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Source: *The Academy of Management Journal*, Vol. 28, No. 2 (Jun., 1985), pp. 446-463

Published by: [Academy of Management](#)

Stable URL: <http://www.jstor.org/stable/256210>

Accessed: 25/02/2014 05:08

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AN EMPIRICAL EXAMINATION OF THE RELATIONSHIP BETWEEN CORPORATE SOCIAL RESPONSIBILITY AND PROFITABILITY

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Although there has been considerable research into the relationship between corporate social responsibility and profitability, it has frequently reflected either an ideological bias or limited methodological procedures. Research has also been impeded by the difficulty of adequately measuring corporate social responsibility. This study, using an elaborate, forced-choice instrument administered to corporate CEOs, did not find any relationship between social responsibility and profitability. Specifically, varying levels of social orientation were not found to correlate with performance differences.

Although an enormous body of literature has emerged concerning corporate social responsibility, actual empirical research designed to test the multitude of definitions, propositions, concepts, and theories that have been advanced has been scarce. In addition, much of the research done in the area has been incomplete and simplistic in methodology. Abbott and Monsen have observed that "the empirical study of corporate social involvement is in an undeveloped state" (1979: 501).

Many of the methodological quagmires in studying corporate social responsibility stem from the nature of the subject, a relatively new field of study whose concepts are value laden and susceptible to particular ideological and emotional interpretations. Perhaps the overriding research constraint has been the difficulty of developing valid measures. Arlow and Gannon, in their recent review (1982) of the relationship between profitability and corporate social responsibility, observed that all the various studies relied upon questionable indexes of social responsibility. Assessing profitability is a relatively clear-cut process, but assessing social responsibility is not.

The problem in assessing levels of corporate social responsibility is objectively determining appropriate criteria and standards of corporate performance, a kind of difficulty typical of the labyrinthian problems confronting social audits. For instance, Parket and Eilbirt observe that:

To be sure, the scope of endeavor categorized by the term social responsibility cannot be analyzed on the order of a balance sheet or profit and loss statement. There are, as yet, no accounting techniques, analytical tools, or statistical methods which will

objectively differentiate companies that are socially responsible from those that are not. To measure degrees of social responsibility would be an even more ethereal task (1975: 6).

The whole process of the corporate social audit is so vague that Robert Jensen, a leading researcher in the social accounting area, has commented that "in most instances we are still groping in the dark concerning what to disclose, how to disclose it, and how to compare and evaluate business enterprises" (1976: 2). Jensen also observed that:

Social accounting, and especially corporate social accounting, is in some instances an attempt to conjure up an image or representation of the institution constituting the "real object." The image created may range from hideous to angelic depending on who is conjuring up the image. Social accounting is like a kaleidoscope in that the same pieces turned a little differently form a whole new pattern (1976: 1).

Compounding difficulties in studying corporate social responsibility has been the lack of an effort to empirically test definitions, propositions, and concepts; researchers have tended to create their own measures rather than to use one of the many preexisting definitions in the literature. Not only has this hindered interstudy comparisons and analyses; it has limited development of a research base in the social issues area.

The initial purpose of this study was to develop an instrument to measure degree of orientation to social responsibility based upon a model defining corporate social responsibility that has appeared in the literature. Carroll (1979) developed the definition used in this study for instrument development. Although no single defining construct has universal acceptance, Carroll's conceptualization has multiple components that lend themselves to measurement and testing. Another, related purpose was to use the instrument to assess how CEOs viewed their firm's social responsibilities. Our ultimate purpose was to investigate the relationship between orientation toward corporate social responsibility, as measured through the instrument, and profitability.

THE LITERATURE ON CORPORATE SOCIAL RESPONSIBILITY AND PROFITABILITY

The first issue of *Business and Society Review* gave us the initial impetus for examining the relationship between corporate social responsibility and profitability. In that issue, Editor Milton Moskowitz suggested that socially responsible firms were good investment risks even though "there is at this point no real evidence that capital markets will be materially affected by social performance" (1972: 71). While Moskowitz made no explicit claim that such firms were good investment risks, he clearly implied it, and, in addition recommended 14 firms as potential investments because of their social performance: ". . . the securities are being suggested here on the basis of corporate behavior that can be considered socially responsive" (1972: 72). However, he never revealed what criteria he used in selecting these 14 firms.

