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CORPORATE SOCIAL RESPONSIBILITY FOR IRRESPONSIBILITY

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ABSTRACT

This paper provides an empirical investigation of the hypothesis that companies engage in corporate social responsibility (CSR) in order to offset corporate social irresponsibility (CSI). We find general support for the causal relationship: when companies do more "harm," they also do more "good." The empirical analysis is based on an extensive 15-year panel dataset that covers nearly 3,000 publicly traded companies. In addition to the overall finding that more CSI results in more CSR, we find evidence of heterogeneity among industries, where the effect is stronger in industries where CSI tends to be the subject of greater public scrutiny. We also investigate the degree of substitutability between different categories of CSR and CSI. Within the categories of community relations, environment, and human rights—arguably among those dimensions of social responsibility that are most salient—there is a strong within-category relationship. In contrast, the within-category relationship for corporate governance is weak, but CSI related to corporate governance appears to increase CSR in most other categories. Thus, when CSI concerns arise about corporate governance, companies seemingly choose to offset with CSR in other dimensions, rather than reform governance itself.

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1. Introduction

There exists a large growing literature that investigates the relationship between corporate social responsibility (CSR) and financial performance. Attempting to explain why companies engage in various forms of CSR, most of the research tests for evidence in support of the notion that companies do "well" by doing "good." The majority of studies find a positive correlation between CSR and different indicators of financial performance, yet many studies find no correlation, or even negative correlation.[1] Even for reasons beyond these seemingly contradictory results, questions remain about why companies engage in CSR and whether studies of this type can provide reasonable answers. It is well known that correlation does not mean causation, and critics of the literature point to problems of endogeneity: Does CSR improve financial performance, or does better financial performance free up resources for companies to engage in CSR? Another challenge facing research in this area relates to the question of how to define CSR, let alone measure it for purposes of empirical analysis.

This paper takes a different approach. We seek to explain why companies engage in CSR, but we do not focus directly on the link to financial performance. Instead, we investigate the proposition that companies engage in CSR in order to offset corporate social *ir*responsibility (CSI). While the link to financial performance is implicit, our analysis seeks to evaluate a different causal mechanism underlying CSR: that CSI is a liability and companies do "good" in order to offset "bad."

While there are many definitions of CSR in the literature, we build our conceptual framework on the definition put forth in Heal (2005): *Corporate social responsibility is a*

[1] See Heal (2008) and Vogel (2005) for general overviews, and for particular studies, see Waddock and Graves (1997), Berman *et al*. (1999), Hillman and Keim (2001), and Barnett and Salomon (2006). Systematic reviews of the literature include Griffin and Mahon (1997), Margolis and Walsh (2001, 2003), and Orlitzky, Schmidt, and Rynes (2003).

program of actions to reduce externalized costs or to avoid distributional conflicts. This definition is appealing because it has a foundation in economic theory. As Heal describes, CSR can be interpreted as a Coasian solution to problems associated with social costs. There is much empirical support for the notion that companies are penalized if they are perceived to conduct business in ways that conflict with social values. This is particularly true when inconsistencies arise between the pursuit of corporate profits and social goals—such as environmental protection, public health, and human rights, among others. In cases where the inconsistencies are large and there is sufficient public awareness, it is advantageous for companies to anticipate the social pressure and to take a proactive stance toward lessoning the potential for conflict. Actions of this type are considered CSR, and they often comprise an important part of corporate strategy. More formal treatments of the same motives for CSR are developed as part of "private politics" in the work of Baron (2001, 2003) and Baron and Diermeier (2007).

This interpretation of CSR implies that companies have an incentive to act more socially responsible in order to offset actions that are perceived as socially irresponsible. In parallel, we thus introduce the following definition: *Corporate social irresponsibility is a set of actions that increases externalized costs and/or promotes distributional conflicts*. It is easy to envision how some industries are perceived as being associated with greater CSI, with examples including tobacco companies and "big oil." But even within industries, particular companies may have reputations for greater CSI because they tend to employ business practices that are more in conflict with social values, or perhaps because of unforeseen events such as an oil spill. Despite the potential costs, companies are often willing to make themselves susceptible to perceptions of CSI in order to take advantage of profitable opportunities or to avoid higher costs. Recent evidence suggests, for example, that so-called "sin" stocks—those involving alcohol, tobacco,

and gaming—earn higher expected returns than other comparable stocks (Hong and Kacperczyk 2007). Companies seeking to minimize costs are also known to locate operations in places with less stringent labor standards, environmental regulations, or both.

