

Regulatory Problems This indicator measures a firm's record of compliance with environmental regulations. Factors affecting this evaluation include, but are not limited to, fines/sanctions for causing environmental damage, and/or violations of operating permits.

Substantial Emissions This indicator measures a firm's emission of toxic chemicals according to data from the Toxics Release Inventory (TRI), a U.S. Environmental Protection Agency (EPA) database of information on toxic chemical releases and waste management activities. Factors affecting this evaluation include, but are not limited to, how the firm compares to its industry peers.

Climate Change This indicator measures the severity of controversies related to a firm's climate change related policies and initiatives. Factors affecting this evaluation include, but are not limited to, a history of involvement in greenhouse gas (GHG)-related legal cases, widespread or egregious impacts due to corporate GHG emissions, resistance to improved practices, and criticism by non-governmental organizations (NGOs) and/or other third-party observers. In addition, factors cover whether a company derives substantial revenues from the sale of coal or oil and its derivative fuel products, or whether the company derives substantial revenues indirectly from the combustion of coal or oil and its derivative fuel products.

Negative Impact of Products and Services This indicator measures the negative environmental impact of a firm's products and/or services. Factors affecting this evaluation include, but are not limited to, products/services that involve regulated substances, the production/consumption of hazardous chemicals, and controversial products such as those that use genetically modified organisms or nanotechnology.

Land Use and Biodiversity This indicator measures the severity of controversies related to a firm's use or management of natural resources. Factors affecting this evaluation include, but are not limited to, a history of involvement in natural resource-related legal cases, widespread or egregious impacts due to the firm's use of natural resources, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

Non-Carbon Emissions This indicator measures the severity of controversies related to a firm's non-GHG emissions. Factors affecting this evaluation include, but are not limited to, a history of involvement in land, air, or water emissions-related legal cases, widespread or egregious impacts due to corporate non-GHG emissions, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

Other Concern This indicator measures the severity of controversies related to a firm's environmental impact. Factors affecting this evaluation include, but are not limited to widespread or egregious environmental impacts, resistance to improved practices, criticism by NGOs and/or other third-party observers, and any other environmental controversies not covered by other environmental ratings.

Appendix 2: Community

Strengths

Charitable Giving The company has given 1 % or more of trailing three-year net earnings before taxes to charity, or has otherwise been notably generous in its giving.

Innovative Giving The company donates 25 % or more of its charitable giving to support NGOs involved with affordable housing, access to healthcare, K-12 education, and initiatives to relieve hunger and/or other services to disadvantaged communities.

Community Engagement The company has a notable community engagement program concerning involvement of local communities in areas where the firm has major operations.

Other Strength The company has either an exceptionally strong in-kind giving program or engages in other notably positive community activities.

Concerns

Community Impact This indicator measures the severity of controversies related to a firm's interactions with communities in which it does business. Factors affecting this evaluation include, but are not limited to, a history of involvement in land use and/or development-related legal cases, widespread or egregious community impacts due to company operations, and criticism by NGOs and/or other third-party observers.

Appendix 3: Human Rights

Strengths

Indigenous Peoples Relations The company has established relations with indigenous peoples near its proposed or current operations (either in or outside the U.S.) that respect the sovereignty, land, culture, human rights, and intellectual property of indigenous peoples.

Human Rights Policies & Initiatives The company has undertaken exceptional human rights initiatives, including outstanding transparency or disclosure on human rights issues, or has otherwise shown industry leadership on human rights issues not covered by other MSCI human rights ratings.

Concerns

Burma Concern The company has operations or direct investment in, or sourcing from, Burma.

Sudan Concern The company has operations or direct investment in, or sourcing from, Sudan.

Other Concern This indicator measures the severity of controversies related to the impact of a firm's operations on human rights. Factors affecting this evaluation include, but are not limited to, a history of involvement in human rights-related legal cases, widespread or egregious complicity in killings, physical abuse, or violation of free speech and other rights, resistance to improved practices, substantive involvement in countries with poor human rights records such as Sudan and Burma, and criticism by NGOs and/or other third-party observers.

Appendix 4: Employee Relations

Strengths

Union Relations The company has taken exceptional steps to treat its unionized workforce fairly.

Cash Profit Sharing The company has a cash profit-sharing program through which it has recently made distributions to a majority of its workforce.

Employee Involvement The company strongly encourages worker involvement and/or ownership through stock options available to a majority of its employees; gain sharing, stock ownership, sharing of financial information, or participation in management decision-making.

Health and Safety Strength The company has strong health and safety programs.

Supply Chain Policies, Programs, and Initiatives This indicator measures a firm's policy commitments and management systems designed to monitor the human and labor rights performance of its suppliers and contractors. Factors affecting this evaluation include, but are not limited to, the protection of supply chain workers' rights, including freedom of association, freedom from forced labor and child labor, safe working environments and other rights described by the International Labor Organization (ILO) Conventions and other applicable standards, and initiatives towards improving the labor conditions of its supply chain workforce. Factors affecting this evaluation include, but are not limited to, efforts to use purchasing power to improve performance, company-led programs that improve the labor conditions and health of supply chain workers, and participation in multi-stakeholder initiatives.

Other Benefits and Programs The company has strong employee relations initiatives not covered by other MSCI ratings.

Concerns

Union Relations The company has a history of notably poor union relations.

Health and Safety Concern The company recently has either paid substantial fines or civil penalties for willful violations of employee health and safety standards, or has been otherwise involved in major health and safety controversies.

Supply Chain Controversies This indicator measures the severity of controversies related to a firm's supply chain. Factors affecting this evaluation include, but are not limited to, a history of involvement in supply chain related legal cases, widespread or egregious instances of abuses of supply chain employee labor rights—including forced labor, supply chain employee safety, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

Labor-Management Relations Controversies The company is involved in an employee relations controversy that is not covered by other MSCI ratings.