The next issue of *Business and Society Review* observed that the 14 socially responsible firms identified by Moskowitz had registered a stock price increase of 7.28 percent over the previous six months, in contrast to a 4.4 percent rise for the Dow-Jones, a 5.1 percent increase for the New York Stock Exchange, and a 6.4 percent gain for Standard and Poors Industrials during that period. This finding was used to support the notion that socially responsible firms were good investment risks.

Stanley Vance challenged the findings and claims of Moskowitz and *Business and Society Review* in a 1975 *Management Review* article. Vance examined the market performance of the 14 Moskowitz-recommended firms from 1972 to 1975 and found that stock in all of the firms had declined in price and had performed far below the Dow-Jones, the New York Stock Exchange Index, and the Standard and Poors Industrials (1975: 19).

To support his tentative conclusion that socially responsible firms are not good investment risks, Vance extended his analysis to looking at the performance of firms identified as having high and low levels of corporate social responsibility in surveys reported by *Business and Society Review*. He compared the financial performance of the firms rated highest in corporate social responsibility with that of those rated lowest and found that the latter outperformed the former. Although he performed no statistical test to determine whether differences were significant, Vance did correlate corporate social responsibility and financial performance, and, finding a negative relationship, concluded that socially responsible firms were not good investments (1975: 24).

There are similar methodological problems with the exploratory work of both Moskowitz (1972) and Vance (1975). The initial 14-firm sample used by each was small and subjectively selected. In addition, both studies relied upon a performance criterion that considered only capital gains or losses. There was also no adjustment for risk; not all stocks reflect the same degree of risk. In addition, the performance time period was short in the Moskowitz study. The Vance study used reputational surveys that reflected a response rate of 11 percent, with the typical responder rating only 20 of 45 firms considered.

Table 1 provides a chronological review of the major research efforts in this area; some of the more important of these research efforts will be briefly examined. Alexander and Buchholz (1978) did an important study that followed up on the efforts of Moskowitz and Vance. The major methodological difference between the Vance study and that of Alexander and Buchholz lies in the area of risk adjustment for the firms identified in the reputational survey. The latter study utilized the betas¹ of each firm to adjust performance. When examining the issue of risk, Alexander and Buchholz were able to conclude that "there seems to be no significant relationship between stock

¹Beta is a measure of sensitivity of a firm's stock price in context of overall fluctuations in the New York Stock Exchange composite average.

TABLE 1
Studies Examining the Relationship between Corporate
Social Responsibility (CSR) and Profitability

Study	Methodology	Performance Criteria	Findings Implications	Limitations
Moskowitz (1972)	Simplistic comparison of stock price increases in Moskowitz' 14 firms with "perceived" high CSR with the average increase in the Dow-Jones Index.	Stock price increases over time (six months)	High CSR firms outperform the Dow-Jones Industrials.	No adjustment for risk; small sample; sample is not necessarily representative of high CSR firms; performance measured over short-term; performance criterion is questionable; no test for significance.
Bragdon & Martin (1972)	Seventeen firms in the paper and pulp industry were rated on a pollution index developed by the Council of Economic Priorities. Each firm's index was compared to its ROE.	Return on equity (ROE)	The better the pollution index, the higher the ROE.	No adjustment for risk; findings limited to one industry; limited definition of CSR; small sample; performance criterion is inadequate; no test for significance.
Bowman & Haire (1975)	Eighty-two food processing firms classified into low, medium, and high CSR categories based on the number of lines devoted to the topic of CSR in corporate annual reports. The CSR categories are compared on the basis of their ROE.	Five-year return on equity	Existence of a U-shaped performance curve; the highest performing firms being those found in the middle range of CSR.	No adjustment for risk; lopsided sample; reliance on annual reports and on the CSR firms of Moskowitz; performance criterion is inadequate; no test for significance.