One way for companies to manage the risk of CSI is, of course, to engage in fewer acts of social irresponsibility. But another possibility—the one we investigate here—is for companies to use CSR as a means to offset CSI. Specifically, we test the hypothesis that CSR is an increasing function of CSI. We take advantage of panel data on nearly 3,000 publicly traded companies in the United States. Our key variables on CSR and CSI are based on the Kinder, Lydenberg, Domini Research & Analytics (KLD) Social Ratings Database between 1991 and 2005.[2] These data consist of more than 80 different indicators and are the most frequently cited source of corporate social performance in the academic literature. We construct measures of overall CSR and CSI, along with separate measures for specific issue areas: community, corporate governance, diversity, employee relations, environment, human rights, product quality and safety, and controversial business issues. In order to control for other factors that may affect CSR, we also collected annual accounting data from the Compustat North America database.

We find general support for the hypothesis that more CSI results in more CSR. In other words, when companies do more harm, they also do more good. The result holds regardless of whether we identify the relationship off of variation within companies or between companies. We also find heterogeneity among industries, where the effect of CSI on CSR appears to be stronger in industries for which CSI tends to be the subject of greater public scrutiny, with examples being chemical and pharmaceutical companies and the automobile industry. Finally, we investigate the degree of substitutability between different categories of CSR and CSI. While

[2] The KLD Social Ratings Database has been acquired and modified several times and recent years. The period over which we conduct our study is one for which relatively few changes occurred to the rating system. The period that we study also takes place prior to the economic recession that began to take hold in 2007.

CSI in the specific area of corporate governance does not affect CSR in the same category, it does stimulate CSR in most other categories. This result suggests that when companies are perceived as having poor corporate governance from a CSI perspective, they seek to compensate in other areas of social performance. In contrast, we find a strong relationship between CSI and CSR within the specific areas of community relations, environment, and human rights, perhaps because these dimensions of corporate social impacts—good and bad—are among the most salient to the public.

Our paper builds on a growing body of literature that emphasizes the strategic nature of corporate social responsibility in the corporate decision-making process. Porter and Kramer (2006) argue that by overcoming the dichotomist thinking about business and society, companies can integrate social considerations more effectively into core business operations and strategy. What we are finding in this paper—namely, the phenomenon that companies are using CSR in order to mitigate harm from value chain activities—is a part of such an integration. Muller and Kräussl (2011) find a similar result as it relates specifically to corporate philanthropy to offset a bad reputation. Using Hurricane Katrina as an exogenous shock, they find that companies with poor social reputations experienced worse abnormal stock returns, but were also more likely to make charitable donations in response to the disaster. In a recent working paper, Minor (2011) builds on the idea of CSR as insurance against negative business shocks and finds empirical evidence in support of the idea. While the latter finding is related, note that the direction of causality is different from what we study in the present paper. As will become clear, and more in line with Muller and Kräussl (2011), we are interested in how CSR occurs in response to negative shocks to CSI.

Finally, the present paper contributes to a recent methodological trend in the literature on CSR in general and the use of the KLD data in particular. Mattingly and Berman (2006) show that the strength and concern items in the KLD Social Ratings data are divergent constructs, and therefore should not be combined to form a single index, as is customary in most of the existing empirical research. We overcome this methodological issue by treating the strength and concern items separately and using them to form independent measures of CSR and CSI, respectively. We are aware of one other study that uses a similar approach of separating strength and concern items in the KLD data. Strike, Gao, and Bansal (2006) show that international diversification of S&P 500 companies is positively correlated with both CSR and CSI. They do not, however, consider the strategic relationship between CSR and CSI, and this is the primary focus of what follows here.

2. Data

The KLD Social Ratings Database is the most widely used measure of corporate social performance among investment managers and academic researchers. Investment managers have historically referred to KLD's ratings when making decisions that require screening into investment funds that take account of various dimensions of social responsibility. The KLD ratings data are also the most frequently cited source of corporate social performance within the academic literature. Chatterji, Levine, and Toffel (2009) provide a critical evaluation of the KLD data as a measure of social performance. They compare the KLD data related to environmental performance with Toxics Release Inventory (TRI) records and compliance with environmental regulations. With respect to environmental performance alone, they find that the concern ratings are good summaries of past performance, while the strength items are not predictive. They also

make suggestions for more optimally using publically available data in such rating schemes. Notwithstanding their findings, there is no other ratings data available with such broad coverage of companies and topic areas over many years. These are the reasons why KLD ratings have served as the industry standard and why they are well suited for our investigation of the relationship between CSR and CSI.