Appendix 5: Diversity

Strengths

Representation The company has made notable progress in the promotion of women and minorities, particularly to line positions with profit-and-loss responsibilities in the corporation.

Board of Directors This indicator measures the diversity of a firm's board. Factors affecting this evaluation include, but are not limited to, the representation of women and minorities on the board, with adjustment for nation-specific demographic conditions.

Work/Life Benefits The company has outstanding employee benefits or other programs addressing work/life concerns, *e.g.*, childcare, elder care, or flextime.

Women and Minority Contracting The company does at least 5 % of its subcontracting, or otherwise has a demonstrably strong record on purchasing or contracting, with women- and/or minority-owned businesses.

Gay and Lesbian Policies The company has implemented notably progressive policies toward its gay and lesbian employees. In particular, it provides benefits to the domestic partners of its employees.

Employment of Underrepresented Groups This indicator measures a firm's efforts to promote diversity in its workforce. Factors affecting this evaluation include, but are not limited to, its recruitment efforts to women and minority communities, and its participation in multi-stakeholder diversity initiatives.

Other Strength The company has made a notable commitment to diversity that is not covered by other MSCI ratings.

Concerns

Workforce Diversity Controversies The company has either paid substantial fines or civil penalties as a result of affirmative action controversies, or has otherwise been involved in major controversies related to affirmative action issues.

Representation This indicator measures the diversity of a firm's workforce. Factors affecting this evaluation include, but are not limited to, the percentage of women and minorities in senior management.

Board of Directors This indicator measures the diversity of a firm's board. Factors affecting this evaluation include, but are not limited to, the representation of women and minorities on the board, with adjustment for nation-specific demographic conditions.

Appendix 6: Product

Strengths

Quality This indicator measures a firm's efforts to improve the safety and health effects of its products/services. Factors affecting this evaluation include, but are not limited to, customer health and safety policies, participation in industry or multi-stakeholder initiatives, and openness to third party oversight of its practices.

Benefits to Economically Disadvantaged This indicator measures the positive community impact of a firm's operations. Factors affecting this evaluation include bottom-of-the-pyramid efforts that benefit the disadvantaged such as access to medicine initiatives, access to education, and appropriate technology products.

Access to Capital This indicator measures the positive impact of a firm's products. Factors affecting this evaluation include, but are not limited to, strong commitment to microfinance, and community development loans and investments.

Concerns

Product Safety This indicator measures the severity of controversies related to the quality/safety of a firm's products and services. Factors affecting this evaluation include, but are not limited to, a history of involvement in product safety-related legal cases, widespread or egregious instances of recalls or fines due to defective or unsafe products and services, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

Marketing/Contracting Concern This indicator measures the severity of controversies related to a firm's marketing and advertising practices. Factors affecting this evaluation include, but are not limited to, widespread or egregious instances of false, discriminatory, or improper marketing/advertising, marketing targeted at disadvantaged groups, resistance to improved practices, and criticism by NGOs and/or other third party observers.

Antitrust This indicator measures the severity of controversies related to a firm's anti-competitive business practices. Factors affecting this evaluation include, but are not limited to, a history of involvement in anti-trust legal cases, widespread or egregious instances of price-fixing, collusion, or bid-rigging, resistance to improved practices, and evidence-based criticism by NGOs and/or other third-party observers.

Other Concern This indicator measures the severity of controversies related to a firm's customer relations. Factors affecting this evaluation include, but are not limited to, a history of involvement in customer-related legal cases, predatory lending, widespread or egregious instances of discrimination, fraud or unfair treatment, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

Appendix 7: Governance

Strengths

Reporting Quality This indicator measures the quality of a firm's reporting on its corporate social responsibility (CSR)/sustainability efforts. Factors affecting this evaluation include, but are not limited to, the completeness and specificity of a firm's reporting, its setting of specific goals for its CSR efforts, and quantitative measurement of progress towards these goals. This indicator also measures whether a firm follows agreed-upon guidelines, such as those established by the Global Reporting Initiative.

Public Policy This indicator measures a firm's support for public policies that have noteworthy benefit s for the environment, communities, employees, or consumers. Factors affecting this evaluation include, but are not limited to, support/lack of support for regulations addressing climate change, improved labor rights, enhancement of shareholder rights, and protections for consumers.

Concerns

Reporting Quality This indicator measures the quality of a firm's reporting on its CSR/sustainability efforts. Factors

affecting this evaluation include, but are not limited to, the completeness and specificity of a firm's reporting, its setting of specific goals for its CSR efforts, and quantitative measurement of progress towards these goals. This indicator also measures whether a firm follows agreed-upon guidelines, such as those established by the Global Reporting Initiative.

Public Policy This indicator measures a firm's lack of support for public policies that have noteworthy benefits for the environment, communities, employees, or consumers. Factors affecting this evaluation include, but are not limited to, support/lack of support for regulations addressing climate change, improved labor rights, enhancement of shareholder rights, and protections for consumers.

Governance Structures Controversies This indicator measures the severity of controversies related to a firm's executive compensation and governance practices. Factors affecting this evaluation include, but are not limited to, a history of involvement in compensation-related legal cases, widespread or egregious instances of shareholder or board-level objections to pay practices and governance structures, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

Other Controversies This indicator measures the severity of controversies related to a firm's business ethics practices. Factors affecting this evaluation include, but are not limited to, a history of involvement in widespread or egregious instances of bribery, tax evasion, insider trading, accounting irregularities, resistance to improved practices, and criticism by NGOs and/or other third-party observers.

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