



The interactive financial effects between corporate social responsibility and irresponsibility

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ABSTRACT

Firms typically present a mixed picture of corporate social performance (CSP), with positive and negative indicators exhibited by the same firm. Thus, stakeholders' judgements of corporate social responsibility (CSR) typically evaluate positives in the context of negatives, and vice versa. We present two alternative accounts of how stakeholders respond to such complexity, which provide differing implications for the financial effects of CSP: *reciprocal dampening* and *rewarding uniformity*. Our US panel study finds a U-shaped relationship – firms that exhibit solely positive or solely negative indicators outperform firms that exhibit both – which supports the notion that stakeholders' judgements of CSR *reward uniformity*.

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1. Introduction

The financial implications of a firm's programs, processes and activities with regard to the natural environment, its employees, the local communities in which it operates and a variety of other social issues, have been the focal point of an ever-growing academic literature for approximately 40 years. Despite the significant, methodologically diverse investigations that have been conducted, it remains unclear whether the relationship between corporate social performance (CSP) and corporate financial performance (CFP) is positive, negative or neutral as empirical studies have brought forward evidence for all three cases (Margolis and Walsh, 2003). A number of reasons have been suggested in an effort to explain the conflicting conclusions between many papers. These range from the inherent difficulties in defining and quantifying CSP (Griffin and Mahon, 1997) to its inappropriate matching with financial variables (Wood and Jones, 1995), model misspecification (McWilliams and Siegel, 2000), the emphasis placed on the relationship between CSP and financial returns rather than financial risk (Oikonomou et al., forthcoming) and various other methodological issues.

Among them, possibly the most fundamental critique of existing CSP-CFP studies relates to the issue of the appropriate measurement of the key concepts, especially corporate social performance (or responsibility). There are many important aspects within this issue: The orientation of the CSR/CSP measures towards outcomes, processes and programs (Waddock and Graves, 1997) or corporate reputation (Brammer, Brooks and Pavelin, 2009); its focus and cover of one or more social issues (Hillman and Keim, 2001); whether aggregation or not of different CSP dimensions (Ruf et al., 1998) will strengthen or weaken its measurable impact on firm financial performance; whether or not positive and negative social action should be combined in empirical research.

With one notable exception (Mattingly and Berman, 2006), the last dilemma has received the least amount of attention. A number of CSP-CFP studies have employed a CSP measure that aggregates across positives (e.g. a creditable record of philanthropy) and negatives (e.g. a shameful record of pollution). Doing so loses information (and, we will argue, valuable information) about the composition of each firm's CSP, and implies a highly restrictive view of the manner in which positives and negatives are perceived when, as is commonly found, both are associated with a single firm. Such aggregation implies that relevant audiences (investors, consumers, employees or other stakeholders) view a mixed picture of a firm's CSP according to some simple arithmetic that additively combines the good and the bad. Therefore, this method implicitly offers only simplistic answers to the questions: 'How does positive social action alter the financial effect of negative social action?' and 'How does negative social action alter the financial effect of positive social action?'

To put it differently, if a company does 'good' in order to compensate for something 'bad', will it also do 'well' (or at least better) in financial terms? Alternatively, if a company invests in CSR to create a strong reputation concerning its social responsibility, but is also involved in socially irresponsible activities, will the overall financial impact turn out to be positive or negative? This study will make an attempt to offer original empirical answers to these types of questions, which involve the potentially moderating role that corporate social responsibility (irresponsibility) has on the financial effects of corporate social irresponsibility (responsibility).

Investigation of whether and how the co-existence of social strengths and concerns for a given firm modifies the effect that each has on corporate financial performance is potentially informative for both academics and practitioners. Evidence of such interactive effects would provide scholars of the relationship between CSP and CFP with an additional explanation for the lack of empirical consensus that has emerged from the host of previous studies that have overlooked these interactions. In addition, novel insights into the importance of appropriately

operationalizing positive and negative aspects of CSP to capture their distinct yet related impacts can prove useful for future studies. Illuminating the manner in which a firm's mixed picture of CSP is viewed in-the-round is potentially instructive for managers seeking to formulate a CSR strategy that not only augments a firm's social contributions but also builds reputation efficiently, manages its relationships with key stakeholder groups and improves financial performance. Lastly, this study will provide lessons for the practice of socially responsible investing (SRI), and particularly the social criteria and screens that are most appropriate (and likely to bring the highest returns) when many commonly-held stocks are associated with firms that exhibit both positive and negative indications of CSP.

The remainder of this paper is structured as follows: Section 2 provides the theoretical background which constitutes the basis of the empirical analysis. The characteristics of the dataset used and the details of the methodology applied are discussed in Section 3. Section 4 presents the results of the various analyses and the robustness tests that have been performed whereas Section 5 draws conclusions and makes suggestions for future research.

2. Background and theory

The starting point for our argument is that stakeholders – those who affect or are affected by a firm's activities (Freeman, 1984) – have preferences that cause (at least some of) them to (at least to some degree) favor relationships with firms that exhibit better CSP, i.e. consumers are more willing to pay for such firms' products; employees are more willing to work for such companies, investors are more willing to own those firms' shares, and so on. In this way, stakeholders care about CSP in a manner that potentially translates into their behavior within the stakeholder-firm relationship in a variety of ways (Mitchell, Agle and Wood, 1997). As CFP is determined by the nature of a company's interactions with stakeholders, then to the extent that stakeholders'

behaviors towards firms are affected by perceived CSP, financial performance is affected by stakeholders' judgments regarding social performance (Clarkson, 1995; Jones, 1995).

CSP is a concept with many facets and has been commonly defined as a firm's "*configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm's societal relationships*" (Wood, 1991, p.693). CSP is also multidimensional. It spans numerous social and environmental issues – from carbon emissions to equal opportunities in hiring, from community projects to product safety and so on and, for each type of issue, it encompasses both the potential for firms to demonstrate strength – e.g. support charities that restore aquatic environments and facilitate employee volunteering – or expose weakness – e.g. receive regulatory sanctions for excessive pollution or sustain child labor in supply chains. It is therefore possible for a single firm to offer a complex and conflicting picture regarding its CSP. Not only might a firm exhibit strengths in some dimensions of CSP and weaknesses in others, it might also show both positive and negative indicators pertaining to the same dimension of CSP, e.g. environmental performance. Indeed, commonly-cited metrics (including those employed in this study) suggest that it is common for large firms to offer just this kind of mixed picture to its stakeholders. Therefore, stakeholders that wish to behave towards a firm in a manner that is contingent upon their perception of that firm's CSP must commonly form a view that takes into account the existence of conflicting indicators.

As mentioned above, previous studies have overlooked the potential importance of the composition of CSP across positives and negatives by ruling out such interactive effects by assumption. The commonly-employed method of estimating the financial effects of some aggregate measure of CSP is illustrated in Figure 1 by the arrow labeled 1. The emergent recent trend for the financial effects of positive and negative indicators to be separately estimated is shown by the arrows labeled 2 and 3. In this study, we wish to broaden the purview to permit

the capture of the effects of positives being viewed in light of negatives and vice versa – as illustrated by the dotted arrows (indicating moderating effects) labeled 4 and 5.

Next, we will offer two alternative perspectives on how stakeholders perceive indications of mixed firm social performance. According to the first view, stakeholders' responses to CSP are such that the positive financial effects of positive indicators are negatively moderated by negative CSP indicators, and the negative financial effects of negative indicators are positively moderated by positive CSP indicators – we refer to this as *reciprocal dampening*. According to the second view, stakeholders' responses to CSP indicators are again influenced by the composition of CSP across positives and negatives, but in a different manner. In this view, one expects negative financial effects from a mix of positive and negative CSP indicators, and positive effects on CFP otherwise, whether all indicators are positive or all are negative – we refer to this as *rewarding uniformity*.