The KLD data cover approximately 80 indicators in seven major issue areas: community, corporate governance, diversity, employee relations, environment, human rights, and product quality and safety. Each issue area has a number of strength and concern items, where a binary measure indicates the presence or absence of that particular strength or concern. For example, the community category contains seven strength items (charitable giving, innovative giving, non-U.S charitable giving, support for housing, support for education, volunteer programs, and other strengths) and four concern items (investment controversies, negative economic impact, tax disputes, and other concerns). In addition to the seven major issue areas, the KLD data provide information about involvement in "controversial business issues," which include involvement with alcohol, gambling, firearms, military, nuclear power, and tobacco. Involvement in any of these sectors results in a negative indicator. In Table 1, we list all of the KLD indicator variables and categorize them in their corresponding issue areas.

The KLD data is based on annual evaluations of companies in the database on each item through various sources, including public records and media reports, monitoring of corporate advertising, surveys, and on-site evaluations. The KLD data begins in 1991, and we use the complete dataset between 1991 and 2005. The number of companies included in the dataset is not constant over the entire study period. Table 2 provides a summary of the index companies included each year and the approximate number. Between 1991 and 2000, the dataset included

roughly 650 companies, all of which were listed in either the S&P 500 or the Domini 400 Social Index. The number increased to 1,100 companies in 2001-2002, with the inclusion of companies in the Russell 100 Index and the Large Cap Social Index. Then in 2003, the Russell 2000 Index and the Broad Market Social Index were added, bringing the total number of companies to approximately 3,100.

As mentioned previously, we use the KLD data to generate variables for CSR and CSI. We consider all the strength items to be consistent with CSR and all the concern items to be consistent with CSI. To construct variables for overall CSR and CSI, we separately sum all the 0-1 strength and 0-1 concern items, respectively.[3] Note that this procedure places equal weight on each item. One complication with this procedure is that we want the variables to be comparable between years, and as indicated in Table 1, some items have been added or removed between years. To account for this annual variation, we standardize the variables within each year.

We then followed the same procedure to create CSR and CSI variables for different dimensions, corresponding to the different issue areas in the KLD data. This entailed separately summing the strength and concern items within each category. These variables were also standardized within each year to account for items being added, removed, or moved to a different category. While both CSR and CSI variables were created for each of the seven KLD issue categories, only a CSI variable was created for controversial business issues, as there are only concern indicators for this category.

We also collected annual financial and accounting data for all of the companies listed in the KLD Social Ratings database from 1991 through 2005 from the Compustat North America database. In the empirical analysis, we use five variables to control for observable company

[3] Note that this approach differs from the standard use of the KLD data in the literature, which simply sums all the strength items and subtracts all the concern items, yielding an overall measure of corporate social performance. The standard approach is, however, the source of Mattingly and Berman's (2006) critique referenced previously.

characteristics: *ROA* is return on assets (earnings divided by total assets) and captures financial performance; *Debt* is the company's debt ratio (total debt divided by total assets) and captures interest cost and leverage risk; *Assets* is total assets, *Sales* is net sales, *Employ* is number of employees. The latter three variables are used to control for company size and operating costs.

The final set of variables are industry categories for all of the companies included in the KLD data. We categorize companies based on SIC codes and aggregate them according to the categories in Waddack and Graves (1997), with one exception. Rather than create one category for Computer, Auto and Aerospace, we break them into two categories: Computers & Precision Products and Auto & Aerospace. The list of different industry categories, the inclusive range of SIC codes, and the corresponding number of companies used in our empirical analysis can be found in Table 4, which we discuss further in the next section. We employ this breakdown of industries in order to make inter-industry comparisons without having to parse the data into too many categories. Moreover, because these categories have been used repeatedly in the literature on corporate social performance, it facilitates comparison to use the same categorization here.

3. Empirical Analysis

We first test the general hypothesis that overall CSR is increasing in overall CSI, that is, whether companies do "good" in order to offset "bad." To determine whether the data are consistent with this relationship, we specify the following regression model:

$$(1) \quad CSR_{it} = \alpha CSI_{i,t-1} + \beta ROA_{i,t-1} + \gamma Debt_{it} + \varphi lnAsset_{it} + \theta lnSales_{it} + \phi lnEmploy_{it} + \mu_t + \nu_i + \varepsilon_{it}$$

where *i* indexes companies and *t* indexes years. In this specification, the right-hand-side variables CSI and ROA are lagged one year to address potential concerns about endogeneity,

whereby CSR in a given year could affect CSI and ROA in the same year. The maintained assumption is that CSR in any given year does not affect CSI or ROA of the previous year. At the end of this section, however, we consider alternative assumptions and specifications and discuss robustness of the results. We take the natural log of the company size variables (i.e., *Assets*, *Sales*, *Employ*) because of the large variation between companies in the data. The coefficient of primary interest is α, as it provides and estimate of the relationship between CSR and CSI. A positive and statistically significant estimate of α would be consistent with the hypothesis that CSR is an increasing function of CSI.