TABLE 1 (continued)

Study	Methodology	Performance Criteria	Findings Implications	Limitations
Parke & Eilbirt (1975)	96 firms that responded to the researchers' previous CSR survey were assumed to be CSR firms. The profitability of 80 of these firms compared to the Fortune 500.	Absolute net income, profit margin, ROE, and EPS	On all four measures, the 80 CSR firms proved to be more profitable.	No adjustment for risk; questionable sample; performance measured over short-term (12 months); performance criterion is inadequate; no test for significance.
Vance (1975)	Two-fold: 1. Replicating Moskowitz 2. Correlating CSR firms derived from two <i>Business and Society Review</i> Surveys with stock price changes over time.	Stock price increases over time	CSR firms are determined not to be good investments; negative correlation between CSR and stock price increases.	No adjustment for risk; questionable samples; performance measured over short-term; regression line does not fit the data; performance criterion is inadequate.
Heinz (1976)	Correlating CSR ratings of 29 firms from a <i>Business and Society Review</i> survey with ROE.	Several measures such as ROA, ROE, and profit margins	A significantly positive correlation between CSR and ROE.	No adjustment for risk; small sample; questionable reliance on reputational rating system for determining CSR.
Sturdivant & Ginter (1977)	A population of 67 high CSR firms as identified by Moskowitz in the <i>Business and Society Review</i> are used in a CSR survey. Twenty-three firms returned 130 questionnaires. The 67 firm population is also reduced down to 28 firms and reclassified	10 year EPS growth	High CSR firms (Best and Honorable Mention) outperform low CSR firms. Honorable mention CSR firms have the best performance and supports findings of Bowman and	No adjustment for risk; employed t-test with very small sample; industrial categories are inconsistent. Many low CSR firms outperform high CSR firms in the same industry group; questionable sample; removal of outliers reduces greatly the differences between high and low CSR firms;

TABLE 1 (continued)

Study	Methodology	Performance Criteria	Findings Implications	Limitations
Sturdivant & Ginter (1977) (continued)	into four industrial groupings. CSR and the 10-year growth in EPS is examined.		Haire and to some extent that of Bragdon and Martin.	performance measure is questionable; failure to identify curvilinear relationship revealed in data between CSR and EPS.
Alexander & Buchholz (1978)	Replicating efforts of Vance by using reputational ratings derived from <i>Business and Society Review</i> surveys. CSR ratings are correlated with stock price increases over time and adjusted for risk.	Stock price increases over 2 years and 5 years	CSR has no effect on stock market performance; repudiates both Moskowitz and Vance.	Reliance on a questionable sample; performance measure is inadequate.
Abbott & Monsen (1979)	Development of a Social Involvement Disclosure (SID) scale from a content analysis of <i>Fortune</i> 500 firms. The SID is used to determine CSR firms, which are then compared on the basis of their investment yield.	10 year yield	CSR has no effect on the total return to investors.	No adjustment for risk; the SID may not reflect the true level of CSR; the content analysis used is superior to that of Bowman and Haire but is still questionable; performance measure is inadequate.

risk levels and degree of social responsibility. These findings suggest that the interpretations of both Moskowitz and Vance are invalid" (1978: 485).

Since the data were derived from both 3-year and 5-year assessment periods and were adjusted for risk, this study was a considerable improvement over its predecessors. However, as with the Vance study, the nature of the sample of firms remains a potential problem in that it relies upon the reputational studies and ratings provided by the *Business and Society Review*. In addition, the use of stock prices as the criterion for performance is undesirable given their inability necessarily to reflect on a firm's profitability.

Bowman and Haire (1975) conducted a study that used a different approach in investigating the issue of the relationship between corporate social responsibility and profitability. The researchers, in identifying firms as low or high in social responsibility on the basis of the number of lines devoted to the topic of social responsibility in their annual reports, point out that:

In searching for a readily available surrogate measure for actual activities in the area of corporate citizenship, we chose to measure the proportion of lines of prose in the annual report devoted to social responsibility. The annual report is a kind of projective test that allows a firm to express its goals and motives in much the same way that a Rorschach or TAT does for an individual A critic could immediately scoff at this measure. It is at least a popular belief that "everybody that talks about heaven ain't going there," that talk is cheap, and that talk about socially desirable behavior is not necessarily a predictor of such behavior (1975: 49–50).

To validate this line-count method, the researchers cross-validated it by applying the method to Moskowitz's 14 firms having high levels of social responsibility and found them to have much more line space devoted to the topic of social responsibility than the 14 other randomly chosen firms (1975: 51). Using this line-count procedure, the authors classified 82 firms into high, medium, and low social-responsibility categories, and then evaluated each category on the basis of 5-year return on equity (ROE). The researchers found that the firms with medium ratings for degree of corporate social responsibility performed the best and the firms with low ratings performed the worst, indicating a U-shaped relationship between corporate social responsibility and firms' financial performance (1975: 51–53).