INSERT FIGURE 1 ABOUT HERE

2.1 Reciprocal dampening

Towards an understanding of how stakeholders proceed in light of such firm-level complexity in CSP, Barnett (2007) introduces the notion of Stakeholder Influence Capacity, and argues that part of the heterogeneity in the financial returns of CSP can be attributed to stakeholders' efforts to discern positive social actions that arise from genuine regard for social welfare (which are worthy of reputational reward) from corporate activities motivated by self-interest (which are worthy of reputational penalty). This implies that stakeholders' perceptions of CSP can be critically influenced by their judgments regarding the underlying motives that inform corporate decision-making (Godfrey, 2005). If so, it would be expected that negative corporate social actions influence assessments of positive social actions, thus limiting (or possibly even reversing) the financial effects of the latter and vice versa. Stakeholders may view the presence of some

negative social impact as diagnostic of a disregard for social welfare on the part of the firm. Such an inference among stakeholders may persist despite apparently countervailing evidence of positive social impacts by the firm in other spheres (Barnett, 2007). Somewhat similarly, stakeholders may view the presence of some negative social impact less unfavorably than otherwise were the same firm to also exhibit a current and/or prior record of creditable contributions to social welfare. Stakeholders may view that lesser reputational punishments are in order in such a case, just as in common law the *mensrea* doctrine promotes the use of character witnesses (who speak to the good character of the defendant rather than the circumstances of the alleged offence) as a device to lessen judgments of guilt (Godfrey, 2005).

There are, however, very few studies, conceptual or empirical, dedicated to the investigation of interactions between positive and negative corporate social performance at the firm-level. Indeed, to the authors' knowledge, there is no previous research that focuses upon the financial impact of any such interactions and only a few investigate the manner in which stakeholders' judgements of CSP balance off positives and negatives. For example, Pomeroy and Dolnicar (2009) study consumer awareness of CSR activities and point out that "*...better context may amount to little if claimed CSR initiatives are perceived as inconsistent with other facets of the business that reflect its values and ethics*" (p.285). Vanhamme and Grobben (2009) study the ways in which CSR can help counter the effects that negative publicity (caused by some sort of firm transgression) has on corporate reputation. They also highlight the role of motivation in this process, along with that of CSR history. In addition, Yoon et al. (2006) provide evidence which supports the notion that CSR activities may have a beneficial, neutral or negative effect on a company's image depending on whether the sincerity of its motives in relation to these activities is determined to be genuine, ambiguous or insincere, respectively. Lastly, perhaps the most thematically related study of all comes from Kotchen and Moon (2007), who claim that firms engage in CSR simply to offset the impact of their negative social and environmental actions. Their empirical analysis generally

supports this assertion, especially when looking at the community relations and environmental dimensions of CSP.

These studies provide further impetus to the idea that stakeholders judge a firm's CSP in a manner that perceives positive indications in the light of negative indications, and perceives negative indications in the light of positive indications. Following the arguments proposed by Godfrey (2005) and Barnett (2007), it can be argued that stakeholders' behavior is influenced by character-like judgments of firms, and particularly the degree to which corporate decision-making is guided by a genuine regard for social welfare. Any such tendency would ensure that the effects of CSP on stakeholder behavior and, therefore, CFP, are critically influenced by the manner in which CSP is composed of positives and negatives. More specifically, stakeholders would tend to view any positive indicators of CSP as a stronger informational basis from which to infer good corporate character if they are not accompanied by negative CSP indicators for the same firm. Also, stakeholders would tend to view any negative indicators of CSP as a stronger informational basis from which to infer a disregard for social welfare if not accompanied by positive CSP indicators for the same firm. Given this, and the resulting effects on the returns to the firm from its stakeholder relationships, we propose that the financial effects of positive and negative indicators moderate each other as described in the following hypotheses:

Hypothesis 1a: Negative indicators of CSP negatively moderate the financial effects of positive CSP indicators.

Hypothesis 1b: Positive indicators of CSP positively moderate the financial effects of negative CSP indicators.

These moderating effects are illustrated in Figure 1 as the dashed lines labelled 4 and 5, respectively.

2.2 Rewarding uniformity

In taking a view of a firm's CSP, stakeholders might make the least favorable judgments of firms that exhibit a mix of positives and negatives. To support such a view, we will employ an argument forwarded by Godfrey (2005) and extend its application beyond corporate philanthropy to encompass CSP in general. Godfrey argues that stakeholders, *"assess interactions between the firm and stakeholders... that reflect some degree of 'moral coloration' by individual actors, managers and leaders within the firm"* and *"from these morally colored activities and contexts, stakeholders impute moral values, principles and character elements that compose a moral reputation"* (p.783). He proposes that an act of corporate philanthropy will positively affect such a reputational assessment only if stakeholders infer that the charitable donation is suitably motivated. Crucially, if a firm's philanthropy is judged not to be genuinely motivated, it will impact negatively on the firm's moral reputation, despite the anticipated benefits with regard to the charitable cause. This is because *"ingratiation is illicit and morally negative because it involves deception; honorable acts belie dishonorable motives and the goal of the ingratiator is to be seen as good without actually being good"* (p.784).

In principle, this characterization of stakeholders' reputational judgments of firms' social responsibility and irresponsibility applies not only to philanthropic acts but also to any corporate action that carries potential implications for assessments of whether a firm's decision-making is governed by a genuine regard for social welfare. Therefore, we will apply Godfrey's arguments to stakeholders' assessments of CSP in toto, and specifically to assessments in light of CSP indicators that are: uniformly positive; a mix of positives and negatives; uniformly negative. In the first case, positive reputational inferences from positive CSP indicators are not undermined by negative indicators. This promotes a tendency among stakeholders to view the firm as being genuinely socially responsible as they have exhibited no tendency to mix CSR initiatives with deleterious impacts on society that stakeholders might view as diagnostic of decision-making that lacks a regard for social welfare. In the second case, a mixed picture threatens just such

inferences, whereby a firm that demonstrates creditable CSR in some aspects does not precipitate reputational rewards because these positives are viewed in light of negatives that critically influence stakeholders' judgments of corporate character. The presence of negative indicators threatens the inference that the firm's positives in CSP are the fruit of ingratiating attempts to mitigate the reputational effects of, and/or distract attention from, its tendency (and apparent willingness) to otherwise impose harms on society.

In the third case, there are negative CSP indicators and no positive indicators. While it seems that such a firm demonstrates the worst possible CSP, they do not attract inferences of ingratiation and the accompanying damage to corporate reputation among stakeholders. Indeed, as in this case firms also avoid the costs often associated with measures that result in positive CSP indicators (such as community programs, pollution controls, health and safety measures and so on), the financial implications of a negative CSP indicator might be better (or less bad) when accompanied by other negative indicators rather than indicators of positive social actions – as the latter threaten inferences of deceptive, ingratiating and morally negative corporate behavior. Also, it could be that this type of firm appeals neither to pure profit-seeking investors (who view CSP as value-destroying) nor to those socially responsible investors who simply choose to screen out firms with social and environmental concerns. Thus the demand for the stocks of these firms could, in theory, be lower than that for the firms generating strictly positive indications with regard to their CSP but higher than that for firms exhibiting mixed indications of social performance.

The implied relatively poor performance of mixed, compared to uniform, CSP – either positive or negative – is somewhat consistent with the U-shaped relationship between corporate philanthropy and CFP imputed by Brammer and Millington (2008) from their study of UK firms over the period 1990-1999. In that study, the hypothesized curvilinear relationship is supported by references to two alternative routes to competitive advantage – low-cost and differentiation –

and to the likelihood that firms will perform relatively poorly if they follow a strategy that falls some way between the two (Porter, 1980). In particular, the authors argue that *“Firms that make moderate levels of investment in social performance neither save the resources for alternative investments nor achieve differentiation in the eyes of stakeholders, and, in consequence, exhibit relatively poor financial performance”* (p.1329). Their analysis suggests that firms donating relatively small or large amounts (compared to the amounts predicted by firm size, industry and other control variables) enjoy better CFP than those whose donations lay between the two extremes. More specifically, their comparisons of the top and bottom 10 percentiles of giving with the middle 20 percentiles demonstrated, *“that firms with both unusually high and low social performance have higher financial performance than other firms with unusually poor social performers doing best in the short run, and unusually good social performers doing best over longer time horizons”* (p.1341). In addition, a similar quadratic, U-shaped relationship is detected in the investigations of the CSP-CFP link conducted by Barnett and Salomon both at the firm level (Barnett and Salomon, forthcoming) and the portfolio level of analysis (Barnett and Salomon, 2006).