Table 3 reports three different estimates of the parameters in specification (1): the pooled ordinary least squares (OLS), the between, and the fixed-effects (within) models. Though each model is based on different assumptions, all three produce an estimate of α that is positive and highly statistically significant. The pooled OLS and between estimators are consistent under the assumption that ν_i is uncorrelated with the other explanatory variables, but the two models differ on the source of identification. For the pooled OLS model, identification comes from variation both within companies over time and between companies cross-sectionally; whereas, for the between model, identification comes from only cross-sectional variation between companies, as the data is time averaged. Nevertheless, the models produce similar results and indicate, due to our standardization of the variables, that an increase in CSI of one standard deviation in a given year is associated with a .190 or .152 increase in the standard deviation of CSR the following year.

The fixed-effects estimator is perhaps more preferable, however, as it does not rely on the assumption that ν_i is uncorrelated with the other explanatory variables. Identification for this model comes from only variation year-to-year within companies. The advantage of having a

fixed effect for each company is that the model accounts for all time-invariant heterogeneity among companies. The fixed-effects estimate of α is lower, which suggests that the unobserved heterogeneity may be positively correlated with CSI. The magnitude of the estimate implies that a one standard deviation increase in CSI in a given year results in a .102 increase in the standard deviation of CSR the next year. Based on this model, we also find that CSR is increasing in total assets, but decreasing in net sales. Interestingly, in no model do we find a statistically significant relationship between the lagged return on assets (i.e., financial performance) and CSR.

We now consider the possibility that the relationship between CSR and CSI is heterogeneous among industries. We restrict attention to the fixed-effects estimates of specification (1), i.e., the preferred model, but now estimate the equation separately for each of the 14 industries described previously. Table 4 reports the estimates of α for each industry, along with the number of observations and *R*-squared for each model. The other variables are included in each of the models but are not reported in the table. A robust finding across all estimates of α is that the relationship between CSI and CSR is not negative: all coefficients are either statistically indistinguishable from zero or positive and statistically significant. Industries for which the relationship is statistically significant are Chemicals & Pharmaceuticals, Heavy Manufacturing, Computers & Precision Products, Auto & Aerospace, Telephone & Utilities, Wholesale & Retail, Bank & Financial Services, Hotel & Entertainment, and Hospital Management. The magnitude of the effect is greater in the industries of Chemicals & Pharmaceuticals, Auto & Aerospace, Bank & Financial Services, Hotel & Entertainment, and Hospital Management.

One possible interpretation of these results is that the effect of CSI on CSR is positive in industries subject to greater public scrutiny, as could be the case with Heavy Manufacturing,

Auto & Aerospace, Bank & Financial Services, and Hotel & Entertainment. It is, however, difficult to definitively state which industries are in fact the ones more or less in the public eye. But related research finds that CSR tends to be more prevalent in industries that are advertising-intensive and therefore consumer-oriented (Fisman, Heal, and Nair 2005), and that are based on credence and experience goods (Siegel and Vitaliano 2007). There is also evidence that for consumer oriented industries, greater corporate social performance is associated with better financial performance, while the opposite is true for more industrial-based industries (Baron, Harjoto, and Jo 2009). Similarly, we find that the link between CSR and CSI appears stronger in several of the consumer oriented sectors, especially for the automobile industry, financial services, and hotel and entertainment.[4]

We have thus far combined all indicators of CSI into a single measure, but we now consider whether overall CSR is more or less responsive to CSI in different dimensions. In particular, we disaggregate the different categories of CSI and separately estimate the effect on overall CSR. While we continue, for the time being, to aggregate CSR into one left-hand-side variable, we do relax that assumption next. Our general, disaggregated CSI specification takes the form

$$(2) \quad CSR_{it} = \alpha_1 CSIcgov_{i,t-1} + \alpha_2 CSIcom_{i,t-1} + \alpha_3 CSIdiv_{i,t-1} + \alpha_4 CSIemp_{i,t-1} + \alpha_5 CSIenv_{i,t-1} + \alpha_6 CSIhum_{i,t-1} + \alpha_7 CSIpro_{i,t-1} + \alpha_8 CSIcbi_{i,t-1} + \beta ROA_{i,t-1} + \gamma Debt_{it} + \varphi lnAsset_{it} + \theta lnSales_{it} + \phi lnEmploy_{it} + \mu_t + \nu_i + \varepsilon_{it} .$$

The only difference from specification (1) is that CSI is disaggregated into separate measures for each issue area in the KLD data. Recall, however, that to make uniform comparisons between years, the CSI measure for each issue area is standardized for each year. The value of

[4] We do not have a good explanation for why the relationship between CSI and CSR has the greatest magnitude in the hospital management industry, but, as we discuss later, this result is not robust to alternative specifications.

specification (2) is that we can estimate the partial effect of CSI in each dimension on overall CSR.

