Corporate Disclosure Quality and Social Performance

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Abstract

Corporate audiences rate the social performance of firms by interpreting information signals about the firms from various monitors. Of importance to these parties are signals about corporate disclosure quality. The results of an empirical study of large U.S. firms supported the general hypothesis that corporate audiences rate the social performance of firms on the basis of information about firms' corporate disclosure quality in addition to market and accounting signals indicating the size of the assets, market assessment of the value assets in place and rate of return on assets.

Introduction

This paper investigates the link between a firm's overall disclosure quality and its social performance. This study adds to the growing literature on the determinants of social performance by suggesting that corporate audiences rate the social performance of firms by interpreting information signals about the firm's corporate disclosure quality. What results is that firms that consistently make timely and informative disclosures are more likely to avoid withholding value-relevant unfavorable economic and social information. Consequently these firms are given a high social performance rating.

The results of this study conform to the above argument. A firm's social performance is measured by executives' evaluation of corporate practices, available annually from Fortune Magazine. A firm's disclosure policy is measured by financial analysts' evaluation and corporate disclosures policy available from the annual volume of the Report of the Financial Analysts Federation Corporate Information Committee. Results show that the measure of social performance is positively related to the disclosure measure, after controlling for market and accounting signals indicating the size of the assets, market assessment of the value of assets in place and rate of return on assets.

The study extends the investigation of both the determinants of social performance and the consequences of disclosure quality by showing evidence of a link between disclosure quality and social performance of large U.S. firms.
Corporate social responsibility or social performance involves a continuance of social responsive activities that goes from profit-making only (Friedman, 1962); going beyond profit-making (Backman, 1975; Davis, 1960); going beyond economic/legal requirements (McGuire, 1963); voluntary activities (Manne & Wallich, 1972); economic, legal, and voluntary activities (Steinen, 1972); concentric, ever-widening circles of influence (Committee for Economic Development, 1971; Davis & Bloomstrom, 1975); concern for the broader social system (Elles & Walton, 1961); responsibility in a number of social problem areas (Hay, Gray & Gates, 1976); giving way to social responsiveness (Ackerman & Bauer, 1976; Riahi-Belkaoui, 1999a, 1999b, 1984; Sethi, 1975); and doing what society and the customer pay us for (Drucker, 1977). However, given that business receives its legitimation from society, social performance is best defined as the accomplishment or the perception of accomplishment of the desired ends of society in terms of moral, economic, legal, ethical, and discretionary expectations (Murray & Montani, 1986). Management may seek the accomplishment by looking at corporate social responsibility as a "product" offered to key publics. This marketing philosophy of social responsibility management, as proposed by Murray and Montani (1986), involves both a production and selling aspect. The production function involves the implementation of socially beneficial activities. The selling aspect of social performance is viewed as the public indoctrination by means of corporate disclosure. As a result corporate audiences will likely assess the social performance of a firm based on the firm's disclosure practices. They may be inclined to examine the adequacy of disclosure in annual and quarterly reports, the frequency of press releases and the availability of timely information to financial analysts. If a firm sores high on these actions, it may be perceived as having achieved quality in its corporate disclosures. It may follow that corporate audiences will attach a lower probability that the firm has withheld adverse private information and assign to it a high social performance ranking. This leads to the main hypothesis of the study:

Hypothesis 1: A firm's social performance is positively related to the quality of its disclosures.

Methodology

The impact of corporate disclosures in a firm's social performance is examined using the following model:

\[ SOP_{t+1} = f(DISC_t, \text{Control Variables}) \]  

Where \( SOP_{t+1} \) is the social performance ranking issued in year \( t+1 \) and \( DISC_t \) is a measure of disclosure quality over a period of years ending in year \( t \). Equation
(1) shows social performance as a function of disclosure quality and a set of control variables. All the variables are discussed below.

**Measure of Social Performance (SOP)**

The social performance measure was derived from the annual survey of corporate reputation by *Fortune Magazine*. The survey, covering thirty-three industry groupings, asked executives, directors and analysts in particular industries to rate companies in the following eight key attributes of reputations: (1) quality of management, (2) quality of products/service offered, (3) innovativeness, (4) value as a long term investment, (5) soundness of financial position, (6) ability to attract/develop/keep talented people, (7) responsibility to the community, environment, and (8) wise use of corporate assets. Ratings are on a scale of 0 (poor) to 10 (excellent). Social performance of each company is measured by the score obtained in item 7 of the organizational effectiveness instrument, namely, responsibility to the community/environment.

