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Author(s): Sandra A. Waddock and Samuel B. Graves

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THE CORPORATE SOCIAL PERFORMANCE– FINANCIAL PERFORMANCE LINK

SANDRA A. WADDOCK and SAMUEL B. GRAVES

Wallace E. Carroll School of Management, Boston College, Chestnut Hill, Massachusetts, U.S.A.

Strategic managers are consistently faced with the decision of how to allocate scarce corporate resources in an environment that is placing more and more pressures on them. Recent scholarship in strategic management suggests that many of these pressures come directly from sources associated with social issues in management, rather than traditional arenas of strategic management. Using a greatly improved source of data on corporate social performance, this paper reports the results of a rigorous study of the empirical linkages between financial and social performance. Corporate social performance (CSP) is found to be positively associated with prior financial performance, supporting the theory that slack resource availability and CSP are positively related. CSP is also found to be positively associated with future financial performance, supporting the theory that good management and CSP are positively related. © 1997 by John Wiley & Sons, Ltd

INTRODUCTION

Strategic managers are consistently faced with the decision of how to allocate scarce corporate resources in an environment that is placing more and more pressures on them. Recent scholarship in strategic management suggests that many of these pressures are coming directly not from traditional concerns of strategic management but instead from concerns about social issues in management (see, for example, Prahalad and Hamel, 1994). Strategic resource allocation decisions have always been complex, but now they are even more so, since companies are assessed not only on the financial outcome of their decisions but also on the ways in which their companies measure up to a broader set of societal expectations.

Prahalad and Hamel (1994) indicate that influences on strategic decisions now come from influences that go well beyond traditional indus-

try-based competitive forces identified by Porter (1980). Changing customer expectations, regulatory shifts, problem of excess capacity (and presumably the associated employees), and environmental concerns are now becoming important influences on strategy (Prahalad and Hamel, 1994). These emerging influences on strategic decision making are the result of the impact of different stakeholder expectations (Freeman, 1984) and a company's interactions with a range of stakeholders arguably comprise its overall corporate social performance record (cf. Wood, 1991a, 1991b; Waddock, 1996). To illustrate the importance of such influences on companies, it should be noted that investors now hold some \$650 billion in social investment funds. Within many of the investment houses that run these so-called socially responsible investment funds are analysts who carefully screen potential investments both on financial and social performance criteria.

Further, watchdog groups like the Council on Economic Priorities (CEP) have long evaluated company performance on a range of social dimensions. In recent years CEP has produced a widely

Key words: corporate social performance; social responsibility; financial performance; management quality

disseminated guide called 'Shopping for a Better World' that interested consumers use to help guide purchasing decisions. More recently independent services have sprung up that evaluate companies' social performance across a broad range of 'social' activities and sell that information to the investment community. As a result, these ratings are now available to the investment community as input to investor decisions. These ratings services seem to be having an effect on some investment decisions, which is evident in research that shows that institutional investors are favorably inclined toward companies with higher corporate social performance when other factors are held constant and independent information about CSP is available (Teoh and Shiu, 1990; Graves and Waddock, 1994).

Despite these developments, the linkages between CSP and financial performance are still far from clear (Ullman, 1985). Results of empirical work indicate an ambiguous relationship (e.g., Alexander and Buchholz, 1982; Aupperle, Carroll and Hatfield, 1985; Ullman, 1985; Shane and Spicer, 1983). Further, even when a positive link is established (e.g., Wokutch and Spencer, 1987; McGuire, Schneeweiss and Sundgren, 1988), it is still unclear whether financially successful companies simply have more resources to spend on CSP and therefore attain a higher standard (a slack resources theory) or whether better performance along various dimensions of CSP itself results in better financial outcomes (which we will characterize as good management theory) (McGuire *et al.*, 1988; Ullman, 1985).

Using a greatly improved source of data on corporate social performance, this paper reports the results of a rigorous study of the empirical linkages between financial and social performance. With a broad-based index of corporate social performance, we test whether there is a positive relationship between CSP and financial performance and whether both slack resource and good management theory may be operating simultaneously.

THE MEASUREMENT PROBLEM

One fundamental reason for the uncertainty about the relationship between CSP and financial performance is that a serious problem has plagued researchers to date: the problem of measuring

CSP. CSP is a multidimensional construct, with behaviors ranging across a wide variety of inputs (e.g., investments in pollution control equipment or other environmental strategies), internal behaviors or processes (e.g., treatment of women and minorities, nature of products produced, relationships with customers), and outputs (e.g., community relations and philanthropic programs) (see Wood, 1991a, 1991b; Aupperle *et al.*, 1985; Wolfe and Aupperle, 1991; Aupperle, 1991; Miles, 1987; Gephart, 1991). These behaviors also occur across a wide range of industries with significantly different characteristics, histories, and performance in the different CSP domains (see Waddock and Graves, 1994). Further, numerous issues, managerial decisions, and corporate behaviors are encompassed by the term CSP (Wood, 1991a, 1991b; Lydenberg, Marlin, and Strub, 1986). As a result, little clarity has been reached on measurement of CSP, and the measures used in empirical work have frequently been one-dimensional, and have been applied to small samples of companies. There is a clear need for a multidimensional measure applied across a wide range of industries and larger samples of companies.

CSP measures used in the past have included forced-choice survey instruments (Aupperle, 1991; Aupperle *et al.*, 1985), the *Fortune* reputational and social responsibility index or Moskowitz' reputational scales (Bowman and Haire, 1975; McGuire *et al.*, 1988; O'Bannon and Preston, 1993), content analysis of documents (Wolfe, 1991), behavioral and perceptual measures (Wokutch and McKinney, 1991), and case study methodologies resembling social audits (Clarkson, 1991). In some instances social disclosure has been used as a surrogate for CSP (e.g., Preston, 1978; Abbott and Monson, 1979; Ingram, 1978). Pollution control investments are another frequently used one-dimensional measure (e.g., Bowman and Haire, 1975; Chen and Metcalf, 1980; Spicer, 1978; Shane and Spicer, 1983).

Each of these measurements, while offering some benefits, has limitations. Survey methodologies have problems relating to return rates and consistency of raters across a variety of firms. The *Fortune* rating of CSP tends to be viewed as a measure of overall management of a firm rather than being specific to CSP. Further, it is highly correlated with other measures. Content analysis of existing documents, while yielding

valuable insights into corporate behavior, depends to a large extent on the comprehensiveness and purposes for which the documents were originally created and can be biased by omission or inclusion. Case study methodologies, by their nature, can be applied to only a limited sampling of companies; further, although significant progress has been made (e.g., Clarkson, 1991), there are problems of consistency across cases studied by different research teams. Social disclosure and pollution control investments are unidimensional measures. Thus, many measures are either unidimensional and may not properly reflect the overall level of a company's CSP or they are difficult to apply consistently across the range of industries and companies that need to be studied.