In parallel with the previous aggregated results, Table 5 reports the results of the pooled OLS, the between, and the fixed-effects estimators. The results of the pooled OLS and between models are again quite similar. With the exception of diversity, all dimension-specific CSI coefficients that are statistically different from zero have a positive sign. An increase in CSI with respect to the dimensions of corporate governance, community, environment, human rights, and product quality and safety all result in more overall CSR. In contrast, more CSI with respect to diversity results in less overall CSR, but this result does not hold up in the fixed-effects model, where fewer of the coefficients are statistically significant. The results that remain are those for corporate governance, community, and environment. One could argue that these dimensions of CSI tend to be the most salient in terms of media and public concern, especially over the period of our data that spans 1991 through 2005. Hence these results can be interpreted in support of the idea that CSR is responsive to CSI in the dimensions where public pressure is most present. Note that in terms of magnitudes, CSI with respect to corporate governance has the largest affect on overall CSR. The other results in Table 5 relate to the effects of observable company characteristics, and these, not surprisingly, are very close to those already discussed in Table 3.

The final component of our empirical analysis is a further investigation of the relationship between CSR and CSI within the different issue areas. Specifically, we examine whether CSR in one dimension is more or less responsive to CSI within the same dimension. To test for this, we now disaggregate the measure of overall CSR into its different dimensions, based on the KLD issue areas. We then estimate variants of specification (2) in which the left-hand-side variable is an issue-specific measure of CSR. For example, the model for corporate

governance has CSR for only corporate governance as the left-hand-side variable. We thus have seven different models corresponding to the different issue areas in the KLD data. In all models, the right-hand-side variables remain the same as those in specification (2).

We again focus on the preferred fixed-effects estimates, and Table 6 reports the results for all seven models. The highlighted cells contain the coefficients on the dimension of CSI that corresponds to the same dimension of CSR in the dependent variable. Within three issue areas, the results indicate a positive and statistically significant relationship. More CSI within the categories of community, environment, and human rights results in more CSR in the same category. The magnitude of the effect is strongest within the environment dimension. While we find no statistically significant effect for corporate governance, diversity, and product quality and safety, the relationship is negative and statistically significant for the employee category. While we have no good explanation for the employee relations result, it may be due to the way the employee relations category is constructed in the KLD Social Ratings data. The items in the strength and concern groups are mirror images of each other, far more so than any other category in the database. This leads to the relationship that whenever a company has a positive employee relations score, it is likely to have less of the negative employee relations score, and vice versa. But referring back to the issue areas with a positive relationship between CSR and CSI—i.e., community relations, environment, and human rights—these again are the categories of corporate social performance that one could argue are most salient to the public.

Another pattern that emerges quite strongly in the results of Table 6 is the inter-dimension effect of CSI with respect to corporate governance. While an increase in corporate governance CSI does not increase CSR in the same category, it does increase CSR in most other categories. The result is positive and statistically significant on CSR with respect to community, diversity,

employee, environment, and product quality and safety. One possible explanation for these results stems from the fact that decision-making about CSR is a corporate governance issue (see Johnson and Greening 1999; Hillman, Keim, and Luce 2001). Hence, when CSI arises about corporate governance—such as concerns about high compensation or low political accountability—those responsible for corporate governance seemingly choose to offset with CSR in other dimensions, rather than reform governance itself. Other categories of CSI that appear to cause increases in different CSR categories are community and environment, both of which we have argued are among the more salient dimensions of social concern. Community is related to human rights, environment is related to corporate governance, and both are related to employee relations.

There are, of course, many ways to estimate regression models in order to evaluate the relationship between CSR and CSI. While we have presented the results of models that we consider to produce the most reliable estimates, it is worth mentioning some alternative specifications that we have tried, but that have little effect on the main findings. Recall that we have used lagged values of CSI and ROA throughout in order to avoid potential endogeneity, whereby contemporaneous levels of CSR and CSI may be determined jointly and CSR may affect financial performance (see, for example, Baron, Harjoto, and Jo 2009). To evaluate the effect of using lagged variables, we estimated all models without lags, although we do not report the results because they are very similar to those discussed already. With respect to the fixed-effects estimates there are only three qualitative differences: the estimate of α in Table 4 for hospital management becomes statistically insignificant, the coefficient on $CSIpro_{it}$ in Table 5 becomes statistically significant, and the negative coefficient on $CSIdiv_{it}$ becomes statistically significant in the diversity equation in Table 6. More generally, however, the coefficients have

similar magnitudes regardless of whether or not we use lagged variables. This suggests that either contemporaneous endogeneity is not an important concern or using lagged variables is not an adequate correction. We side with the former explanation. With the lagged specifications, it seems less plausible that companies would increase CSI this year in anticipation of increasing CSR next year; for if this were the case, they could simply increase CSR immediately with perhaps greater effect.