To reflect these arguments, we will test the following hypotheses:

Hypothesis 2a: The financial effects of positive CSP indicators in the absence of negative CSP indicators are more positive than those in the presence of both positive and negative indicators.

Hypothesis 2b: The financial effects of negative CSP indicators in the absence of positive CSP indicators are more positive than those in the presence of both positive and negative indicators.

2.3 Intra- and inter-dimensional CSP interactions

According to the preceding arguments, interactions between positive and negative CSP indicators arise in the context of stakeholder judgements of social responsibility (or irresponsibility), which provide for one indication of good or bad performance to have financial

implications that vary considerably depending on the presence and absence of other indications of good or bad CSP. If so, an outstanding issue is the extent to which interactions are constrained within each dimension of CSP. Is it that each indication of a firm's CSP significantly interacts with that firm's other indications of CSP only if the latter relate to the same CSP dimension as the former? Is it instead that interactions cross dimensional boundaries?

Were the plurality of stakeholders to make overall judgements of a firm's degree of social (ir)responsibility – i.e. each makes a single judgement about a firm that spans all social and environmental issues deemed relevant – one might expect interactions between positive and negative CSP indicators to seamlessly cross dimensional boundaries. A holistic, firm-level stakeholder judgement implies a conceptual weighing of evidence from across all dimensions of CSP, and permits positive and negative indicators in each CSP dimension to be viewed in light of positive and negative indicators in all other dimensions. However, an expectation for such pervasive interactions is cognitively demanding for stakeholders (Barnett, 2011; Latin, 1993; Kahneman, 1973), somewhat at odds with the tendencies for attention to be greatly guided by salience (Fiske and Taylor, 1991) and biased towards connections between straightforwardly related information (Saimee, Shimp and Sharma, 2005). Indeed, such an expectation would represent one of two extreme positions regarding the scope of interactive effects – the other being that interactions reside only within dimensional boundaries, e.g. that the financial effects of environmental strengths are affected only by the presence of environmental concerns, and are unaffected by any other positive and negative indicators in all other dimensions of CSP. While this narrower view is appealingly reflective of both cognitive limitations and the influences of salience, it overlooks established theory and findings that suggest a credible record on philanthropy can mitigate negative perceptions and impacts that result from evidence that might otherwise be construed as diagnostic evidence of a firm's irresponsibility.

In this study, we adopt an intermediate approach that accommodates the prospects of both corresponding interactions and non-corresponding interactions, with the latter selectively investigated in a theoretically grounded manner. First, a CSP indicator is viewed in the context of those other indicators associated with the same firm that supply relevant context for the former because they pertain to the same CSP dimension, and so relate to consonant issues and jointly inform judgement of the priority placed by a firm on issues of that kind. For example, an indication that a firm has reduced its use of landfill will readily inform stakeholders' judgements of that firm's sensitivity to environmental issues and strength of commitment to environmental stewardship. This connection brings an imperative to bring other indications of environmental performance to mind (such as, perhaps, the firm's record of habitat-threatening river pollution) and, as a result, each indicator is viewed in the context of other reinforcing and/or countervailing indicators within the same CSP dimension.

Second, and following Godfrey (2005), a firm's record of philanthropy can provide critically influential context in the wake of events from which stakeholders might infer misconduct and egregious social irresponsibility, which propagates a shift in stakeholder relationships that causes significantly deleterious financial repercussions. As mentioned previously, a creditable record of philanthropy can act as evidence of good corporate character and thereby mitigate such negative impacts. Within this view, it is possible for a firm to protect itself from reputational risks associated with the socially-damaging impacts that can possibly arise in conjunction with its business activities. In a relatively direct test of this thesis, Godfrey Merrill and Hansen (2009) empirically verify that philanthropy can effectively lessen the negative financial impacts associated with legal or regulatory actions taken against firms. This finding demonstrates the potential for philanthropy to offset financial impacts associated with other CSP dimensions, and as Godfrey, Hatch and Hansen (2010) note: "*social risks may lead to investments in non-corresponding CSRs when investment in corresponding CSRs is ineffective for insurance purposes*" (p.334).

Somewhat similarly, Brammer, Pavelin and Porter (2009) argue for, and find evidence in support of, a hypothesis that philanthropy is employed to offset reputational risks raised by the geographical location of a firm's business activities. The reported tendency for greater charitable giving associated with multinational firms' presence in one or more foreign countries associated with the lowest levels of civil liberties and political rights is ascribed to firms' preferences to sustain operations in such countries, but offset the associated threat of perceived social irresponsibility by seeking to demonstrate creditable philanthropy. The link between CSR risks associated with business activities and philanthropy is further underlined by evidence from Brammer and Millington (2008) that operating in consumer-oriented or environmentally-damaging industries brings a tendency for companies to spend a greater amount in charitable donations. Consistent with these arguments, we will investigate non-corresponding interactions that match indicators of philanthropic behaviour with CSP indicators that pertain to negative impacts of a firm's business activities, such as environmental damage and product safety controversies.

We propose the following hypotheses to reflect arguments in support of both corresponding and non-corresponding interactions:

Hypothesis 3a: The financial effects of CSP indicators are moderated by other indicators that lie within the same CSP dimension.

Hypothesis 3b: The financial effects of CSP indicators associated with a firm's business activities relating to environmental concerns and product-related concerns are moderated by the firm's philanthropic strengths.

Having described the main features of the theoretical framework of the current study, we proceed to elaborate on the specifics of the dataset and methodology in the following section.

3. Data and method

3.1 CSP data

We employ the Kinder, Lydenberg and Domini (KLD) STATS database as the primary source of corporate social performance information in an effort to create the company specific social metrics of interest. KLD is a social rating agency¹ which assesses firms' strengths and concerns with regard to several qualitative issue areas (community relations, diversity issues, employee programs, environment issues, product safety and quality, corporate governance and human rights) and controversial business issues (firm involvement in military contracting, nuclear power, firearms, alcohol, tobacco or gambling).

The multiple merits of using the KLD database when conducting empirical research on the business case for CSR include, *inter alia*, a consistent application of objective criteria to assess CSP, a vast coverage of U.S firms since 1991, a multidimensional approach to social performance and have been extensively outlined in previous studies (Sharfman, 1996; Waddock, 2003). Nevertheless, a brief discussion of the appropriateness of KLD in direct relation to the particular issue that is investigated seems warranted at this point.

It should be noted that the use of KLD leads to firm samples of significant size, heterogeneity and span which are scarcely encountered in empirical CSP-FP research, even less so in studies that try to investigate the moderating or mediating effects that other variables may have in this relationship. Another obvious advantage of KLD is that it distinguishes between positive and negative social actions by separately rating firms on a variety of strengths and concerns. Without a CSP measure that differentiates between corporate activities that have positive and negative social impacts, an empirical study such as this would be impossible to perform. Mattingly and Berman (2006) have observed that within the taxonomy of the KLD database, social strengths and concerns are both conceptually and empirically distinct (which is a desirable property for the

purpose of this study). Furthermore, by covering several dimensions of CSP, KLD allows for an investigation of the impact of the interactions between corresponding and non-corresponding social strengths *and* concerns on the financial effect of one another.