So problematic has been the measurement problem that an entire section of the annual research volume *Research in Corporate Social Performance and Policy* was devoted to this topic (see Wolfe and Aupperle, 1991, for the introduction to this special section). The research we report in this paper attempts to overcome some of the measurement problems that in the past have hindered examination of the strategic links between firms' CSP and financial performance.

As noted, many empirical studies of CSP tend to focus on only one or two areas of social performance while ignoring the rest. It is difficult to construct a truly representative CSP measure in part because of its complexity and because measurements of a single dimension provide too limited a perspective on how well a company is actually performing in the relevant social domains (Lydenberg *et al.*, 1986; Wolfe and Aupperle, 1991). In part because of the measurement difficulties, previous findings on the relationship between profitability and corporate social performance have been mixed. Some find tenuous positive linkages (McGuire *et al.*, 1988; McGuire, Schneeweiss and Branch, 1990; Aupperle *et al.*, 1985), others find clear positive relationships (Cochran and Wood, 1984), while others document negative linkages (Shane and Spicer, 1983). It is simply unclear at this point whether linkages between financial performance and CSP exist, and if so whether they are positive or negative (Aupperle *et al.*, 1985). Ullman provides a comprehensive review of the mixed results up to 1985, concluding, in fact, that 'the situation pertaining to relationships among social performance, social disclosure, and economic performance can

best be characterized at this time as empirical data in search of an adequate theory' (1985: 555).

HYPOTHESES

In forming our hypotheses, it is evident that there are two issues to address: (1) the sign of the relationship, and (2) the direction of causation (O'Bannon and Preston, 1993). The sign of the relationship may indicate negative, neutral, or positive linkages between CSP and financial performance. Separately, it is possible that changes in CSP influence financial performance, or the opposite, that change in financial performance influence CSP. Together, these two issues result in a total of six possible hypotheses (O'Bannon and Preston, 1993). Below we recount the arguments for these different hypotheses.

Negative association

Those arguing for a negative relationship between social and financial performance believe that firms that perform responsibly incur a competitive disadvantage (Aupperle *et al.*, 1985) because they are incurring costs that might otherwise be avoided or that should be borne by others (e.g., individuals or government). An example of this kind of action would be the decision to invest in pollution control equipment when other competitors do not. According to this line of thinking, which is fundamental to Friedman's (1970) and other neoclassical economists' arguments, there are few readily measurable economic benefits to socially responsible behavior while there are numerous costs. The costs, by this argument, fall directly to the bottom line, reducing profits and thus shareholder wealth. These theorists expect the relationship between CSP and financial performance to be negative.

Neutral association

The empirical results to date lend themselves to a second possibility: that there is simply no relationship, positive or negative, between social and financial performance. Proponents of this line of reasoning (e.g., Ullman, 1985) argue that there are so many intervening variables between social and financial performance that there is no reason to expect a relationship to exist, except possibly

by chance. On the other hand, the measurement problems that have plagued CSP research may mask any linkage that exists.

Positive association

The third perspective, based on stakeholder analysis, proposes that a tension exists between the firm's explicit costs (e.g., payments to bondholders) and its implicit costs to other stakeholders (e.g., product quality costs, environmental costs). This theory predicts that a firm that attempts to lower its implicit costs by socially irresponsible actions will, as a result, incur higher explicit costs, resulting in competitive disadvantage. According to this argument, then, there is a positive relationship between CSP and financial performance.

A compatible view is that the actual costs of CSP are minimal and the benefits potentially great. For example, an enlightened employee relations policy may have a very low cost, but can result in substantial gains in morale and productivity, actually yielding a competitive advantage in comparison to less responsible firms. Firms that are reported in lists of 'best companies to work for', for example, may find it easier to recruit top quality employees, possibly resulting in increases in productivity at relatively low cost (e.g., Moskowitz, 1972). Although this argument is a fundamentally normative one, there is a recent emphasis in strategic management on the construction of meaningful strategies that emphasize the importance of core values to which employees and other key stakeholders can relate. Sometimes this 'meaning-making' is called strategic intent (e.g., Hamel and Prahalad, 1989). Others term it purpose (Bartlett and Ghoshal, 1994) or enterprise strategy, which is explicit about what the corporation 'stands for' in the linkages between its values and strategy (Freeman and Gilbert, 1988).

In any case, strategic postures with an overlay of social and other normatively defined purposes have historically been held in low regard as possible sources of competitive advantage. These new ideas in strategic management, however, suggest that such socially embedded purposes and strategic postures may be related to positive strategic outcomes in important ways. By extension, such purposes may have positive impact on financial performance as well.

Finally, some take the position that high levels of CSP are indicators of superior management skill, and thus lead to lower explicit costs (Alexander and Buchholz, 1982), a perspective that would tend to be supported by the high correlations among *Fortune's* indicators of good management and social performance. The weight of these arguments about the potential positive benefits of CSP suggests to us that the sign of any relationship between financial and social performance will be positive, hence we will hypothesize that the relationship between social and financial performance is a positive one.

DIRECTION OF CAUSALITY: SLACK RESOURCES OR GOOD MANAGEMENT?

The second aspect of the CSP–financial performance relationship has to do with the direction of causality. Two views, mentioned earlier, can be contrasted and tested empirically. We will call the first the slack resources theory and the second the good management theory.

Slack resources

Slack resource theorists argue that better financial performance potentially results in the availability of slack (financial and other) resources that provide the opportunity for companies to invest in social performance domains, such as community relations, employee relations, or environment (e.g., IBM's or Digital Equipment Corporation's philanthropy programs during earlier good times). If slack resources are available, then better social performance would result from the allocation of these resources into the social domains, and thus better financial performance would be a predictor of better CSP. Some of the empirical evidence, particularly that of McGuire and colleagues (1988, 1990), provides support for the slack resources theory.

Good management

Good management theorists argue, alternatively, that there is a high correlation between good management practice, and CSP, simply because attention to CSP domains improves relationships with key stakeholder groups (e.g. Freeman,

1984), resulting in better overall performance. For example, good employee (including women and minorities) relations might be expected to enhance morale, productivity, and satisfaction. Excellent community relations might provide incentives for local government to provide competition-enhancing tax breaks (e.g., Dayton Hudson's anti-takeover campaign), improved schools (and a better workforce over the long term), or reduced regulation, thereby reducing costs to the firm and improving the bottom line.