Another possible critique, which is somewhat related, is that a single year is too short of a planning horizon over which to analyze company decisions relating CSI and CSR. We address this concern by estimating each of the models with a two-year lagged average of the CSI and ROA variables. Because this reduces the amount of observations included in the models even further, the magnitudes of the estimated coefficients change some, as does the statistical significance in some cases. Nevertheless, the overall pattern of results remains the same: CSI has a positive effect on CSR. It is also worth noting that a longer planning horizon is consistent with the results reported already for the between estimator. Because the estimator is based on time-averaged data for each company, it can be interpreted as treating all of the years as the same planning horizon and identifying the coefficients off of cross-sectional variation between companies. With this approach, as we have seen, the positive relationship between CSR and CSI remains.

4. Conclusion

This paper provides an empirical investigation of the hypothesis that companies engage in CSR in order to offset CSI. The idea is that CSI poses a financial liability that companies seek to minimize by compensating with CSR. Such a relationship is implied by the conceptualization of

corporate social performance in Heal (2005) and Baron (2001, 2003). We find general support for the causal relationship: when companies do more harm, they also do more good. The empirical analysis is based on an extensive 15-year panel dataset that covers nearly 3,000 publicly traded companies. In addition to the overall finding that more CSI results in more CSR, we find evidence of heterogeneity among industries, where the effect of CSI on CSR appears to be stronger in industries where CSI tends to be the subject of greater public scrutiny. We also investigate the degree of substitutability between different categories of CSR and CSI. Within the categories of community relations, environment, and human rights—arguably those dimensions of social responsibility that are the most salient—there is a strong within-category relationship. Within the category of corporate governance, however, the within-category relationship is weak, but CSI related to corporate governance appears to increase CSR in most other categories. Thus, when CSI arises about corporate governance, companies seemingly choose to offset with CSR in other dimensions, rather than reform governance itself.

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Table 1: List of the strength and concern items in the KLD Social Ratings Database

Category	*Strength Items*	*Concern Items*
Community (*com*)	Generous Giving	Investment Controversies
	Innovative Giving	Negative Economic Impact
	Support for Housing	Indigenous Peoples Relations ('00-'01)
	Support for Education (added '94)	Tax Disputes (added '05)
	Indigenous Peoples Relations (added '00, moved '02)	Other Concern
	Non-U.S. Charitable Giving	
	Volunteer Programs (added '05)	
	Other Strength	
Corporate Governance (*cgov*)	Limited Compensation	High Compensation
	Ownership	Tax Disputes (moved '05)
	Transparency/Communications (added '05)	Ownership
	Political Accountability (added '05)	Accounting (added '05)
	Other Strength	Transparency (added '05)
		Political Accountability (added '05)
		Other Concern
Diversity (*div*)	CEO	Controversies
	Promotion	Non-Representation
	Board of Directors	Other Concern
	Work/Life Benefits	
	Women/Minority Contracting	
	Employment of the Disabled	
	Gay & Lesbian Policies	
	Other Strength	
Employee Relations (*emp*)	Union Relations	Union Relations
	No Layoff Policy (ended '94)	Safety Controversies
	Cash Profit Sharing	Workforce Reductions
	Involvement	Pension/Benefits (added '92)
	Strong Retirement Benefits	Other Concern
	Health and Safety Strength (added '03)	
	Other Strength	
Environment (*env*)	Beneficial Products & Services	Hazardous Waste
	Pollution Prevention	Regulatory Problems
	Recycling	Ozone Depleting Chemicals
	Clean Energy	Substantial Emissions
	Transparency/Communications (added '96, moved '05)	Agricultural Chemicals
	Property, Plant, and Equipment (ended '95)	Climate Change (added '99)
	Other Strength	Other Concern

Table continued on next page.