Moreover, by using KLD, it is possible to test this moderation phenomenon at the firm level or at the portfolio level by creating CSP score-sorted portfolios². This is important as there is the issue of whether this phenomenon (or rather, set of phenomena) should be studied at the firm or portfolio level. The generic CSP-CFP literature comprises many empirical papers that try to establish the nature of the relationship between the two concepts either at the level of individual stocks (Waddock and Graves, 1997) or at the level of portfolios of assets (Barnett and Salomon, 2006; Statman and Glushkov, 2009). However, since there is no conceptual hint that would prompt an empiricist towards one direction or the other in relation to the particular theme of this study, both avenues will be explored. Moreover, by using KLD, it is possible to test this moderation phenomenon at the firm level or at the portfolio level by creating CSP score-sorted portfolios.

KLD is of course not a perfect data source for CSP in general and for the purpose of this study in particular. Many of the papers that have been cited so far stress the role of the assessment of corporate motives by stakeholders. KLD is a database which focuses on implemented programmes, processes and outcomes and not on corporate reputation which would, arguably, incorporate an assessment of motives. Reputation indices and relevant surveys may be more appropriate when one tries to assess the general public's (or particular stakeholders) opinion of a firm's actions. However, such indices concentrate solely on one end of the CSP ladder and report the "best" firms, i.e. the top social and environmental performers. In addition, the absolute number of reported companies is much smaller than the equivalent number of firms available from KLD. So using a reputation index would result in a sample that is much smaller and skewed towards top CSR performers.

Following Hillman and Keim (2001), we focus upon the omnipresent indicators of the qualitative business issues of interest (Community, Diversity, Employees, Environment, Product Safety and Quality). We add the indicators of each particular social strength or concern for a given firm in a given year and divide the sum by the number of relevant indicators in order to construct a CSP measure for the firm's strengths and concerns in that dimension. As mentioned previously, we investigate not only (corresponding) interactions between strengths and concerns within CSP dimensions (e.g. between environmental strengths and environmental concerns), but also (non-corresponding) interactions across dimensions (e.g. between philanthropic strengths and environmental concerns). Consistent with the discussions presented above, we investigate the set of corresponding and non-corresponding interactions listed in Table I. Towards the purpose of constructing a KLD-derived measure of philanthropic strengths we identify the following components as potentially relevant: Charitable Giving (COM-str-A in KLD STATS); Innovative Giving (COM-str-B); Non-US Charitable Giving (COM-str-F); Support for Housing (COM-str-C); Support for Education (COM-str-D); and Benefits to Economically Disadvantaged (PRO-str-C). Of these, we exclude Non-US Charitable Giving and Support for Education because no pre-1994 data are available for either.

INSERT TABLE I ABOUT HERE

Given that the philanthropic measure is largely comprised of community-related indicators, we will seek to verify whether any of the results obtained reflect the moderating effects of community strengths in general, rather than philanthropic strengths in particular. In this connection, it is worth noting that, by doing so, we reflect prior arguments that the insurance value of CSR derives from its ability to enhance community engagement (Godfrey, 2005), which promotes perceptions that the firm acts with a regard for communities likely to be most deeply impacted by the firm's operations (Godfrey et al., 2010; Brammer and Pavelin, 2004). Consistent with this, Godfrey et al. (2010) investigate whether firms offset negative impacts on the

environment and/or consumers by strongly investing in local communities – and term any firms that do so ‘umbrella riders’. To test for this, that study employs KLD-derived measures to match the firm-level presence of community strengths, with that of environment concerns and product safety/quality concerns. Following this precedent, we investigate whether non-corresponding interactions arise in connection with not only philanthropic strengths but also community strengths.

3.2 Firm level analysis

For the firm level analysis, the original sample is subdivided into several subsamples according to whether, in a particular CSP dimension, the company is shown to be involved only in positive social activities, only in negative ones or both. Overall, there will be 19 different subsamples (5 different CSP dimensions times 3 different sorts of firms for each plus 4 subsamples for the non-corresponding pairs of KLD strengths and concerns). Standard multifactor panel fixed effects regressions and pooled OLS Carhart regressions are then run on each subsample.³ The data for the excess market return ($R_m - R_f$), Small Minus Big portfolio returns (SMB), High Minus Low portfolio returns (HML) and Momentum factors are taken from Kenneth French’s online data library. These factors have been shown to be amongst the most important determinants of stock returns in seminal studies of the literature of financial economics (Fama and French, 1992; Carhart, 1997). They account for a firm’s sensitivity to systemic factors, firm size, value characteristics and past financial performance respectively. Comparisons of the resulting alphas for these different pools of firms calculated from the regression analyses is an intuitive way to investigate whether positive and negative CSP influence the financial impact of one-another. Newey-West estimators are applied to overcome possible autocorrelation and heteroskedasticity issues in the error terms of the models.

For robustness, we will determine the statistical significance of differences in excess returns across the subsamples relevant to the same social/environmental dimension. For example, in order to test whether the difference in the alphas generated in the subsample including firms that have indications of community strengths but not of community concerns, we use the following

$$\text{model: } R_{it} = \alpha_{it-1} + \alpha'_{it-1}SD_{it-1} + \beta_1(R_{mt-1} - R_{ft-1}) + \beta_2SMB_{t-1} + \beta_3HML_{t-1} + \beta_4MOM_{t-1} + \beta_5(R_{mt-1} - R_{ft-1})SD_{t-1} + \beta_6SMB_{t-1}SD_{t-1} + \beta_7HML_{t-1}SD_{t-1} + \beta_8MOM_{t-1}SD_{t-1} + \varepsilon_{it} \quad (1)$$

where R_{it} is the excess return of firm i in year t , R_{mt-1} is the lagged market return, R_{ft-1} the risk free rate, SMB is the small-minus-big factor, HML is the high-minus-low factor, MOM the momentum factor and SD is a dummy variable that takes a value of 1 if firm i belongs in the “community strengths only” sample of firms in year $t-1$, and takes a value of 0 if it belongs in the “community concerns only” sample (firms that have mixed indications in terms of community CSP are excluded). Then it is easy to notice that when $SD=0$, the excess return is equal to a , and when $SD=1$, the excess return is equal to $a+a'$. So a' is actually the difference between the excess returns of the “community strengths only” and “community concerns only” subsamples and testing its statistical significance is the main point of this analysis. Clearly, this method can be (and is) applied to test the difference between “strengths/concerns only” and “mixed indications” subsamples for all five of the individual component subsamples.

It would also be of interest to make a direct comparison between the results that are produced by following this methodology and those that occur when using a CSP measure which aggregates the strengths and concerns of the same social dimension (the arrow labelled 1 in Figure 1). In order to perform such a task, we first calculate one aggregate measure for each of the community, diversity, employment, environment and product dimensions of CSP. We then sort the entire longitudinal sample according to the value of each of the aggregate measures, using one at a time, and separate these ordered distributions of firm-year observations in tertiles. We

reapply the econometric methodology mentioned above and use equation (1), only this time the comparison is made between the different tertiles of the sorted samples.

3.3 Portfolio level analysis

Although the firm level analysis is revealing as to the course of action that the management team of a firm should take with regard to corporate social responsibility, portfolio level analysis is more relevant for investors engaging in SRI who apply positive or negative social screens during their stock picking process and form “ethical investment portfolios”. The discussions concerning which type of screens (positive/negative and in which dimension) are more appropriate to apply as well as what is the optimal level of the intensity of those screens are closely tied with the nature of the moderating effects that this study examines.

In order to conduct the portfolio level analysis, we use the same type of categorization described in Section 3.4 and separate the sample according to firm involvement only in activities that result in positive CSP, only in activities that result in negative CSP or both, for every social and environmental dimension and for the non-corresponding CSP pairs of strengths and concerns. This is done on a year-to-year basis and in this way 19 different portfolios are constructed. Both the identity and number of constituents in each change every year. Equally-weighted and value-weighted portfolio returns are calculated and conclusions are drawn by comparing the time series averages of returns for each portfolio. As an alternative, and perhaps more intuitive, avenue to assess the performance of these portfolios, the overall return of an individual who would invest a monetary unit in 1991 in a single portfolio and then roll over his investment every year until 2008 is calculated in every case. Equivalently, the compound annual growth rate (CAGR) for each portfolio is also estimated.