Bowman and Haire's (1975) study exhibits numerous methodological problems. First, what is or is not a sentence or comment on corporate social responsibility can be difficult to ascertain, as the researchers themselves implicitly demonstrate (1975: 50). Second, the issue of validity also arises when assessment of corporate social responsibility is based on simple line count and cross-validated by 14 other firms whose level of social responsibility is also indeterminant, as we earlier observed. Third, the study included more (51) firms having low social responsibility than firms with moderate (18) or high (13) levels of social responsibility. Fourth, reliance on ROE as a measure of firm performance could be misleading since that return is a function not only of profitability, but also of a firm's financial leverage.

Finally, the researchers performed no significance tests, nor did they adjust performance for risk.

A subsequent study by Abbott and Monsen (1979) employed a similar but more sophisticated methodology. The researchers used a content analysis of *Fortune* 500 annual reports performed annually by the accounting firm of Ernst and Ernst. This content analysis involves 28 items monitored in the annual reports; the content analysis is then used to construct a Social Involvement Disclosure (SID) scale that Abbott and Monsen used as a surrogate for corporate social responsibility. They divided 450 firms from the *Fortune* 500 into high and low groups on the basis of this scale and then examined each group for profitability. They discovered little difference in investment yield between firms in the two groups, even when controlling for size. They concluded that: "Being socially involved does not appear to increase investor's total rate of return. Nor does it appear that being socially involved is dysfunctional for the investor" (1979: 514–515).

Some methodological problems exist with this study, as well. The annual report method used to assess corporate social responsibility may be superior to that used by Bowman and Haire, but it is still subject to validity problems. In addition, there was no adjustment for risk, and the performance criterion of investor's yield is not necessarily an adequate surrogate for profitability: yield is a function of both capital gains and dividends, neither of which need be tied directly to profitability.

Parke and Eilbert (1975) conducted a study that took still another approach. In a previous study of corporate social responsibility the researchers had been able to get 96 firms from the *Forbes* 1971 Annual Directory to respond; they concluded that, since these firms had responded, they were clearly more oriented toward social responsibility than were nonrespondents. Parke and Eilbert point out that:

The fact that all ninety-six of the replying forms identified themselves as engaged in endeavors associated with social responsibility suggests that firms not actively undertaking such work are more heavily represented among our nonrespondents (1975: 6).

They then compared 80 alleged socially responsible firms to the *Fortune* 500 firms (minus these 80 firms) on the performance criteria of dollar net income, profit margin, ROE, and earnings per share (EPS). The researchers conclude: "By all four measures, the 80 respondents who were considered to be the most socially active show up as more profitable" (1975: 8).

However, no significance test was performed, and it appears that the differences in both ROE and EPS are insignificant between the firms identified as socially responsible and other firms. Other methodological limitations exist. One problem was the assumption that the 80 firms in the sample had demonstrated a socially responsible orientation because they responded to a previous survey. Also, the data analysis methods were incomplete; there was no risk adjustment, and the profitability measures employed are not definitive and cover only one year.

Another major research effort in this area was based on the judgment of Moskowitz, who had classified 67 firms over time as essentially high, moderate, and low in corporate responsibility (Sturdivant & Ginter, 1977). The researchers note that:

The study was based on the sixty-seven corporations that had been cited by business journalist Milton Moskowitz as exhibiting exceptional social responsiveness or lack thereof. While no claim can be made about the accuracy of these ratings, they had the advantage of consistency in that they came from a single source (1977: 30).

Sturdivant and Ginter used this sample to derive yet a smaller 28 firm sample that they subdivided into four industrial groupings. They compared firms showing high, moderate, and low social responsibility in each grouping on the basis of 10-year EPS growth, and then normalized each firm by dividing growth by the industry average. They found that firms from the high and moderate groups outperformed those from the low group (1977: 38). However, Sturdivant and Ginter did not really mention the fact that firms in the moderate group were the best performers, a result similar to what Bowman and Haire had discovered earlier.

A number of methodological problems exist in this study, the first of which was sample selection: Sturdivant and Ginter derived their sample from a single source whose judgment was used in classifying the various firms in terms of orientation to corporate social responsibility. No criteria were offered for this classification. Moreover, the four industrial groupings reflect inconsistencies: for instance, Weyerhaeuser was grouped with U.S. Steel, Giant Food with S. S. Kresge Company, and Ralston Purina with Campbell Soup. In addition, the final sample, having been reduced to 28 firms, was small; there was no adjustment for risk; and the performance measure of growth in earnings per share is not definitive.