Table 1: *Continued*

Category	*Strength Items*	*Concern Items*
Human Rights (*hum*)	Positive Operations in South Africa (added '94, ended '95) Indigenous Peoples Relations (added '02) Labor Rights (added '02) Other Strength	South Africa (ended '94) Northern Ireland (ended '94) Burma (added '95) Mexico (added '95, ended '02) International Labor (added '98) Indigenous Peoples Relations (added '00) Other Concern
Product Quality and Safety (*pro*)	Quality R&D/Innovation Benefits to Economically Disadvantaged Other Strength	Product Safety Marketing/Contracting Controversy Antitrust Other Concern
Controversial Business Issues (*cbi*)		Alcohol Gambling Tobacco Firearms Military Nuclear

Notes: All items are listed in their corresponding category. Unless otherwise indicated, the item has been included in the data from 1991-2005. Items that were add to the data or discontinued (i.e., ended) in intermediate years are indicated, as are the cases in which an item was moved from one category to another.

Table 2: Summary of companies included in the KLD dataset

Index	1991-2000	2001	2002	2003-2005
S&P 500	Yes	Yes	Yes	Yes
Domini 400 Social Index	Yes	Yes	Yes	Yes
Russell 1000 Index	--	Yes	Yes	Yes
Large Cap Social Index	--	--	Yes	Yes
Russell 2000 Index	--	--	--	Yes
Broad Market Social Index	--	--	--	Yes
Approximate total number of companies covered	650	1100	1100	3100

Source: KLD Research & Analytics, Inc. (2006)

Table 3: Pooled OLS, between, and fixed-effects estimates of specification (1)

	(1)	(2)	(3)
	Pooled OLS	Between	Fixed-effects
CSI_{t-1}	0.190***	0.152***	0.102***
	(0.030)	(0.019)	(0.024)
ROA_{t-1}	0.056	-0.012	0.005
	(0.065)	(0.072)	(0.044)
Debt	-0.398***	-0.264***	0.003
	(0.102)	(0.057)	(0.119)
lnAssets	0.180***	0.149***	0.144**
	(0.026)	(0.014)	(0.071)
lnSales	-0.023	-0.061***	-0.216**
	(0.024)	(0.016)	(0.085)
lnEmply	0.102***	0.031	0.098
	(0.031)	(0.019)	(0.083)
Year dummies	Yes	Yes	Yes
Observations	11,041	11,041	11,041
# companies	2,914	2,914	2,914
R-squared	0.19	0.16	0.34

Notes: The dependent variable is CSR_t. Standard errors are reported in parentheses. Standard errors in columns (1) and (3) are clustered on companies. One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Table 4: Industry specific fixed-effects estimates of α in specification (1)

SIC codes	*Companies*	*Category*	*Coef.*	*Std. Err.*	R^2	*Obs.*
1000 – 1799	136	Mining & Construction	0.026	(0.048)	0.24	529
2000 – 2399	97	Food, Textiles, Apparel	-0.095	(0.077)	0.41	487
2400 – 2799	99	Paper & Publishing	0.106	(0.089)	0.38	617
2800 – 2899	224	Chemicals & Pharmaceuticals	0.153*	(0.079)	0.51	887
2900 – 3199	45	Refining, Rubber, Plastic	-0.040	(0.106)	0.37	225
3200 – 3569	161	Heavy Manufacturing	0.114**	(0.055)	0.38	788
3570 – 3699	434	Computers & Precision Products	0.109*	(0.060)	0.38	1,568
3700 – 3799	57	Auto & Aerospace	0.177**	(0.071)	0.58	302
4000 – 4789	61	Transportation Services	0.007	(0.122)	0.47	253
4800 – 4991	211	Telephone & Utilities	0.102*	(0.061)	0.32	988
5000 – 5999	274	Wholesale & Retail	0.090*	(0.049)	0.37	1,150
6000 – 6799	657	Bank & Financial Services	0.127***	(0.047)	0.44	1,937
7000 – 7999	351	Hotel & Entertainment	0.176*	(0.090)	0.39	1,035
8000 – 8999	117	Hospital Management	0.263**	(0.123)	0.36	275

Notes: The dependent variable is CSR_t. The reported coefficient is for CSI. Other variables in specification one are included, although not reported. All standard errors clustered on companies. One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Table 5: Pooled OLS, between, and fixed-effects estimates of specification (2)