Further, positive customer perceptions about the quality and nature of a company's products, its environmental awareness, and its government and community relations, are increasingly becoming bases of competition (cf. Prahalad and Hamel, 1994), blurring the lines between good management practice and 'social' performance. Such positive perceptions of the firm by outside stakeholders may lead to increased sales or reduced stakeholder management costs. The work of McGuire and colleagues (1988, 1990) also supports the good management theory in that it provides empirical support for financial performance as the dependent variable.

Following these latter findings and based on McGuire *et al.* (1990), we hypothesize that CSP is both a predictor *and* consequence of firm financial performance. That is, there is a simultaneous relationship, or a kind of 'virtuous circle', such that:

Hypothesis 1: Better financial performance results in improved CSP, ceteris paribus.

Hypothesis 2: Improved CSP leads to better financial performance, ceteris paribus.

METHOD

Measuring CSP

To deal with the measurement problems noted above, we constructed an index of CSP (as proposed by Ullman, 1985), based on the eight corporate social performance attributes rated consistently across the entire Standard and Poors 500 by the firm Kinder, Lydenberg, Domini (KLD).¹

KLD is an independent rating service that focuses exclusively on assessment of corporate social performance across a range of dimensions related to stakeholder concerns.

KLD's rating scheme makes several advances beyond those used in earlier research. First, all companies in the S&P 500 are rated. Second, each company is rated on multiple attributes considered relevant to CSP. Third, a single group of researchers, working independently from the rated companies or any particular brokerage house, applies the same set of criteria to related companies. Fourth, the criteria are applied consistently across a wide range of companies, with data gathered from a range of sources, both internal and external to the firm.

As noted, KLD rates companies on eight attributes of CSP, providing a multidimensional assessment. Five of the rated attributes emphasize key stakeholder relations that might be included among those emphasized as important emerging influences on corporate strategy (Prahalad and Hamel, 1994), specifically, community relations, employee relations, performance with respect to the environment, product characteristics, and treatment of women and minorities. These five are rated on scales ranging from -2 (major concerns) to neutral to +2 (major strength). Three of the attributes are less directly related to stakeholder groups but encompass areas in which companies have received significant external pressures in recent years. These areas are military contracting, participation in nuclear power, and involvement in South Africa (relevant during the time period of analysis); these are rated only from -2 (major concern) to 0 (neutral) because KLD awards no positive assessment of activities in these domains.

In each of the areas, KLD investigates a range of sources to determine, for example, whether the company has paid fines or penalties in an area (for concerns) or has major strengths in the area (e.g., strong family policies for the Employee Relations category). Appendix 1 provides details on the factors used in determining ratings for each of the eight categories. Where possible, KLD uses quantitative criteria to determine the rating (e.g., dollar amount paid in fines or penalties; percentage of employees receiving certain kinds of benefits). Judgement is necessary, of course, in the determination of the cutoff point for a negative rating, as well as in borderline

¹ Data source: Kinder, Lydenberg, Domini & Co. Inc., 129 Mt Auburn St, Cambridge, MA 02138, U.S.A.

case and in interpretation of qualitative criteria (e.g., an excellent employee or community relations program). KLD staff members meet on a weekly basis to discuss borderline cases and assure that decisions on ratings are being made in a consistent manner across companies and from year to year.

KLD uses a variety of sources to capture social performance data about each company. Each company's investor relations office is sent a yearly questionnaire about CSP practices and KLD maintains continuing relations with investor relations offices to assure the accuracy of data. KLD maintains the independence and integrity of its ratings, but the firm is willing to respond to company concerns where accuracy is at issue. Corporate data sources include annual reports, 10K forms, proxy statements, and quarterly reports, as well as reports issued for specific CSP arenas, such as environment and community. External data sources include articles about a company in the general business press (e.g. *Fortune*, *Business Week*, *Wall St. Journal*), trade magazines, and general media. KLD staffers also draw on relevant articles on companies from periodicals such as the *Chronicle of Philanthropy*, regional Environmental Protection Agency newsletters, academic journals, and, for legal or regulatory issues, such as fines and penalties, the *National Law Journal*. External surveys and ratings are also used, where appropriate, for instance *Working Mother's* listing of the 100 best companies for women to work for.

Each attribute in the KLD scheme is implicitly given equal weighting, ranging from major concern (2 X's), concern (1 X), no concern (neutral), to strength and major strength. In our weighting scheme, major concern was given an index of -2, while major strength equaled +2. Because experts on CSP consider certain attributes to be more important to an overall assessment of CSP than others at any given time (Preston and Post, 1975), the authors developed a panel of three experts from the Social Issues in Management division of the Academy of Management, who had been active in the social issues arena for more than 15 years, and asked them to help construct an appropriate weighting scheme for the index.

Using the simple multiattribute rating technique (SMART) (Von Winterfeldt and Edwards, 1986), we asked each panelist to evaluate the eight CSP

attributes, perform trade-offs among the attributes, then construct a scale. Values from 0 to 100 were derived, representing the relative importance of each attribute to the overall index. Normalized values were averaged across the panelists and a weighted average CSP index was computed for each company. A Friedman's nonparametric analysis of variance indicated that the ratings of each panelist were not significantly different from each other. The index developed is statistically the same as that used by Ruf, Muralidhar and Paul (1993) and reported in Graves and Waddock (1994).

We believe that this weighting scheme deals with the problem of shifting of the relative importance of items in the KLD rating over time and with changing social standards (cf. Preston and Post, 1975). For example, South Africa, nuclear, and military involvement, which carry low weight in the index, seem in terms of face validity to have relatively less importance to the currently emerging construct of CSP than do the more stakeholder-oriented measures of community, product, employee relations, diversity (women and minority), and environment. The actual weighting by our panel of experts reflects this common sense.

Raw CSP data were taken from KLD as of 1990. For the models that treated CSP as a dependent variable, financial data from 1989 were used. For the models that treated financial performance (profitability) as the dependent variable, we took profitability in 1991 as the dependent variable and used 1990 data for CSP and control variables.

Control variables

Because size, risk, and industry have been suggested in previous articles to be factors that affect both firm performance and CSP (e.g., Ullman, 1985), each of these characteristics was operationalized as a control variable. Size is a relevant variable because there is some evidence that smaller firms may not exhibit as many overt socially responsible behaviors as do larger firms. Perhaps this is the case because as they mature and grow, firms attract more attention from external constituents and need to respond more openly to stakeholder demands (cf. Burke *et al.*, 1986). Management's risk tolerance influences its attitude toward activities that have the potential to

(1) elicit savings (e.g., a recycling or waste reduction effort, costly at first but potentially money saving in the long run, such as 3M Corporation's Pollution Prevention Pays program; (2) incur future or present costs (e.g., pollution control equipment that helps avoid future fines), or (3) build (environmentally friendly firm) or destroy (perceived as unfriendly to certain types of people) markets. As a proxy for management's risk tolerance, we use the level of debt held by the firm.