These studies reflect both varying methodologies and different degrees of rigor. Although reputational surveys and content analysis of annual reports do provide useful beginning points, other exploratory methods also exist. Also, it is surprising that so much research has been based on the value orientations of a single business critic, and that none of the studies used a financial performance measure, like return on assets, that is less susceptible to corporate manipulation. Only one study realized the critical importance of adjusting performance on the basis of risk. The two studies employing the most rigor (Abbott & Mosen, 1979; Alexander & Buchholz, 1978) found no relationship between corporate social responsibility and financial performance. However, two studies employing different methodologies (Bowman & Haire, 1975; Sturdivant & Ginter, 1977) found a curvilinear relationship between corporate social responsibility and financial performance, with moderately socially responsible firms being the best performers.

RESEARCH METHODOLOGY

In order to avoid some of the methodological problems of previous studies, we chose to develop a survey instrument capable of clearly assessing,

on a relative basis, a corporate respondent's social-responsibility orientation. The design and validation of the survey instrument was an important and indispensable part of this study; the basic approach used in constructing the instrument drew on Carroll's (1979) corporate social responsibility construct.

Carroll's Construct

The attractive feature of Carroll's (1979) construct was its definition of corporate social responsibility through four components; we saw this comprehensive quality as particularly conducive to the construction of a research instrument, and judged each of the components to be suitable for the kind of survey data we deemed desirable. The four components of the defining model are: economic, legal, ethical, and discretionary (or philanthropic) concerns. Carroll defines them as follows: (1) Economic responsibilities of business reflect the belief that business has an obligation to be productive and profitable and meet the consumer needs of society. (2) Legal responsibilities of business indicate a concern that economic responsibilities are approached within the confines of written law. (3) Ethical responsibilities of business reflect unwritten codes, norms, and values implicitly derived from society; ethical responsibilities go beyond mere legal frameworks and can be both strenuously undertaken and nebulously and ambiguously stated. (4) Discretionary responsibilities of business are volitional or philanthropic in nature, and, as such, also difficult to ascertain and evaluate.

With Carroll's (1979) construct, we could assess orientations toward social responsibility of corporate executives. In addition, use of the construct permitted inquiry into whether or not four separate components of corporate social responsibility exist, and, if they do, whether they exist in the weighted proportions implied by Carroll. His graphic representation of the four-part construct (1979: 499) suggested a weighting of 4-3-2-1, respectively, for the economic, legal, ethical, and discretionary components.

A Forced-Choice Survey Instrument

We used a forced-choice methodology to minimize the social desirability of responses. Respondents were asked to allocate up to 10 points to each of 20 sets of statements measuring corporate social responsibility. Each set contained four statements, each of which corresponded to one of Carroll's four components. Though all statements were unique, we asked respondents to respond repetitiously to slightly varying situations referring to corporate social responsibility. In other words, each set sought the same basic information.

Item Selection and Content Validity

Our first concern was content validity. To ensure the statements on corporate social responsibility were representative, an exhaustive list of statements representing the three non-economic components was derived from five studies — Eilbirt and Parket (1973), Corson and Steiner (1974), Paluszek

(1976), Holmes (1977), and Ostlund (1977). We took only items or statements rated as important by respondents in the former studies, and omitted industry-specific items in order to facilitate meaningful ratings from respondents regardless of industry association. Items selected to represent the economic performance component were drawn from performance measures typically found in corporate scoreboard sections of *Business Week* and *Forbes* and commonly referred to in well-established managerial finance texts. Altogether, we developed an inventory of 117 statements; each of the four components had its own pool of statements in this inventory. The 117 statements assessing corporate social responsibility were screened through a panel of six independent judges to ensure that statements in the instrument for each set actually represented Carroll's four components. The judges' task was to place each of the statements into one of the four categories, and to differentiate economic statements from non-economic statements. Consensus for a given statement was considered to exist when at least five judges concurred. This process produced enough statements to construct a 20-set, 80-item instrument. Since the ethical and discretionary statements produced less consensus, in a few instances high consensus statements from those two pools were used in more than one set. As statements were assigned to the various sets, three panel members reviewed the composition of each set to ensure the statements had relatively equal levels of social desirability. Statements were also randomly ordered to reduce response bias.