	(1)	(2)	(3)
	Pooled OLS	Between	Fixed-effects
$CSIcgov_{i,t-1}$	0.160***	0.135***	0.076***
	(0.020)	(0.020)	(0.014)
$CSIcom_{i,t-1}$	0.043**	0.053***	0.034**
	(0.021)	(0.019)	(0.015)
$CSIdiv_{i,t-1}$	-0.075***	-0.106***	0.003
	(0.018)	(0.015)	(0.013)
$CSIemp_{i,t-1}$	0.018	0.014	-0.003
	(0.018)	(0.017)	(0.013)
$CSIenv_{i,t-1}$	0.068**	0.060***	0.045*
	(0.031)	(0.019)	(0.024)
$CSIhum_{i,t-1}$	0.078***	0.110***	-0.003
	(0.024)	(0.019)	(0.017)
$CSIpro_{i,t-1}$	0.111***	0.132***	0.030
	(0.029)	(0.020)	(0.019)
$CSIcbi_{i,t-1}$	-0.026	-0.008	0.017
	(0.023)	(0.015)	(0.029)
ROA_{t-1}	0.068	0.007	0.012
	(0.061)	(0.070)	(0.046)
Debt	-0.340***	-0.209***	-0.002
	(0.098)	(0.056)	(0.114)
lnAssets	0.154***	0.121***	0.135*
	(0.025)	(0.014)	(0.070)
lnSales	-0.038*	-0.071***	-0.223**
	(0.023)	(0.016)	(0.087)
lnEmply	0.096***	0.018	0.110
	(0.031)	(0.019)	(0.082)
Year dummies	Yes	Yes	Yes
Observations	11,041	11,041	11,041
# companies	2,914	2,914	2,914
R-squared	0.22	0.21	0.35

Notes: The dependent variable is CSR_t. Standard errors are reported in parentheses. Standard errors in columns (1) and (3) are clustered on companies. One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.

Table 6: Category-specific fixed-effects estimates of specification (2)

	Corporate governance	Community	Diversity	Employee	Environment	Human rights	Product quality & safety
$CSIcgov_{i,t-1}$	0.002	0.051***	0.063***	0.044***	0.042**	0.005	0.030**
	(0.012)	(0.017)	(0.014)	(0.014)	(0.017)	(0.010)	(0.014)
$CSIcom_{i,t-1}$	-0.010	0.054**	0.022	0.035*	-0.013	0.067**	0.013
	(0.012)	(0.022)	(0.013)	(0.020)	(0.022)	(0.031)	(0.018)
$CSIdiv_{i,t-1}$	0.010	0.008	-0.006	0.009	-0.002	-0.003	0.016
	(0.013)	(0.015)	(0.012)	(0.017)	(0.015)	(0.016)	(0.016)
$CSIemp_{i,t-1}$	0.007	-0.004	0.011	-0.032**	-0.003	0.010	0.021
	(0.015)	(0.015)	(0.012)	(0.014)	(0.019)	(0.023)	(0.016)
$CSIenv_{i,t-1}$	0.059***	-0.027	-0.021	0.126***	0.122***	-0.009	-0.028
	(0.021)	(0.032)	(0.022)	(0.041)	(0.042)	(0.028)	(0.030)
$CSIhum_{i,t-1}$	0.007	0.020	-0.004	-0.026	0.000	0.078**	-0.024
	(0.018)	(0.020)	(0.017)	(0.020)	(0.026)	(0.037)	(0.016)
$CSIpro_{i,t-1}$	0.001	0.041	0.049**	-0.010	-0.002	0.004	0.012
	(0.018)	(0.026)	(0.020)	(0.022)	(0.037)	(0.042)	(0.030)
$CSIcbi_{i,t-1}$	-0.019	-0.017	0.025	0.021	0.034	-0.048	-0.062**
	(0.026)	(0.033)	(0.028)	(0.031)	(0.042)	(0.038)	(0.028)
ROA_{t-1}	-0.109	-0.023	0.020	0.069	-0.027	0.003	0.057
	(0.075)	(0.038)	(0.047)	(0.057)	(0.040)	(0.034)	(0.061)
Debt	-0.256**	0.048	0.101	-0.192	0.130	-0.141	-0.225
	(0.107)	(0.120)	(0.112)	(0.153)	(0.161)	(0.120)	(0.146)
lnAssets	0.073	0.055	0.121*	0.153**	-0.062	-0.055	0.042
	(0.059)	(0.078)	(0.070)	(0.066)	(0.088)	(0.064)	(0.078)
lnSales	-0.056	-0.160**	-0.216***	-0.069	-0.055	-0.097	-0.099*
	(0.042)	(0.076)	(0.082)	(0.060)	(0.090)	(0.066)	(0.051)
lnEmply	-0.106	0.354***	0.161*	-0.089	-0.132	0.185	-0.007
	(0.075)	(0.101)	(0.088)	(0.089)	(0.109)	(0.164)	(0.089)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,041	11,041	11,041	11,041	11,041	11,041	11041
# companies	2,914	2,914	2,914	2,914	2,914	2,914	2,914
R-squared	0.02	0.13	0.25	0.16	0.13	0.01	0.10

Notes: The dependent variable is CSR_t for the specific KLD issue area indicated in the column. Standard errors are reported in parentheses and are all clustered on companies. One, two, or three asterisks indicate statistical significance at the 10-, 5-, and 1-percent levels, respectively.