Finally, earlier research (Graves and Waddock, 1994) has shown that clear differences in performance and levels of R&D investment exist among different industries. A quick scan of Table 1 suggests that unless the overall differences in CSP among industries are controlled for, understanding the main effects may be blurred, since depending on its characteristics, an industry may or may not experience significant problems in a given social arena. Controlling for industry takes these differences into account.

Firm size was measured by total assets and by total sales. As a proxy for the riskiness of a firm, we used the long-term debt to total assets ratio. Industry was determined by 4-digit SIC (see Table 1) and represented in the model by dummy variables. All financial data were derived from COMPUSTAT tapes.

Financial performance

Firm financial performance (profitability) was measured using three accounting variables: return

on assets, return on equity, and return on sales, providing a range of measures used to assess corporate financial performance by the investment community.

Analysis

Table 1 gives a listing of the industries, SIC codes, and average industry CSP ratings, Table 2 gives descriptive statistics for all variables used in the study, and Table 3 gives the relative weights assigned to each CSP attribute. Regression analysis was used to test our hypotheses, first using CSP as the dependent variable, while controlling for size (three size measures were used: total sales, total assets, and number of employees), debt level, and industry, then using profitability as the dependent variable and employing the same control variables.

Table 2. Descriptive statistics

Variable	N	Mean	S.D.
CSP Index	469	−0.034	0.356
Return on assets	486	0.055	0.058
Return on equity	486	0.139	0.283
Return on sales	486	0.059	0.073
Debt/asset ratio	486	0.203	0.174
Total sales	486	6416.37 M\$	11133.74 M\$
Total assets	486	11444.75 M\$	23598.73 M\$
No. employees	467	39.646 thous	64.358 thous

Table 1. Industries in the sample

Industry	SIC	N	CSP	Min.	Max.
Mining, construction	100–1999	17	−0.22	−0.93	0.14
Food, textiles, apparel	2000–2390	29	0.05	−0.57	0.90
Forest products, paper, publishing	2391–2780	35	−0.03	−0.77	0.78
Chemicals, pharmaceuticals	2781–2890	39	−0.15	−1.17	0.75
Refining, rubber, plastic	2891–3199	24	−0.52	−0.68	0.51
Containers, steel, heavy mfg.	3200–3569	51	−0.14	−0.77	0.46
Computers, autos, aerospace	3570–3990	80	−0.11	−1.13	0.92
Transportation	3991–4731	15	−0.09	−0.62	0.75
Telephone, utilities	4732–4991	56	−0.00	−0.80	0.90
Wholesale, retail	4992–5990	47	0.11	−0.32	0.75
Bank, financial services	6150–6700	51	0.13	−1.08	0.75
Hotel, entertainment	6800–8051	18	0.04	−0.47	1.06
Hospital management	8052–8744	7	−0.04	−0.30	0.31

Table 3. Weightings of CSP attributes by expert panel^a

Weight	Attribute
0.168	Employee relations
0.154	Product
0.148	Community relations
0.142	Environment
0.136	Treatment of women and minorities
0.089	Nuclear power
0.086	Military contracts
0.076	South Africa

^aThese weightings represent the summary evaluations of a panel of three CSP experts of the relative importance of each of the attributes included within the CSP index.

RESULTS

A total of 469 companies remained in the sample after companies missing either financial or CSP data were eliminated. As can be seen in Table 1, there are considerable differences in the ratings among industries, with the lowest CSP rated industry being refining, rubber, and plastic (SIC 2891-3199) at -0.52 . Other heavy manufacturing and extraction industries (e.g., mining, construction at -0.22 , chemicals and pharmaceuticals at -0.15 and containers, steel, and heavy manufacturing at -0.14) also rated considerably lower than less manufacturing-intensive industries, which scored much higher on the CSP rating (e.g., banking and financial services at 0.13 and wholesaling and retailing at 0.11). Note from Table 1 that most industries (9 out of 13) were rated below 0 on the overall CSP scoring and that only those industries not engaged in activities as likely to have significant CSP consequences (e.g., environmental impact or community, employee, and product-related issues) were rated positively on overall CSP. These descriptive results indicate the importance of controlling for industry in the assessment of the relationship between financial and CSP performance.

Table 3 shows the panel's weighting of the CSP attributes in the KLD data base. As can be seen, employee relations, product, community relations, environment, and treatment of women and minorities (now called diversity) were considered more important than the three issues of nuclear power, military contracts, and South Africa, which today would likely not be considered important at all. The data are from 1990,

however, when South Africa was still an issue. These panelist ratings are consistent with other research on stakeholder rankings of the KLD data (Ruf *et al.*, 1993; Graves and Waddock, 1994) as well as assessments of the validity of the KLD rankings compared to other potential measures of CSP (e.g., Sharfman, 1993).

Table 4 provides the correlation matrices for the key variables. Table 4(a) shows 1989 financial data and 1990 CSP. These data were used for the models which treated CSP as the dependent variable. Table 4(b) shows correlations between 1991 profitability (ROA, ROE, ROS) and 1990 CSP and financial controls. These data were used for the models which treated financial performance (profitability) as the dependent variable. Note first that CSP is positively and significantly correlated at $p < 0.10$ or better with all three of the financial performance measures (ROA, return on assets; ROE, return on equity; ROS, return on sales) for the 1989 financial data, and with those measures at the $p \leq 0.05$ level or better for the correlations with the 1991 financial data. Further, we can see from Table 4 that the three financial variables are highly correlated with each other (at $p < 0.001$ for all three variables), as would be expected.

Table 5 presents the results of the regression analysis using CSP as the dependent variable and financial performance as the independent variable, controlling for debt, size, and industry (industry controls are omitted from the table in the interest of space), using a 1-year lag between the financial performance (1989 data) and the CSP measurement (1990 data). In all nine of these models, corporate social performance is the dependent variable and measurement of the key independent variable, financial performance, varies. Models 1–3 present the result using ROA as the key independent variable and controlling for debt, industry, and size (with size measured three ways, yielding the different models).