**The Control Variables**

The control variables were selected on the basis of a survey of prior research on the determinants of social performance (Ullman, 1985). They were identified in these studies as being positively related to social performance. These studies typically explain social performance building for large U.S. firms in terms of market and accounting signals of performance. Based on these studies, the following control variables were included.

- **ROA**: rate of return on assets. A firm's efficient use of its assets is best reflected by its rate of return in assets. Corporate audiences will assign better social performance ratings to firms with greater ROAs.
- **LR**: logarithm of total revenues as a measure of size. Corporate audiences better appreciate the information quality of larger firms and assign them a better social performance ranking.
- **QV**: the market value relative to the accounting value, denoted "q-value," is computed as the ratio of the market value of the firm to the book value of its assets. As both a measure of managerial performance and a measure of agency costs, QV can also be interpreted as a signal of asset management performance. Corporate audiences will assign a better social performance to firms with greater QV. (The "q-Value" also used in Smith and Watts (1991) is found to be highly correlated with Tobin's q).

**The Disclosure Quality Measurement (DISC)**

To measure disclosure quality, this study uses data from the annual volumes of the *Report of the Financial Analysts Federation Corporate Information Committee* (FAF 1986-1990). It is generally considered as a comprehensive measure of the informativeness of a firm's disclosure policy (Lang & Lundholm, 1993, 1996; Farragher et al., 1984; Welker, 1995; Sengupta, 1998; Botosan, 1997).
The data measures the firm’s effectiveness in communicating with investors and the extent to which the firm provides information so that investors have the information necessary to make informed judgments across all types of disclosures. The disclosures provided through annual reports, quarterly reports, proxy statements, published information in the form of press releases and fact books, and direct disclosures to and communications with analysts are used for the evaluation of the firm’s disclosure practices. In the FAF report, analysts evaluate the complete range of a firm’s disclosures, summarize their evaluations by a score (out of 100 possible points) on the firm’s total disclosure efforts and separate scores for the different disclosure categories. Although these scores are based on analysts’ perceptions of corporate disclosures practices any potential biases or errors are minimized by a procedure that a) requires the reporting of average scores (across industry analysts), and b) rests on the use of detailed guidelines and a comprehensive checklists of criteria that allow a standardization of the rating process both within and across industries.

Because corporate audiences may be expected to consider both past and present disclosures in their social performance assessments, the disclosure metric, DISC, to be used in this study is the average of the total disclosure score of a firm over three consecutive years (years t, t-1, and t-2).

The Model

The main hypothesis may be expressed by the following model:

$$SOP_{it} = a_{it} + a_{lt} \times DISC_{it} + a_{2t} \times LR_{it} + a_{3t} \times ROA_{it} + a_{4t} \times QV_{it} + e_{it}$$  \hspace{1cm} (2)

where

- $SOP_{it}$ = Score on responsibility to the community/environment
- $DISC_{it}$ = Average of total FAF disclosure score over the years t, t-1, and t-2.
- $LR_{it}$ = Logarithm of total revenues at the end of year t.
- $ROA_{it}$ = Rate of return on assets in year t.
- $QV_{it}$ = q-Value computed as total market value in year over total assets of year t.
- $a_{it}$ = Regression coefficient.
- $e_{it}$ = Residual term.

The model states that the score assigned to responsibility to the community/environment, as a measure of social performance, is a function of the level of corporate disclosure quality after controlling for the size, profitability and market to accounting value of the firm. The regression coefficients measure the relative impact of each of the independent variables of disclosure quality, size, profitability and market to accounting value on the social performance score assigned to the firm. Basically, a knowledge of the level of disclosure quality, size, profitability and market value to accounting value can be used to determine and/or explain the level of social performance assigned to a firm by external corporate audiences.

The model was run for the 1986-1990 period.
Sample

To secure the greatest sample of firms for which data would be available for all variables the initial sample chosen was for all firms included in both *Fortune*’s 1986 to 1990 studies of corporate reputation and in the annual volumes of the Report of the Financial Analysts Federation Corporate Information Committee (FAF 1986-1990). The disclosure scores of each firm were averaged over three consecutive years (years t, t-1, and t-2) to obtain the disclosure metric (DISC) capturing a firm’s current and past corporate disclosure performance. Accounting data for these firms’ control variables were obtained from Standard and Poor’s COMPSTAT industrial and business segment tapes. The final sample was 347 firm-year observations.

Results

Descriptive Statistics and Correlation Analysis

Table 1 presents the descriptive statistics for all the variables used for the study. The median disclosure score is 56.31. A wide dispersion of the score is present with a minimum of 47.31, a maximum of 76.73, and a standard deviation of 6.89. The median of logarithm of revenues of 9.027 indicates a sample of large U.S. firms, with a wide variation as indicated by the minimum and maximum values. The social performance score also varies across firms with a minimum of 3.90 and a maximum of 8.51. Table 2 presents the intercorrelations among the variables used in the study. The low intercorrelation among the predictor variables used in the model indicates no reasons to suspect multicollinearity, and various diagnostic tests run on the derived regression model confirmed that it was not a problem.