Reliability

We tested reliability by administering the instrument to 158 business policy students in four different classes at a large business school. Cronbach alphas calculated for each of the four categories of corporate social responsibility produced the following results: economic, .93; legal, .84; ethical, .84; and discretionary, .87.

The final questionnaire included additional questions in a Likert format including two questions that asked whether or not the respondents' organization engaged in social forecasting or had a corporate social responsibility committee on its corporate board.²

Instrument Mailing

We sent the final instrument, containing the 20 items assessing corporate social responsibility and other questions pertaining to both corporate social responsibility and to strategic management to the 818 chief executive officers (CEOs) listed in *Forbes 1981 Annual Directory*. A first mailing and two follow-up mailings generated 241 (30%) usable responses. Eight other responses were unusable, and 42 respondents indicated that they did not wish to participate in the survey.

²A copy of the main instrument can be obtained from the first author.

RESULTS

Factor Analysis

A factor analysis of the 80 item instrument was performed to determine whether the 4-part construct defining corporate social responsibility offered by Carroll could be supported. We used an N-factor, principal components factor analysis with a varimax rotation; it produced 22 factors with eigenvalues greater than 1.0. Further parsimony was required, particularly since the factor loadings for the 22 factors were low. Also, the eigenvalues and explained variances declined rapidly following the extraction of the first factor.

In order to identify the relevant number of factors inherent in the construct, we performed a scree test, which suggested that either three or four factors existed. We therefore performed both 3-factor and 4-factor principal component factor analyses.³

We judged the 3-factor solution to be the one that produced the more practical results because in it, 59 of the statements assessing corporate social responsibility had dominant loadings, considerably more than we found with the 4-factor solution.

One factor contained both highly negative economic loadings and highly positive ethical loadings. This pattern supported the validity of the four-part corporate social-responsibility construct, but also produced an unanticipated revelation: a clear inverse relationship between the economic and ethical dimensions, implying that an emphasis on one of these two components was primarily at the expense of the other. Apparently, the more concerned a corporation was with its economic responsibilities, the less interested it was in its ethical responsibilities. Considering the amount of support given in recent years by both business leaders and social critics to the topic of ethical behavior, we found this result somewhat surprising.

Table 2 presents zero-order correlations among the four component scores; Cronbach alpha coefficients are in the diagonal cells. As would be expected from the factor structure, the strongest correlation ($r = -.71, p = .001$) was between the economic and ethical components. In fact, the economic factor correlated negatively with all three of its non-economic counterparts. Generally, our analysis supported the existence of four distinct, but related, components. In addition, the relative values or weights of each of the components, as implicitly depicted by Carroll, approximated the relative degree of importance the 241 executives placed on the four components. The mean scores for each component were: economic = 3.50, legal = 2.54, ethical = 2.22, discretionary = 1.30.

Partitioning the Four Components

For purposes of later analysis, we rearranged the four components assessing corporate social responsibility into two categories. The first category,

³The results of these factor analyses can be obtained from the first author.

TABLE 2
Intercorrelations Among the Four Components
of Corporate Social Responsibility^a

	1	2	3	4
1. Economic	.90 ^b			
2. Legal	-.48***	.86		
3. Ethical	-.71***	.13*	.87	
4. Discretionary	-.47***	.04	.25**	.84

^aN = 241

^bValues on diagonal are Cronbach alphas.

*p < .05

**p < .01

***p < .001

denoted as “a concern for society,” consisted of the three non-economic components (legal, ethical, and discretionary). We labeled the remaining, economic component a “concern for economic performance.” This dichotomy is not uncommon, for social responsibility is often seen as combining the legal, the ethical, and the philanthropic. The social orientation of an organization can be appropriately assessed through the importance it places on the three non-economic components compared to the economic. For instance, we considered high concern-for-society scores for an organization to indicate a strong orientation toward social responsibility.