4. Results

4.1 Firm-level analysis

The main focus of this study lies on the companies listed in the S&P 500 Composite Index for the years between 1991 and 2008 (inclusive). The unbalanced panel data sample used in the following analyses comprises 6,986 firm-year observations, coming from 769 different firms over a period of 18 years.

The principal empirical results are particularly interesting and illuminating and are presented in Table II. The comparison of abnormal returns (alphas) for pools relevant to the same CSP dimension depicts a U-shaped relationship between CSP and financial performance. All of the longitudinal pools of firm-year observations except for the one containing firms with indications of both KLD community strengths and concerns are found to have significant estimated abnormal returns. The comparison of these returns for pools relevant to the same CSP dimension depicts a U-shaped relationship between CSP and financial performance as can be seen in Table II. Groups of firm-year observations that are shown to have positive social action without the corresponding indications of negative social action have the highest abnormal returns, followed by those firms that do the exact opposite (i.e. those that are shown to be socially irresponsible without the corresponding social responsibilities). Those pools containing firms that are shown to be both socially responsible and irresponsible in the same dimension are almost invariably characterized by the lowest returns compared to the other two types of pools. The difference in financial performance is especially high in the case of the community relations and product safety and quality dimensions where firms with uniformly positive or uniformly negative CSP outperform firms with mixed CSP from 5.76% up to 16.46%. The only exception to this observed U-shaped link comes from the environmental dimension of CSP where the

“strengths only” pool has a lower alpha than that of either the “concerns only” pool or the “strengths and concerns” pool, although the differences are economically modest.

The pools whose comparison helps in investigating the financial effect of an “umbrella rider” strategy display its ineffectiveness. If a firm that has been shown to be irresponsible in terms of its treatment of the natural environment or product safety and quality chooses to engage in support of local communities or charitable giving, it will not be able to increase its financial returns according to these results. If anything, the opposite seems to hold (i.e. a decrease of abnormal returns).⁴ Taken together, these results strongly indicate that firms that are “caught in-between” doing good and bad tend to underperform not only socially responsible firms but also those firms that are clearly shown to engage only in negative social actions. This observation is in line with the rationale of Godfey (2005) and Pomeroy and Dolnicar (2008) who stress the importance of the assessment of motivation behind corporate activities. So, it is possible that firms that are found to be both socially responsible and irresponsible in various aspects of the same social dimension are deemed to be inconsistent social actors that attempt to ingratiate particular stakeholder groups and are consequently penalized by the financial markets. In other words, the “rewarding uniformity” framework appears to receive support in contrast to the “reciprocal dampening” hypothesis.

INSERT TABLE II ABOUT HERE

Lastly, the results that occur from the utilization of equation (1) are particularly revealing. Table III verifies the statistical significance of the differences between the excess returns of the “strengths only” subsamples and the excess returns of the “mixed indications” subsamples. In all CSP dimensions except for the environmental one, the “strengths only” sample outperforms the respective “mixed indications” sample in an economically and statistically significant way. It is also worth noticing that the outperformance in the pairs of samples previously mentioned (ranging from 5.43% to 16.46%) is invariably higher than the differences between the excess

returns of the “strengths only” and the “concerns only” samples (which are in favor of the “strengths only” samples and range between 2.49% to 7.69% – again, with the single exception of the environmental dimension). Lastly, the “concerns only” samples also outperform the respective “mixed indications” samples but this observation is less strong, both in economic and statistical terms, than the one occurring from the comparison of uniformly positive and “mixed indications” samples. Again, all of these results, taken together, point towards a moderately strong support for the “rewarding uniformity” framework that was developed earlier.

INSERT TABLE III ABOUT HERE

Table IV contains the output of the results that occur from applying the same model but this time to test the sizes and statistical significance of the differences in the performances of different tertiles of the entire longitudinal sample that is iteratively sorted according to the size of each of the aggregate measures of CSP. It is easily noticeable that the differences in the alphas of the various subsamples are algebraically much lower than those depicted in Table III. Furthermore, they tend to change signs from one CSP dimension to the other and all but two are statistically insignificant even at the 10% level. This provides support for the view that because CSP strengths and concerns are conceptually and empirically distinct concepts (Mattingly and Berman, 2006), they should not be aggregated as they are likely to mask some of the finer points of the relationship between CSP and CFP and lead to less informative or even misleading conclusions.

INSERT TABLE IV ABOUT HERE

4.2 Portfolio-level analysis

The portfolio level analysis generally reinforces the aforementioned findings. The annual mean returns of the year-by-year portfolios are highest for the “strengths only” portfolios (either equal

or value-weighted) in the case of community, diversity and employment dimensions and very similar for the environment and product safety/quality dimensions as is depicted in Tables V and VI. Yearly portfolios that contain less than 10 stocks are excluded from the analysis as they may produce misleading signals because of small numbers of constituent securities.⁵ Since the standard errors for these mean returns are usually higher in the case of the “strengths and concerns” portfolios,⁶ other methods of assessing the differences in the performances of different portfolios are explored.

Specifically, we calculate the total proceeds of an investor who places 1 dollar in each portfolio in 1991 and rolls over each investment until 2008. In the case that for a given year a portfolio of a certain type does not have at least ten stocks, it is assumed that the investor will choose to invest in US Treasury bills⁷. Equivalently, the compound annual growth rate is also calculated in each case. When Treasury bills are preferred as an alternative investment, the conclusions are exactly the same as they were when looking at portfolio mean returns. The “community strengths and concerns” (COMSC) portfolio earns approximately 6% less than the “community strengths only” (COMS) portfolio and 4.7% less than the “community concerns only” portfolio (COMC). The respective numbers are 6.3% and 2.5% for diversity portfolios and 5.3% and 3.5% for employee relations portfolios. Evidently, the “strength only portfolios” also outperform the “concerns only” portfolios, but not by much. CAGRs for portfolios relevant to the environmental and product safety/quality dimensions are very similar, with differences no greater than 0.8% in each case. The same applies for the non-corresponding strengths and concerns portfolios. The mean returns and CAGRs of the “environment concerns only” and “product safety/quality concerns only” portfolios are similar to, and often a bit smaller than, the returns of the “umbrella riders”.

INSERT TABLES V and VI ABOUT HERE

The general conclusion that can be deduced from the pooled regressions and an examination of the historic mean returns of certain portfolios is that in most cases, a U-shaped relationship makes its appearance, with firms that engage in both positive and negative social actions underperforming firms that are either just “good” or just “bad” in a specific social dimension. This is intuitive when taking into consideration all the arguments concerning stakeholder assessments of corporate activities. It seems that Godfrey’s (2005) rationale about the hazardous effects of firms’ ingratiating attempts and the backfire effect of corporate insincerity mentioned by Yoon et al. (2006) are both empirically verified by these analyses. Another way to think about these results is that firms that do not exhibit strong indications of positive or negative CSP cannot benefit from the product differentiating aspects of the former or the cost saving opportunities that may come with the latter and thus find themselves at a competitive disadvantage. Similarly, Brammer and Millington (2008) find that firms with very high or very low levels of charitable giving perform better than those firms that are “stuck in the middle”. Furthermore, Barnett and Salomon (2006) also detect a curvilinear, U-shaped relationship between screening intensity and returns at the portfolio level, i.e. funds that use few or many social screens outperform those that use a moderate number of screens. They also test and verify the existence of a U-shaped link between corporate social and financial performance at the firm level (Barnett and Salomon, forthcoming) by concentrating on the association between CSP and accounting performance measures (return on assets and net income). The shape of this relationship remains unchanged even after controlling for firm size, R&D and advertising intensity, firm leverage and applying fixed firm and time effects. Lastly, Guney and Schilke (2010) provide evidence from cross-sectional analyses which reinforce the notion that there is a U-shaped relationship between market-based CFP measures and CSP. The results from our analyses are in line with these findings and extend the limited existing literature by attributing the curvilinear CSP-CFP link to stakeholders’ perception of mixed corporate social performance. It

is also shown for the first time⁸ that this conclusion is especially relevant in the case of the community, diversity and employee relations dimensions where all alternative assessments of financial performance, at both the firm and portfolio level, point towards a U-shaped link between CSP and CFP.