As can be seen (Table 5), each of the models is significant overall at the $p < 0.001$ level and CSP as the dependent variable is seen to be strongly related to the ROA at $p < 0.001$ for all the models as well. The results are less strong, but still significant at $p < 0.10$ when the financial variable used is ROE (Models 4–6) and at $p < 0.05$ when the independent financial variable is return on sales (Models 7–9). These results strongly support Hypothesis 1, which posits that

Table 4(a). Correlation matrices: Correlations with 1989 financial data and 1990 CSP

	CSP	ROA	ROE	ROS	LD/A	Sales	Assets	No. empl.
CSP	1.00	0.13**	0.09*	0.08+	−0.08+	−0.02	0.08+	0.02
ROA		1.00	0.47***	0.71***	−0.22***	−0.08+	−0.23***	−0.05
ROE			1.00	0.41***	−0.09*	0.02	−0.05	0.03
ROS				1.00	−0.14**	−0.06	−0.08+	−0.06
D/A					1.00	−0.01	−0.09*	0.04
Sales						1.00	0.70***	0.81***
Assets							1.00	0.51***

+ $p \leq 0.1$; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Table 4(b). Correlations with 1991 profitability, 1990 CSP, and 1990 financial controls

	CSP	ROA	ROE	ROS	LD/A	Sales	Assets	No. empl.
CSP	1.00	0.18***	0.09*	0.17***	−0.12**	−0.01	−0.08+	0.02
ROA		1.00	0.45***	0.82***	−0.24***	−0.06	−0.15**	−0.05
ROE			1.00	0.45***	−0.15**	0.02	0.01	0.01
ROS				1.00	−0.21***	−0.06	−0.01	−0.07
Lagged debt/assets					1.00	−0.00	−0.09+	0.05
Lagged sales						1.00	0.70***	0.78***
Lagged assets							1.00	0.53***

+ $p \leq 0.1$; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$.

better financial performance leads to improved CSP. CSP is negatively related to debt-to-asset ratio in each of the first nine models, but is only significant ($p < 0.10$) when ROE is used. Size shows no significant relationship in any of these models; its sign is negative in all but two instances.

Our second hypothesis proposed that improved CSP results in improved financial performance. Using a 1-year lag for financial performance (1991 data) and the 1990 CSP data (and 1990 financial control variables), we performed a set of regression analyses using the financial performance variables, ROA, ROE, and ROS as the dependent variables and CSP as the independent variable, while again controlling for debt, size (measured three ways), and industry. As can be seen (Table 6), the results generally support the hypothesis that financial performance depends on CSP. In the ROA models (Models 1–3) there is a significant relationship between ROA and CSP ($p < 0.01$) when size is measured by sales; $p < 0.001$ when size is measured by total assets;

and $p < 0.01$ when size is measured by number of employees.

When profitability is measured by ROE, the relationship, while in the same direction, is not significant (Models 4–6); however, when the financial variable ROS is used, each model is significant at the $p < 0.05$ level (Models 7–9). In these models there is a consistently negative and significant relationship between debt-to-asset ratio and CSP. The size effect is significantly negative in the first three models, and negative in all but two cases.

DISCUSSION AND CONCLUSIONS

This study has attempted to address what has become a perennial question: whether corporate social performance is linked to financial performance and, if so, in what direction the causation runs. In undertaking the study, we are exploring whether or not strategic linkages exist between CSP behaviors and financial performance. Using

Table 5. Regression analysis using 1990 CSP as the dependent variable and 1989 financial data as independent variables

<i>Dependent variable: Corporate social performance</i>	Model 1	2	3
Independent variable: ROA	1.189***	1.206***	1.225***
<i>Control variables</i>			
Debt/total assets	-0.079	-0.079	-0.079
Total sales	-0.722E-6		
Total assets		-0.903E-7	
Number of employees			0.962E-4
R^2	0.11	0.11	0.11
Adj. R^2	0.08	0.07	0.08
F	3.443***	3.426***	3.435***
	4	5	6
Independent variable: ROE	0.110 ⁺	0.108 ⁺	0.109 ⁺
<i>Control variables</i>			
Debt/total assets	-0.173 ⁺	-0.176 ⁺	-0.175 ⁺
Total sales	-0.136E-5		
Total assets		-0.453E-6	
Number of employees			-0.721E-5
R^2	0.09	0.09	0.09
Adj. R^2	0.06	0.06	0.06
F	2.884***	2.844***	2.822***
	7	8	9
Independent variable: Return on sales	0.597*	0.602*	0.614*
<i>Control variables</i>			
Debt/total assets	-0.152	-0.154	-0.154
Total sales	-0.113E-5		
Total assets		-0.355E-6	
Number of employees			0.292E-4
R^2	0.09	0.09	0.09
Adj. R^2	0.06	0.06	0.06
F	2.940***	2.911***	2.899***

* $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

a greatly improved source of CSP assessment, we evaluated the linkage between financial and social performance when CSP was *both* a dependent and independent variable. Our data set included most the S&P 500 firms.

In support of those studies that have found positive linkages in the past (e.g., Cochran and Wood, 1984; McGuire *et al.*, 1988, 1990; Aupperle *et al.*, 1985), we found, using this improved measure, that CSP does depend on financial per-

formance and that the sign of the relationship is positive. That is, in support of the slack resources theory, firms with slack resources potentially available from strong financial performance may have greater freedom to invest in positive CSP. Thus, it may well be that firms with available resources may choose to spend those resources on 'doing good by doing well', and that those resource allocations may result in improved CSP overall.

Table 6. Regression analysis with 1991 financial performance (profitability) as dependent variable and 1990 CSP as the key independent variable with 1990 financial control variables

<i>Dependent variable: Return on assets</i>	Model 1	2	3
Independent variable: CSP	0.024**	0.024***	0.024**
<i>Control variables</i>			
Debt/total assets	−0.120***	−0.121***	−0.117***
Total sales	−0.502E−6*		
Total assets		−0.298E−6*	
Number of employees			−0.953E−4*
R^2	0.29	0.29	0.29
Adj. R^2	0.27	0.27	0.27
F	11.558***	11.593***	11.549***
<i>Dependent variable: Return on equity</i>	4	5	6
Independent variable: CSP	0.081	0.081	0.081
<i>Control variables</i>			
Debt/total assets	−0.471***	−0.471**	−0.472**
Total sales	0.136E−6		
Total assets		−0.194E−7	
Number of employees			0.500E−4
R^2	0.07	0.07	0.07
Adj. R^2	0.04	0.04	0.04
F	2.200**	2.199**	2.201**
<i>Dependent variable: Return on sales</i>	7	8	9
Independent variable: CSP	0.021*	0.021*	0.022*
<i>Control variables</i>			
Debt/total assets	−0.115***	−0.116***	−0.113***
Total sales	−0.427E−6		
Total assets		−0.137E−6	
Number of employees			−0.784E−4
R^2	0.20	0.20	0.20
Adj. R^2	0.17	0.17	0.17
F	6.994***	6.853***	6.976***

* $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Clearly, firms that are in financial trouble may have little ability to make *discretionary* investments in traditional CSP activities such as philanthropy, while those doing well financially have resources to spend in ways that may have more long-term strategic impacts, such as investments in improved local schools or community conditions to improve a workforce. Such resource allocations may be strategically linked to improvements in long-term image and relation-

ships with the communities with which it must interact. If, as will be discussed below, CSP is redefined to encompass critical stakeholder relations, as the measure used in the present study does, then expenditures on CSP activities are far from discretionary and may actually be strategic because they encompass daily corporate life.