Corporate Performance Criteria

To ascertain the relationship between corporate social responsibility and profitability, it was necessary to correlate a firm’s concern for society score with its profitability. The profitability indicator used was return on assets (ROA); we employed both short-term (one year) and long-term ROA (five year). However, in order to rely on this indicator as our performance criterion, we had to adjust it for risk propensities typical of various firms and industries. We took our adjustments from *Value Line*, which publishes betas and safety measures for most large corporations. Although these measures pertain directly to risk in regard to a firm’s stock, they also reflect the firm’s general risk characteristics. *Value Line*’s safety index is perhaps the most comprehensive among measures of total risk confronting a firm, since it incorporates the beta and many other factors as well. *Value Line* observes that the safety index is:

a measure of potential risk associated with individual common stocks rather than large diversified portfolios (for which the Beta is a good risk measurement). Safety is based on the Stability of price (which includes sensitivity to the market — i.e., Beta — as well as the stock’s inherent volatility) adjusted for trend and other factors — including company size, the penetration of its markets, product market volatility, the degree of financial leverage, the earnings quality, and the overall condition of the

balance sheet. Safety Ranks range from 1 (Highest) to 5 (Lowest). (1981, part IV: 7)

To standardize a firm's return on assets, we first averaged its safety index figures for five years. We then divided this measure by three, the *Value Line* average safety index, and divided this result into the ROA. For instance, if a firm's safety index figure over five years were 3,4,3,4, and 3, the average would be 3.4. Because 3.4 would be slightly above the risk norm, and since greater levels of risk require greater compensating payouts, we would adjust such a firm's ROA of (say) 20 percent downward by dividing it by 1.1 ($3.4 \div 3$), bringing the risk-adjusted ROA of that firm down to 19 percent. An average safety index of 1 would also need to be divided by 3, yielding an adjustment factor of .333, to be divided into an ROA of (say) 7 percent. Adjusting ROA for risk, the second firm would have higher performance: a 21 percent versus a 19 percent risk-adjusted ROA. This method, though uncommon, serves the purpose of standardizing the ROA so that firms can be compared with one another.

Analyses of Performance

Table 3 shows that no statistically significant relationships were found between a strong orientation toward social responsibility, or concern for society, and financial performance. It did not matter whether short-term or long-term ROA were used, nor did it matter if that indicator were adjusted or unadjusted for risk. We concluded that it was not possible to support the notion of a positive or negative relationship between profitability and an orientation toward corporate social responsibility, results that are basically consistent with Arlow and Gannon's (1982) conclusion that research studies have not provided strong support for a positive association between profitability and corporate social responsibility. The present study also suggests that it is neither beneficial nor harmful for a firm to be socially motivated to fulfill its social contract.

The results displayed in Table 3 parallel other empirical findings derived with our research instrument. For instance, the instrument examined two issues related to the social orientation of an organization. One question

TABLE 3
Relationship of Concern for Society
with Financial Performance and Risk

Predictors	<i>N</i>	<i>r</i>	<i>p</i>
Long-term return on assets	174	.00	.99
Risk-adjusted, long-term return on assets	166	.11	.16
Short-term return on assets	228	.10	.15
Risk-adjusted, short-term return on assets	192	.13	.08
Five-year total risk	189	-.17	.02
Long-term beta	189	-.08	.25

regarding organizational policy involved determining whether social forecasting was employed. Another question addressed whether there was a corporate social responsibility committee on the board of directors.

The results shown in Table 4 clearly suggest that firms that employ social forecasting are not different from firms that do not in regard to long-term profitability, with or without an adjustment for risk. The same results also appear to be true for the related category concerning corporate social responsibility committees on boards of directors. The results shown in Table 5 reveal no statistically significant differences in regard to adjusted or unadjusted profitability. We concluded that firms with a corporate social responsibility committee on their boards did not differ in profitability from other firms.

DISCUSSION

The review of the literature on the relationship between corporate social responsibility and profitability showed that the studies produced varying results. Although many studies concluded that a relationship existed, those studies that appeared to be most methodologically sound did not reach that

TABLE 4
Relationship between Employing Social Forecasting and Profitability of Firms

Firms	<i>N</i>	Mean	<i>t</i>	<i>p</i>
Firms employing social forecasting	69	10.83 ^a	-.59	.550
Remaining firms	111	11.27 ^a		
Firms employing social forecasting	68	15.56 ^b	1.16	.250
Remaining firms	103	13.40 ^b		

^aLong-term return on assets.

^bRisk-adjusted, long-term return on assets.

TABLE 5
Relationship between Presence of Corporate Social Responsibility Committee on Board and Profitability of Firms

Firms	<i>N</i>	Mean	<i>t</i>	<i>p</i>
Firms with CSR committees	53	10.43 ^a	1.18	.24
Remaining firms	127	11.39 ^a		
Firms with CSR committees	53	14.60 ^b	-.02	.98
Remaining firms	118	14.63 ^b		

^aLong-term return on assets.