4.3 Further analysis

With regard to the analyses conducted on the different subsamples of firm-year observations, it should be noted that although the four-factor model employed does account for the variability of key financial characteristics within each pool, it does not make such an adjustment across different pools. So it could be argued that the heterogeneity of unaccounted for yet important characteristics in the observations of each pool could be the primary driver of their differential financial performance, and not corporate social performance as was argued. Tables VII and VIII depict the mean values of the Fama-French and Carhart factors and the median values for the respective, firm-level, variables across the various subsamples. The similarity of the respective values between subsamples is evident in almost every case. Even in those instances where there are significant deviations between the average values of the groups compared, these deviations are not in a direction that could explain the observed differences in financial performance. For example, in the categorization according to community-related CSP, the uniformly CSP negative sample has a smaller mean value for firm size compared to the “mixed indications” subsample and despite this, the second subsample significantly outperforms the first. So, overall, it seems unlikely that these non-CSP factors are driving the observed disparities in financial performance.

INSERT TABLES VII and VIII ABOUT HERE

Nevertheless, we conduct a simple test in order to add some robustness to our findings in this direction. Specifically, we remove the top 5% and bottom 5% firm-year observations in terms of beta, firm size and market to book value ratio from the entire longitudinal sample. This creates a

good framework for a comparison of subsamples that differ in terms of CSP and are otherwise fairly homogenous, but comes at a significant cost as the remaining sample consists of 5,308 observations, i.e. we lose almost 1,700 observations that constitute 24% of the original sample. We reapply the methodology discussed on this truncated sample and compare the four-factor alphas that are produced from different pools once more. The results are contained in Table IX and corroborate the core part of the analysis as the U-shaped relationship between CSP and CFP is still present in all dimensions but the environmental one.

INSERT TABLES IX ABOUT HERE

5. Conclusions

This study investigates the interactive financial impacts of positive and negative indicators of social and environmental corporate performance. Across three pools of firm-year observations that exhibit uniformly positive, uniformly negative and mixed indications in specific CSP dimensions, a U-shaped relationship is evident – firms with only positive or only negative indicators outperform firms that exhibit both. At the firm level, Carhart pooled OLS regressions reveal a tendency for the abnormal returns of firms that have both positive and negative indicators in the same CSP dimension to be lower than the abnormal returns of firms with only positives or only negatives in the corresponding dimension. This is found for every CSP dimension except for environmental performance. Historical mean returns and compound annual growth rates of both equal and value-weighted portfolios provide similar results for the community, diversity and employee relations measures.

Our findings not only imply that the financial effects of CSP are subject to significant interactions between positive and negative indicators, but are also instructive regarding the form these interactions take. While one might consider both *reciprocal dampening* – wherein

stakeholders view positives less positively in the presence of negatives, and view negatives less negatively in the presence of positives – and *rewarding uniformity* – wherein stakeholders take their dimmest view of a mix of positives and negatives as a reputationally-damaging attempt to ingratiate is inferred – intuitively appealing, we find evidence in support of only the latter. By discriminating in this way, this study provides distinctive insights into the nature of the moderating factors that act within the link between CSP and CFP.

There are practical lessons for both managers and investors. In order to reap the financial rewards highlighted in this study, managers should seek to avoid offering a mixed picture to stakeholders in regards of CSP, and specifically a mix of positive and negative indicators within a narrow spectrum of consonant issues. Our study provides a financially-grounded rationale for firms to focus on building CSP strengths in those dimensions in which the firm is not simultaneously exhibiting notable weaknesses. While the impetus to address an area of extant weakness is compelling, we find that unless investments remove the weakness and so offer an unblemished account in that dimension, the tendency to bring countervailing evidence will carry a financial penalty. The financial rewards from such corporate investments are associated with a firm prioritizing CSP dimensions in which they can present a uniformly positive picture.

For investors, our findings suggest that firm-level information about CSP influences returns. Moreover, our study suggests that investors selecting portfolios according to criteria that favour firms that are uniformly either socially responsible or socially irresponsible (in the within-dimension sense we have employed) will systematically outperform investors that favour firms with mixed CSP indications (with the exception of the environmental dimension). We find that investors should not be swayed by positive indications of CSP *per se*. Rather, they should look across CSP indicators and view negatively those firms whose strengths are accompanied by weaknesses on consonant issues.

Notes

1. Since June 2010, KLD has been a part of Morgan Stanley Capital International (MSCI).
2. In a way similar to the one implemented by Brammer, Brooks and Pavelin (2006), who use social and environmental data for UK firms.
3. Redundant fixed effects F -tests produce p -values well over 0.10, indicating strong support for the null hypothesis of the redundancy of these effects. Thus, pooled OLS estimations are more suitable and it is their output that will be reported.
4. Although the Fama-French factors plus Carhart's momentum factor are shown to be small in size and sometimes statistically insignificant, this output is overall in agreement in terms of the sizes, signs and importance of the coefficients with the findings of Galema, Plantinga and Scholtens (2008) who implement a similar methodology.
5. However, even when portfolios of as few as 3 stocks are included, the qualitative results remain largely the same as those reported here in terms of mean returns.
6. An unsurprising result given that the exclusion of portfolios due to a small number of stocks is more common in the case of the "strengths and concerns" portfolios compared to the other two.
7. Widely considered to be the marketable financial asset bearing the smallest amount of risk.
8. As the relevant prior empirical studies either focused on a single dimension of CSP or used an aggregated measure of social performance.

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Figure 1:

The relationships between CSP and CFP that are commonly-tested in the extant literature (1, 2 and 3) and those tested in this study (4 and 5; moderating effects shown as dashed lines)

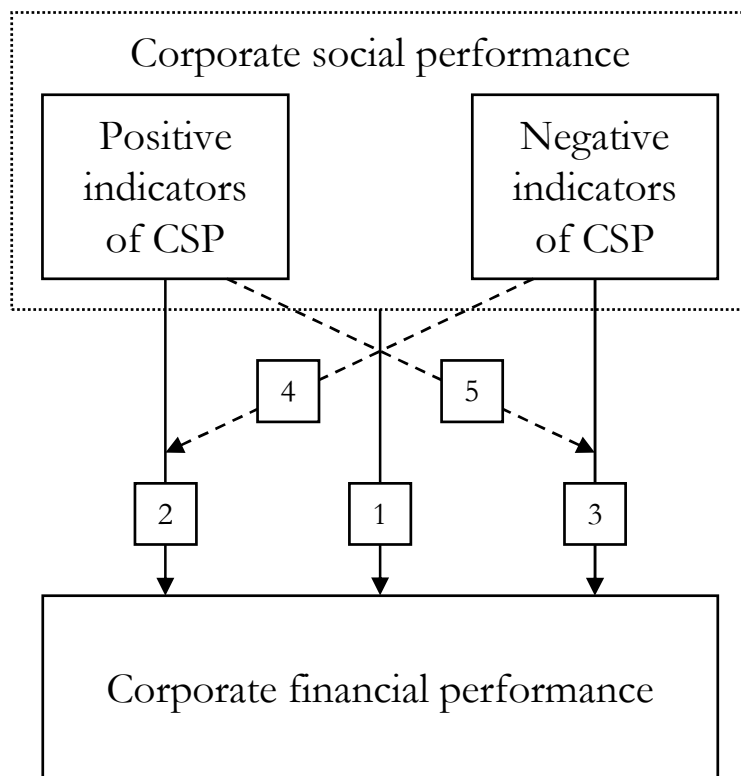


Table I: Outline of interactions examined between positive and negative social/environmental actions.