Further, we found (in a kind of simultaneous relationship) that financial performance *also* depends on good social performance, suggesting

that there is something about performing well in social arenas that may be simply linked to good managerial practice. Thus, in support of what we termed the 'good management theory', firms may also 'do well by doing good', to turn the phrase used above. This finding provides support for researchers using the *Fortune* reputational index in the past (McGuire *et al.*, 1988, 1990; O'Bannon and Preston, 1993), who have implicitly suggested that there may be a linkage between good management and good social performance.

A virtuous circle?

As we consider the relationship between the first and second hypothesis, we can begin to speculate that wherever the cycle begins, whether in an initial availability of slack resources or in initial attention to the social performance dimensions, there *may* be a simultaneous and interactive impact, possibly forming what we earlier termed a virtuous circle. The impact appears to be positive: better CSP, based on these findings, seems to be positively related to better financial performance, whichever measure we choose as the dependent variable. We interpret this finding to mean that causation may run in both directions. That is, better financial performance may lead to improved CSP. Also, better CSP may lead to improved financial performance, *ceteris paribus*. The first finding, if upheld in future research, would be explained by the slack resources theory.

The second finding is somewhat more difficult to explain. At this point in the research, we can forward only tentative, yet plausible, explanations. First, meeting stakeholder expectations in advance of their becoming problematic may simply reflect proactive attention to domains that others (Prahalad and Hamel, 1994) have recognized as becoming increasingly important. Such concerns reflect a variety of *stakeholder* interests, thereby aligning stakeholder interests more closely to the very definition of CSP than previous research has done and making these stakeholder relations more prominent in the link to financial performance. Importantly, the heavier weights in the CSP index are those that most closely represent critical stakeholders, such as employees, customers, and community, while less directly stakeholder-related categories of involvement in nuclear industries, military contracting, or South Africa receive considerably less weight.

Alternatively, the positive finding may represent (at least initially) simple 'posturing' on the part of companies to improve their external reputations, possibly boost employee morale, and improve investor relations, and hence may not be real at all. According to this explanation, good managers may not be fully committed to improved CSP, but they may recognize that certain benefits may be gained by *appearing* to support social performance goals. Such managers might pursue social performance goals just enough to avoid significant bad publicity, but may do so at a minimum investment. Although this possibility is somewhat obviated by the higher weights on the key stakeholder relationships encompassed by the CSP measure, it does remain a possibility until these relationships are explored in more depth.

Although the comprehensiveness of the KLD data on CSP mitigate somewhat the posturing hypothesis because the data are gathered across such a wide range of activities and behaviors, it is entirely possible firms wishing to appear socially responsible will *initially* engage in posturing behaviors only to find that over time, they have actually *institutionalized* cultural or strategic changes in what Mintzberg (1987) has termed emergent strategy. We can speculate, for example, that CSP expenditures, whether derived from real strategic intent or posturing behaviors, may, once implemented, result in *actual* improved attention to key external and internal stakeholders, such as customers (via products that meet real needs), communities and the environment, or employees, including women and minorities. Alternatively, they may provide benefits beyond their costs that are eventually reflected in financial performance.

Our findings indicate minimally that attention to CSP arenas does not represent a competitive disadvantage and may in fact be a competitive advantage. If, for example, better performance along CSP dimensions allows companies to attract better employees more easily, forego difficult and costly battles for site placement with communities or governmental officials, or avoid payments of fines for environmental problems, then potentially we are changing the definition of CSP so that it no longer represents a discretionary activity on the part of management (Carroll, 1979), but is fundamentally linked to management performance itself. Thus, stakeholder relations *are* corporate social performance in this new definition and

expenditures in key stakeholder domains become an important element of improved corporate performance as well as improved CSP.

It is thus entirely possible that there are direct linkages between the overall quality of management and CSP, with the clear implication that good CSP and good management may be one and the same thing if CSP is measured and defined properly, that is, if CSP is defined *in terms of* stakeholder relations considered critical to firm performance and not as simply discretionary activities, such as philanthropy or corporate volunteerism. Even if CSP and quality of management can be differentiated, the meaning-making that goes with creating strong social performance may elicit greater loyalty to firms from two important constituencies: employees and customers, while simultaneously providing at least certain categories of owners (i.e., those with social concerns) even more reason to invest in a particular firm.

The data used in this study support that latter notion, indicating that it may pay to give attention to dimensions of management that are normally outside of strict financial, productivity, and efficiency considerations. The components of the CSP index encompass a range of social concerns not always considered central strategic issues, but which can now be considered important to performance (cf. Prahalad and Hamel, 1994), when factors such as company size, industry, and debt (or risk) level are taken into account. That is, good management and its reflection in financial outcomes may also encompass the nature of products produced, a company's posture with respect to the natural environment, its relations to employees, including women and minorities, and its community relations, among others.

Implications for future research

Much remains to be learned about the relationship between CSP and financial performance, which has been explored in the present study. For example, as more CSP data become available it would be useful to determine whether or not the relationships that we have examined hold consistently over time. Additionally, it would be useful to examine lags other than the 1-year time period used in the present study. Further, if quality of management is a critical variable in financial outcomes, as the relationships identified in

this study suggest, then controlling for the quality of management while assessing the CSP–financial performance link might also be beneficial. Such an approach would incorporate financial performance as part of the measure of CSP, by recognizing that financial/market performance implicitly measures treatment of a key stakeholder, the owner. Although, additional research is clearly necessary to explore these specific relationships between the stakeholder categories and financial performance, the findings here are suggestive of the need to alter current definitions of CSP to bring them more closely into line with stakeholder relations (cf. Wood and Jones, 1995; Waddock, 1996) as the weighted index does.

Implications for management

As strategic managers consider where to place their investments, they may wish to take into account the results reported above. This study suggests that there is no detrimental impact or penalty from allocating some resources towards corporate social performance (as has also been recognized in earlier research, e.g., Graves and Waddock, 1994). In fact, it would seem that such investments might be beneficial, especially if they improve key stakeholder relations.