^bRisk-adjusted, long-term return on assets.

conclusion. The current study is also unable to support the notion that such a relationship exists.

This study has made an attempt to avoid some of the problems that existed in earlier studies. Rather than relying upon methodologically weak mechanisms by which to determine the social orientation of an organization, we used an elaborate forced-choice instrument to examine the relationship between an orientation toward corporate social responsibility and profitability. The structure of the survey instrument not only minimized the degree of response bias, but facilitated our observing how much relative importance an organization placed on both the non-economic and the economic. We found it interesting that many executives wrote on their questionnaires that it was unfair that they had to make unpleasant choices. For instance, respondents commonly noted that all categories were attractive or important to them. They clearly indicated a dislike for the forced-choice procedure, which, they felt, constrained their responses — in actuality, it limited their bias.

Since the instrument itself was embedded in Carroll's (1979) four-part model defining corporate social responsibility, it was imperative that this construct's validity be examined as well. The results of the content validity studies appear to support both model and instrument. First, the studies indicated that "experts" were capable of distinguishing among the four components when sorting written statements reflecting each component. Second, we concluded, from our factor analyses, that there are four empirically interrelated, but conceptually independent, components of corporate social responsibility. Third, a test of discriminant validity for an instrument developed to represent those components clearly identified the components for 59 of the 80 statements used in the study, and in addition, two separate studies verified the internal consistency of each component as a reflection of aspects of corporate social responsibility.

Our results also give tentative support to the relative weightings Carroll (1979) assigned to each of the four components. Although the mean scores used to determine these weightings were rather crude indicators, their relative magnitude and order confirmed that, at least for 241 active CEOs or their designated associates, Carroll's weightings were close approximations. We were interested in seeing that, although respondents clearly placed more emphasis on the economic component, the non-economic component means taken together (6.06) were of much greater weight than the mean for the economic component (3.50). Perhaps this suggests the corporate community is more responsive to social issues than has been suspected.

The research inquiry also produced an unanticipated finding. Apparently, there is a strong inverse relationship between the economic and ethical components, as the factor analysis made clear, with the economic component loading negatively on one factor and the ethical component loading positively on the same factor. In addition, strong negative correlations between the economic and each of the three non-economic components suggest that the more economically oriented a firm is, the less emphasis it places on ethical, legal, and discretionary issues, a particularly interesting finding,

given the fact that the three non-economic components had modest or insignificant correlations among themselves. The correlations among these components showed few substantive relationships from the emphasis respondents placed on them. Consequently, the results indicate that CEOs make fairly unambiguous negative associations between economic and non-economic components taken together, but make few associations among the non-economic components themselves.

In addition to using a more objective social orientation measurement technique than former studies, we employed more representative profitability criteria. Many of the earlier studies relied upon profitability measures of less definitive value than ours when performing inter-company comparisons. We used return on assets in this study because we thought, as a standard means of assessing profitability on a relative basis, it was more universally acceptable and less likely to produce misleading results than other measures. We used both short-term (one year) and long-term (five year) return on assets, adjusted for risk.

When correlating orientation toward social responsibility, a "concern for society," with profitability, we observed no statistically significant relationships. Much the same was also discovered when surrogate measures for this orientation were used. The profitability of firms that did social forecasting was not found to be statistically different from that of firms that did no forecasting. In addition, the profitability of firms having a corporate social responsibility committee on their corporate boards did not significantly differ from that of other firms. It seems that there is insufficient evidence to support the claim that socially responsible firms are more profitable than other firms.

There are many other methods available to assess the relationship between corporate social responsibility and profitability. Some studies have chosen to measure managers' behavior, commitment, or reputations in regard to their orientation toward social responsibility; this study assessed CEOs' orientations. Consequently, the findings of this study are limited, in part, to the perceptions on corporate social responsibility of CEOs or their delegated representatives. It is possible that CEOs are not representative of their organizations and that the research instrument should instead be administered to several employees of each organization surveyed.

Still, this study has not been able to corroborate the claims of either advocates or critics as to the value social responsibility may have for industrial organizations. Perhaps its merits simply do not show up on the "bottom line;" perhaps superior methodologies or new qualitative approaches are required. It could very well be that the intangible benefits of corporate social responsibility tend to evade scientific inquiry. Perhaps this issue, whether or not corporate social responsibility is related to profitability, will never be completely resolved.

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