Interaction between		
Corresponding corporate social strengths and concerns		
Strengths		Concerns
Community	↔	Community
Diversity	↔	Diversity
Employees	↔	Employees
Environment	↔	Environment
Product safety/quality	↔	Product safety/quality
Non-corresponding corporate social strengths and concerns		
Strengths		Concerns
Community	→	Environment
Community	→	Product safety/quality
Philanthropy	→	Environment
Philanthropy	→	Product safety/quality

Note: In the non-corresponding strengths and concerns pairs, only the impact of corporate social responsibility on the financial effects of corporate social irresponsibility is examined in accordance with the findings of Godfrey et al. (2010) and Brammer and Millington (2008).

Table II: Pooled OLS Carhart regressions on groups of firms according to their involvement in positive/negative

Pools	α	Rm-Rf	SMB	HML	MOM	
COMS	19.75%	*** (0.0000)	*** (0.0019)	(0.1452)	** (0.0111)	*** (0.0000)
COMSC	3.29%	(0.4221)	(0.6183)	(0.2697)	(0.3843)	(0.1276)
COMC	12.92%	*** (0.0000)	*** (0.0000)	(0.7781)	0.0000	*** (0.0002)
DIVS	14.48%	*** (0.0000)	*** (0.0000)	(0.0017)	-0.0006	*** (0.0000)
DIVSC	5.83%	** (0.0176)	** (0.0161)	(0.3877)	0.0004	(0.4736)
DIVC	11.99%	*** (0.0011)	*** (0.0073)	(0.1133)	-0.0025	(0.5209)
EMPS	14.85%	*** (0.0000)	** (0.0209)	(0.0008)	-0.0012	** (0.0445)
EMPSC	9.42%	*** (0.0000)	*** (0.0000)	(0.1210)	(0.2434)	* (0.0739)
EMPC	10.73%	*** (0.0000)	*** (0.0000)	(0.6771)	0.0019	* (0.0775)
ENVS	16.08%	*** (0.0000)	*** (0.0012)	(0.2714)	-0.0001	*** (0.0087)
ENVSC	16.56%	*** (0.0000)	*** (0.0008)	(0.03090)	0.0002	*** (0.0002)
ENVC	18.44%	*** (0.0000)	*** (0.0000)	(0.1495)	-0.0014	*** (0.0000)
PSQS	19.80%	*** (0.0000)	*** (0.0010)	(0.0009)	-0.0027	*** (0.0054)
PSQSC	6.36%	* (0.0589)	(0.9058)	(0.9839)	0.0031	(0.1802)
PSQC	12.12%	*** (0.0000)	*** (0.0000)	(0.1408)	0.0002	** (0.0164)
COMENV	18.07%	*** (0.0000)	** (0.0397)	(0.0002)	0.0005	*** (0.0013)
COMPRO	9.25%	*** (0.0001)	(0.1751)	(0.6135)	0.0018	(0.5941)
PHISENV	17.18%	*** (0.0000)	** (0.0354)	(0.0068)	0.0006	*** (0.0065)
PHISPRO	8.20%	*** (0.0009)	(0.2977)	(0.3399)	0.0014	(0.3190)

Notes: Entries are parameter estimates; p -values in parentheses are calculated by using Newey-West correlation and heteroskedasticity robust estimators; the dependent variable is the simple annual stock return and has been winsorized at the 1% level; COMS stands for a longitudinal pool of firms which have a positive score in community strengths and zero in community concerns; vice versa for COMC; COMSC includes firms that have positive scores in both community strengths and concerns; the notation is analogous for the other social dimensions; DIV is used for diversity, ENV for environment, EMP for employee relations, PSQ for the product safety and quality; COMENV includes firms that have positive scores in environmental concerns and community strengths (PHIS for philanthropy), COMPRO includes firms that have positive scores in environmental concerns and community strengths (PHIS for philanthropy), “ α ” stands for abnormal returns, Rm-Rf is the excess market return coefficient, SMB stands for Small Minus Big portfolio returns, HML stands for High Minus Low portfolio returns and MOM is the Momentum factor ; *, **, and *** denote significance at the 10%, 5% and 1% levels respectively.

Table III: Sampling according to the presence or absence of strengths and concerns

Comparison of subsample alphas		
COM	Strengths-Strengths/Concerns	16.46% ^{***}
	Concerns-Strengths/Concerns	9.63% ^{**}
	Strengths-Concerns	6.83% ^{**}
DIV	Strengths-Strengths/Concerns	8.64% ^{***}
	Concerns-Strengths/Concerns	6.16%
	Strengths-Concerns	2.49%
EMP	Strengths-Strengths/Concerns	5.43% ^{**}
	Concerns-Strengths/Concerns	1.30%
	Strengths-Concerns	4.13% [*]
ENV	Strengths-Strengths/Concerns	-0.47%
	Concerns-Strengths/Concerns	1.88%
	Strengths-Concerns	-2.36%
PSQ	Strengths-Strengths/Concerns	13.44% ^{***}
	Concerns-Strengths/Concerns	5.75%
	Strengths-Concerns	7.69% ^{***}

Table IV: Sampling according to tertiles of aggregate CSP measures

Comparison of subsample alphas		
COM	Top tertile-Bottom tertile	-1.06%
	Top tertile-Middle tertile	-2.66%
	Middle tertile-Bottom tertile	1.60%
DIV	Top tertile-Bottom tertile	-0.74%
	Top tertile-Middle tertile	0.28%
	Middle tertile-Bottom tertile	-1.02%
EMP	Top tertile-Bottom tertile	-2.02%
	Top tertile-Middle tertile	-0.50%
	Middle tertile-Bottom tertile	-1.52%
ENV	Top tertile-Bottom tertile	-2.05%
	Top tertile-Middle tertile	-1.11%
	Middle tertile-Bottom tertile	-0.94%
PSQ	Top tertile-Bottom tertile	0.42%
	Top tertile-Middle tertile	-3.28% [*]
	Middle tertile-Bottom tertile	3.69% ^{**}

Notes: Estimates are alphas based on four-factor model pooled OLS regressions; Newey-West correlation and heteroskedasticity robust standard errors are estimated; COM stands for community; DIV is used for diversity; ENV for environment; EMP for employee relations, PSQ for the product safety and quality; *, **, and *** denote significance at the 10%, 5% and 1% levels respectively.

Table V: Equally-weighted portfolios

Portfolios	Mean return	Standard error	\$1 investment gives	CAGR
COMS	12.43%	0.04738	5.96	10.42%
COMSC	6.82%	0.07265	2.18	4.41%
COMC	11.63%	0.04572	4.82	9.13%
DIVS	11.89%	0.04485	5.73	10.18%
DIVSC	5.67%	0.05879	2.00	3.92%
DIVC	9.90%	0.07074	3.06	6.41%
EMPS	11.99%	0.04252	5.97	10.44%
EMPSC	7.03%	0.04735	2.46	5.14%
EMPC	10.20%	0.04233	4.47	8.67%
ENVS	11.07%	0.04264	5.15	9.53%
ENVSC	11.27%	0.03856	5.57	10.01%
ENVC	10.61%	0.04016	4.90	9.22%
PSQS	11.50%	0.04571	5.39	9.81%
PSQSC	11.94%	0.04877	5.14	9.52%
PSQC	11.80%	0.04104	5.90	10.36%
COMENV	10.91%	0.04438	4.88	9.21%
COMPRO	11.35%	0.04593	5.12	9.50%
PHISENV	11.25%	0.04400	5.19	9.58%
PHISPRO	11.30%	0.04570	5.08	9.45%