This research indicates that good CSP may go beyond simple 'good deeds' in excess of normal strategic activity to encompass a panoply of stakeholder relations, simply because we have used a broader measure of CSP than has traditionally been used in the past and because our measure does both encompass and highly weight these stakeholders' concerns. Typically single-dimension, narrow measures (for example, philanthropic contributions, corporate volunteer records, building pollution control devices in excess of mandate, or the building of day care centers) have been used to assess CSP on the assumption that CSP is discretionary activity above and beyond required daily activities. Thus, prior CSP research has been undertaken with an assumption that CSP is an *extra* activity, an add-on to normal strategic and management decision making, with reference to the normal activities of corporate life (see Carroll, 1979, 1995 for an articulation of this type of framing of CSP). The present research indicates that poor performance in *primary* stakeholder domains, including environmental pollution (measured by fines), poor labor relations, prob-

lematic products, and so on, may have significant deleterious impacts on firm financial performance, thus linking CSP–stakeholder relations more tightly and simultaneously allowing more in-depth exploration of the link to financial performance than has been possible with more limited data bases in the past.

Managers and scholars arguably need to broaden their understanding of the term corporate social performance to encompass the ongoing nature of activities of a firm with respect to key stakeholders. If good management theory and the virtuous circle hold, as this research begins to suggest, then CSP involves more than doing the extras: it is a way of doing business. It may be true that firms with available resources sometimes go beyond minimum expectations of good management to achieve sound stakeholder relations by investing in extras that are traditionally associated with the slack-resources view of CSP. Nonetheless, if strong performance is to continue, strategic managers must focus increasingly on the concerns of all stakeholders.

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REFERENCES

- Abbott, W. F. and R. J. Monson (1979). 'On the measurement of corporate social responsibility: Self-reported disclosure as a method of measuring corporate social involvement', *Academy of Management Journal*, **22**, pp. 501–515.
- Alexander, G. and R. Buchholz (1982). 'Corporate social responsibility and stock market performance', *Academy of Management Journal*, **21**, pp. 479–486.
- Aupperle, K. E. (1991). 'The use of forced choice survey procedures in assessing corporate social orientation'. In J. E. Post (ed.), *Research in Corporate Social Performance and Policy*, **12**, pp. 269–280.
- Aupperle, K. E., A. B. Carroll and J. D. Hatfield (1985). 'An empirical examination of the relationship between corporate social responsibility and profitability', *Academy of Management Journal*, **28**(2), pp. 446–463.
- Bartlett, C. A. and S. Ghoshal (1994). 'Changing the role of top management: Beyond strategy to purpose', *Harvard Business Review*, **72**(6), pp. 79–88.
- Bowman, E. H. and M. Haire (1975). 'A strategic posture toward corporate social responsibility', *California Management Review*, **18**(2), pp. 49–58.
- Burke, L., J. M. Logsdon, W. Mitchell, M. Reiner and D. Vogel (1986). 'Corporate community involvement in the San Francisco Bay Area', *California Management Review*, **XXVIII**(3), pp. 122–141.
- Carroll, A. B. (1979). 'A three-dimensional conceptual model of corporate social performance', *Academy of Management Review*, **4**, pp. 497–505.
- Carroll, A. B. (1995). 'Stakeholder thinking in three models of management morality: A perspective with strategic implications'. In J. Nasi (ed.), *Understanding Stakeholder Thinking*. LSR Publications, Helsinki, Finland, pp. 47–74.
- Chen, K. H. and R. W. Metcalf (1980). 'The relationship between pollution control record and financial indicators revisited', *Accounting Review*, **55**, pp. 168–177.
- Clarkson, M. B. E. (1991). 'Defining, evaluating, and managing corporate social performance: The stakeholder management model'. In J. E. Post (ed.), *Research in Corporate Social Performance and Policy*, **12**, pp. 331–358.
- Cochran, P. L. and R. A. Wood (1984). 'Corporate social responsibility and financial performance', *Academy of Management Journal*, **27**, pp. 42–56.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Pitman, Boston, MA.
- Freeman, R. E. and D. R. Gilbert, Jr. (1988). *Corporate Strategy and the Search for Ethics*. Prentice-Hall, Englewood Cliffs, NJ.
- Friedman, M. (13 September 1970). 'Social responsibility of business', *New York Times Magazine*.
- Gephart, R. P., Jr. (1991). 'Multiple methods for tracking corporate social performance: Insights from a study of major industrial accidents, In J. E. Post (ed.), *Research in Corporate Social Performance and Policy*, **12**, pp. 359–385.
- Graves, S. B. and S. A. Waddock (1994). 'Institutional owners and corporate social performance', *Academy of Management Journal*, **37**(4), pp. 1035–1046.
- Hamel, G. and C. K. Prahalad (1989). 'Strategic intent', *Harvard Business Review*, **67**(3), pp. 63–71.
- Ingram, R. W. (1978). 'An investigation of the information content of (certain) social responsibility disclosures', *Journal of Accounting Research*, **16**(2), pp. 270–285.
- Lydenberg, S., A. T. Marlin and S. Strub (1986). *Rating America's Corporate Conscience*. Addison-Wesley, Reading, MA.
- McGuire, J. B., T. Schneeweiss and A. Sundgren (1988). 'Corporate social responsibility and firm financial performance', *Academy of Management Journal*, **31**(4), pp. 854–872.
- McGuire, J. B., T. Schneeweiss and B. Branch (1990). 'Perceptions of firm quality: A cause or result of