Table VI: Value-weighted portfolios

Portfolios	Mean return	Standard error	\$1 investment gives	CAGR
COMS	10.60%	0.04699	4.53	8.75%
COMSC	4.93%	0.06690	1.88	3.57%
COMC	10.67%	0.05504	3.94	7.91%
DIVS	11.89%	0.04485	5.73	10.18%
DIVSC	4.21%	0.05416	1.77	3.23%
DIVC	4.92%	0.05077	2.11	4.24%
EMPS	11.07%	0.05134	4.70	8.97%
EMPSC	5.83%	0.04166	2.14	4.32%
EMPC	7.19%	0.03882	2.82	5.92%
ENVS	8.76%	0.04914	3.20	6.67%
ENVSC	8.22%	0.04076	3.29	6.84%
ENVC	10.72%	0.04166	4.94	9.28%
PSQS	9.40%	0.05041	3.57	7.33%
PSQSC	10.93%	0.05829	3.90	7.86%
PSQC	10.49%	0.04430	4.64	8.90%
COMENV	9.50%	0.04803	3.76	7.64%
COMPRO	9.76%	0.04939	3.83	7.74%
PHISENV	9.81%	0.04589	4.05	8.09%
PHISPRO	9.98%	0.04876	4.00	8.00%

Notes: COMS stands for a portfolio of firms which have a positive score in community strengths and zero in community concerns; vice versa for COMC; COMSC includes firms that have positive scores in both community strengths and concerns; the notation is analogous for the other social dimensions; DIV is used for diversity, ENV for environment, EMP for employee relations, PSQ for the product safety and quality; COMENV includes firms that have positive scores in environmental concerns and community strengths (PHIS for philanthropy), COMPRO includes firms that have positive scores in environmental concerns and community strengths (PHIS for philanthropy); '\$1 investment gives' shows how much an investment of \$1 in 1991 is worth in 2008 if it is rolled-over every year; CAGR stands for compound annual growth rate.

Table VII: Medians of key financial variables for pools of observations

	BETA	ln(MV)	MTBV	N
COMS	0.9426	9.0284	2.4520	1446
COMSC	1.0328	10.2599	2.3140	253
COMC	0.9518	9.2249	2.1520	701
DIVS	0.9608	9.1694	2.8830	2797
DIVSC	0.9579	10.1278	2.6090	519
DIVC	1.0116	8.8647	2.3140	236
EMPS	0.9706	9.0925	2.9920	2076
EMPSC	1.0672	9.4720	2.4950	671
EMPC	0.9436	8.9292	2.2490	1036
ENVS	0.8583	8.8874	2.6390	671
ENVSC	0.9019	9.1126	2.3970	837
ENVC	0.8291	8.9091	2.1770	1111
PSQS	1.0294	8.8294	2.9390	729
PSQSC	1.0148	10.1926	3.4830	402
PSQC	0.9071	9.2049	2.3880	2030

Table VIII: Mean values of key financial variables for pools of observations

	Rm-Rf	SMB	HML	MOM	N
COMS	8.8031	3.6990	2.9695	11.3158	1446
COMSC	2.1961	3.8937	3.3371	9.1521	253
COMC	-1.1201	3.3882	0.7018	10.7473	701
DIVS	4.3078	3.4303	2.7440	10.4404	2797
DIVSC	1.0623	4.4550	3.1619	8.6160	519
DIVC	1.1414	3.4126	1.7653	10.2611	236
EMPS	5.3682	3.6243	3.2164	11.3259	2076
EMPSC	-1.1439	3.4055	1.1314	10.4983	671
EMPC	1.2710	3.1014	1.0741	10.1312	1036
ENVS	5.7982	2.0297	1.4461	12.0246	671
ENVSC	5.0408	2.7489	1.0625	11.3649	837
ENVC	5.7195	3.5089	3.1343	10.8248	1111
PSQS	6.1835	3.3985	2.9900	11.7732	729
PSQSC	3.5439	3.4911	2.4738	10.4692	402
PSQC	3.2196	3.5733	2.2094	10.1040	2030

COMS stands for a longitudinal pool of firms which have a positive score in community strengths and zero in community concerns; vice versa for COMC; COMSC includes firms that have positive scores in both community strengths and concerns; the notation is analogous for the other social dimensions; DIV is used for diversity, ENV for environment, EMP for employee relations, PSQ for the product safety and quality. SMB stands for Small Minus Big portfolio returns, HML stands for High Minus Low portfolio returns and MOM is the Momentum factor. N stands for the number of observations per pool.

Table IX: Carhart regressions in truncated pools of firms according to their involvement in positive/negative social action or both

Pools	α	Rm-Rf	SMB	HML	MOM
COMS	16.44%	(0.000)**	-0.008998	0.00798	-0.000796
		(0.7339)	(0.000)**	(0.0133)**	(0.5512)
COMSC	9.74%	(0.0533)*	-0.003883	0.010389	0.000637
		(0.3194)	(0.4588)	(0.000)**	(0.9071)
COMC	10.98%	(0.000)**	-0.002385	0.009453	-0.004803
		(0.000)**	(0.000)**	(0.000)**	(0.0749)*
DIVS	12.04%	(0.000)**	-0.004551	0.006553	-0.001827
		(0.000)**	(0.0009)**	(0.000)**	(0.1231)
DIVSC	-1.82%	(0.6012)	0.00739	0.011422	0.007158
		(0.0008)**	(0.0835)*	(0.000)**	(0.0604)*
DIVC	1.22%	(0.8202)	0.005994	0.011601	0.004121
		(0.079)*	(0.264)	(0.0136)**	(0.4016)
EMPS	13.40%	(0.000)**	-0.004267	0.004629	-0.001425
		(0.047)**	(0.0092)**	(0.0001)**	(0.3142)
EMPSC	3.21%	(0.3035)	0.004276	0.009463	-0.000725
		(0.000)**	(0.2524)	(0.0001)**	(0.8251)
EMPC	7.93%	(0.0011)**	-0.003338	0.01066	-0.001617
		(0.000)**	(0.2201)	(0.000)**	(0.4686)
ENVS	13.36%	(0.000)**	-0.007467	0.007506	-0.003395
		(0.0002)**	(0.0023)**	(0.000)**	(0.0979)*
ENVSC	13.54%	(0.000)**	-0.003992	0.007026	-0.004079
		(0.000)**	(0.0559)*	(0.000)**	(0.0219)**
ENVC	12.86%	(0.000)**	-0.006206	0.008586	-0.003283
		(0.000)**	(0.0007)**	(0.000)**	(0.0372)**
PSQS	18.40%	(0.000)**	-0.009178	0.007062	-0.005825
		(0.0001)**	(0.0003)**	(0.000)**	(0.0057)**
PSQSC	9.23%	(0.007)**	-0.003241	0.010058	0.001269
		(0.0046)**	(0.3745)	(0.0005)**	(0.7105)
PSQC	11.60%	(0.000)**	-0.003784	0.007684	-0.002017
		(0.000)**	(0.0184)**	(0.000)**	(0.1287)

Notes: Entries are parameter estimates; p -values in parentheses are calculated by using Newey-West correlation and heteroskedasticity robust estimators; dependent variable is simple annual stock return and has been winsorized at the 1% level; COMS stands for a longitudinal pool of firms which have a positive score in community strengths and zero in community concerns; vice versa for COMC; COMSC includes firms that have positive scores in both community strengths and concerns; the notation is analogous for the other social dimensions; DIV is used for diversity, ENV for environment, EMP for employee relations, PSQ for the product safety and quality; COMENV includes firms that have positive scores in environmental concerns and community strengths (PHIS for philanthropy), COMPRO includes firms that have positive scores in environmental concerns and community strengths (PHIS for philanthropy), “ α ” stands for abnormal returns, Rm-Rf is the excess market return coefficient, SMB stands for Small Minus Big portfolio returns, HML stands for High Minus Low portfolio returns and MOM is the Momentum factor; *, ** and *** denote significance at the 10%, 5% and 1% levels respectively.