- firm performance', *Journal of Management*, **16**(1), pp. 167–180.
- Miles, R. H. (1987). *Managing the Corporate Social Environment: A Grounded Theory*. Prentice-Hall, Englewood Cliffs, NJ.
- Mintzberg, H. (Fall 1987). 'Five P's for strategy', *California Management Review*, pp. 10–17. (Reprinted in *The Strategy Process: Concepts, Contexts, Cases* (3rd ed.), H. Mintzberg and J. B. Quinn, (eds), Prentice-Hall, Upper Saddle River, NJ.
- Moskowitz, M. (1972). 'Choosing socially responsible stocks', *Business and Society*, **1**, pp. 71–75.
- O'Bannon, D. P. and L. E. Preston (1993). 'The corporate social–financial performance relationship: A typology and analysis', paper presented at the 1993 Annual Meeting of the Academy of Management, Atlanta, GA.
- Porter, M. E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. Free Press, New York.
- Prahalad, C. K. and G. Hamel (1994). 'Strategy as a field of study: Why search for a new paradigm?', *Strategic Management Journal*, Summer Special Issue, **15**, pp. 5–16.
- Preston, L. E. and J. E. Post (1975). 'Measuring corporate-responsibility', *Journal of General Management*, **2**(3), pp. 45–52.
- Ruf, B., K. Muralidhar and K. Paul (1993). 'Eight dimensions of corporate social performance: Determination of relative importance using the analytical hierarchy process', *Academy of Management Best Papers Proceedings*, Atlanta, GA.
- Shane, P. B. and B. H. Spicer (1983). 'Market response to environmental information produced outside the firm', *Accounting Review*, **LVIII**(3), pp. 521–536.
- Sharfman, M. (1993). 'A construct validity study of the KLD social performance data'. In D. Collins (ed.), *Proceedings of the International Association of Business and Society*, **4**, pp. 551–556.
- Spicer, B. H. (1978). 'Investors, corporate social performance and information disclosure: An empirical study', *Accounting Review*, **LIII**(1), pp. 94–111.
- Teoh, H. Y. and G. Y. Shiu (1990). 'Attitudes towards corporate social responsibility and perceived importance of social responsibility information characteristics in a decision context', *Journal of Business Ethics*, **9**, pp. 71–77.
- Ullman, A. H. (1985). 'Data in search of a theory: A critical examination of the relationships among social performance, social disclosure, and economic performance of US firms', *Academy of Management Review*, **10**(3), pp. 540–557.
- Von Winterfeldt, D. and W. Edwards (1986). *Decision Analysis and Behavioral Research*. Cambridge University Press, Cambridge.
- Waddock, S. A. (1996). 'Strategy, structure, and social performance: Implications of the W-form enterprise', *Business and the Contemporary World*, **VIII**(1), pp. 43–52.
- Waddock, S. A. and S. B. Graves (1994). 'Industry performance and investment in R&D and capital goods', *Journal of High Technology Management Research*, **5**(1), pp. 1–17.
- Wokutch, R. E. and E. W. McKinney (1991). 'Behavioral and perceptual measure of corporate social performance'. In J. E. Post (ed.), *Research in Corporate Social Performance and Policy*, **12**, pp. 309–330.
- Wokutch, R. E. and B. A. Spencer (1987). 'Corporate saints and sinners: The effects of philanthropic and illegal activity on organizational performance', *California Management Review*, **29**, pp. 77–88.
- Wolfe, R. (1991). 'The use of content analysis to assess corporate social responsibility'. In J. E. Post (ed.), *Research in Corporate Social Performance and Policy*, **12**, pp. 281–308.
- Wolfe, R. and K. Aupperle (1991). 'Introduction to corporate social performance: Methods for evaluating an elusive construct'. In J. E. Post (ed.), *Research in Corporate Social Performance and Policy*, **12**, pp. 265–268.
- Wood, D. J. (1991a). 'Corporate social performance revisited', *Academy of Management Review*, **16**(4), pp. 691–718.
- Wood, D. J. (1991b). 'Social issues in management: Theory and research in corporate social performance', *Journal of Management*, **17**(2), pp. 383–406.
- Wood, D. J. and R. E. Jones (1995). 'Stakeholder mismatching: A theoretical problem in empirical research on corporate social performance', *International Journal of Organizational Analysis*, **3**(3), pp. 229–267.

APPENDIX 1: KLD SOCIAL SCREENS²

KLD is a registered investment advisor providing social research on U.S. corporations to the investment community. KLD's data base consists of more than 1000 publicly traded corporations, each of which has been screened across a broad range of social issues. KLD screens each company annually, using a variety of sources. Each company is rated as neutral (no rating), concern or strength, or major concern or major strength within each of eight screening categories. KLD rates in eight socially relevant categories, using the following general criteria, with 'other' included for special considerations not encompassed within general criteria:

² Source: Kinder, Lydenberg, Domini & Co., All rights reserved. Adapted and reprinted with permission.

Community*Areas of concern*

Fines or civil penalties paid, or major litigation or controversies, relating to communities in which a company operates; general corporate relations strained because of plant closings or general breach of agreements; if the company is a financial institution, there are investment controversies.

Areas of strength

Philanthropic giving over 1.5 percent of pretax earnings or otherwise notably generous giving; known for 'innovative giving', prominent participant in public-private partnerships supporting housing initiatives for the disadvantaged; supports education through long-term commitments or is prominent support of job training program.

Diversity (formerly treatment of women and minorities)*Areas of concern*

Paid substantial fines or civil penalties, or has major controversies re affirmative action; no women on board of directors or senior line management.

Areas of strength

CEO is a woman or minority; notable progress in promotion of women and minorities, especially to line positions; diverse representation on board of directors; outstanding employee benefits addressing work/family concerns; strong purchasing record with women/minority owned firms; initiatives in hiring disabled; progressive gay, lesbian, and bisexual policies.

Employee relations*Areas of concern*

Relatively poor union relations; significant fines or civil penalties over employee safety or major safety controversies; recent layoffs of >15 percent in 1 year, 25 percent in 2 years; substantially underfunded pension plan or inadequate benefits plan.

Areas of strength

Strong relative union relations; long-term policy of company-wide cash profit sharing (profitable firms only); worker involvement/ownership through gainsharing, ESOP, sharing of financial information, participation in decision making; strong retirement benefits or other innovative/generous benefits.

Environment*Areas of concern*

Liabilities for hazardous waste >\$30 million or significant involvement in >30 Superfund sites; significant fines or civil penalties, pattern of regulatory problems, or major controversies on environmental degradation; top producer of CFCs, HCFCs, methyl chloroform, or other ozone-depleting chemicals; high relative legal emissions (or acid rain formation); producer of agricultural chemicals.

Areas of strength

Substantial revenues from remediation products, innovative products with environmental benefits (excludes landfill, incineration, waste-to-energy and deep-well injection), company-wide changes in processes to reduce emissions and toxins; substantial user of recycled materials in manufacturing; substantial revenues from fuels with environmental advantages or notable conservation projects; environmentally sensitive PP&E (new equipment).

Product*Areas of concern*

Recent product safety controversies or product liability lawsuits or regulatory action; major marketing controversy or fines or civil penalties related to advertising, consumer fraud, or regulatory actions; paid fines or civil penalties relating to antitrust laws.

Areas of strength

Long-standing, company-wide quality program judged among industry's best; leader in industry

R&D; products/services benefit the economically disadvantaged.

Negative screens

Three screens in KLD's data base are negative only (i.e., there can be no strength in these areas):

South Africa

(Note, this screen is now dropped, but was in the data used for this study). Equity holdings in South Africa; substantial revenue from licensed operations in South Africa.

Military

Substantial involvement in weapons-related contracting (>\$10 million, major concern); minor

involvement in weapons; >\$50 million from Department of Defense for fuel or other major supplies related to weapons; develops or manufactures advanced electronics that play key role in advanced weapons systems.

Nuclear power

Electric utility that derives electricity from nuclear fuels or has ownership interest; derives >\$1 million from design or construction of nuclear power plants; mines, processes, or enriches uranium; >\$1 million from sale of key parts or equipment for nuclear power plants.