Effect of Disclosure Quality on Social Performance

The test of $H_1$ is performed by running regression (2). Table 3 presents the results of the regression coefficients for all the independent variables, using the social performance score as the dependent variable. The Breusch and Pagan (1979) test for heteroscedasticity yielded an $x^2$ of a minimum of 132.16 and a maximum of 152.13 for the regression, indicating that heteroscedasticity could be a problem. Accordingly, the reported t-statistics are based on White’s (1980) heteroscedasticity corrected covariance matrix. Hypothesis 1 predicts that corporate disclosure quality will positively affect social performance. The results appear to support the hypothesis that corporate audiences tend to assign higher (better) social performance ranking to firms with better corporate disclosure.

The control variables were all significant and have the expected signs, supporting the results of previous research on the determinants of social performance.
Table 1
Summary Statistics and Variable Definitions.

Panel A: Summary Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Median (6.621)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOP</td>
<td>374</td>
<td>6.47</td>
<td>0.607</td>
<td>6.45</td>
<td>3.98</td>
<td>8.51</td>
</tr>
<tr>
<td>DISC</td>
<td>374</td>
<td>57.86</td>
<td>6.89</td>
<td>56.31</td>
<td>47.31</td>
<td>76.7</td>
</tr>
<tr>
<td>ROA</td>
<td>374</td>
<td>0.057</td>
<td>0.05</td>
<td>0.057</td>
<td>0.08</td>
<td>0.2</td>
</tr>
<tr>
<td>LR</td>
<td>374</td>
<td>9.195</td>
<td>0.896</td>
<td>9.027</td>
<td>7.74</td>
<td>11.75</td>
</tr>
<tr>
<td>QV</td>
<td>374</td>
<td>0.8949</td>
<td>0.79</td>
<td>0.665</td>
<td>0.01</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Panel B: Variable Definitions

SOP : Social performance score
DISC : FAF Disclosure Score
ROA : Rate of return on assets
LR  : logarithm of total revenues
QV  : q-Value computed

Table 2
Correlations Among Selected Variables*

<table>
<thead>
<tr>
<th></th>
<th>SOP</th>
<th>DISC</th>
<th>ROA</th>
<th>LR</th>
<th>QV</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOP</td>
<td>1.000</td>
<td>-0.00053 (0.304)</td>
<td>0.460 (0.0001)</td>
<td>0.108 (0.036)</td>
<td>0.4495 (0.0001)</td>
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<tr>
<td>DISC</td>
<td>1.000</td>
<td>-0.285 (0.0001)</td>
<td>-0.136 (0.0004)</td>
<td>-0.320 (0.0001)</td>
<td>1.000</td>
</tr>
<tr>
<td>ROA</td>
<td>0.000</td>
<td>1.000</td>
<td>0.00</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>LR</td>
<td>1.000</td>
<td>0.00</td>
<td>-0.320 (0.0001)</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>QV</td>
<td>0.000</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p-Values for two-tailed tests are provided in parentheses.
Variables are defined in panel B of Table 1.
Table 3
Explaining Social Performance

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Intercept</th>
<th>DISC</th>
<th>LR</th>
<th>ROA</th>
<th>QV</th>
<th>F</th>
<th>Adjusted R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility to Community/Environment</td>
<td>3.412</td>
<td>0.006</td>
<td>0.315</td>
<td>2.042</td>
<td>0.472</td>
<td>46.323</td>
<td>32.65</td>
</tr>
<tr>
<td></td>
<td>(8.105)*</td>
<td>(1.769)**</td>
<td>(4.494)*</td>
<td>(2.083)*</td>
<td>(6.679)*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Variables are defined in Panel B of table 1.

*Absolute value of t-statistics in parenthesis, significant at α=0.01

**Significant at α=0.05.

Conclusion

The paper has hypothesized that corporate audiences will assign social performance ranking on the basis of a firm’s overall disclosure quality. More significantly, the results of an empirical study of large U.S. firms supported the general hypothesis that interested corporate audiences assign social performance ranking on the basis of information about a firm’s overall disclosure policy in addition to market and accounting signals indicating the size of the firm, the market assessment of the value of assets and the rate of return on assets. Firms appear to “sell” the social performance as a product to key publics through their disclosure policies in a way indoctrinating them and securing a societal support as a result of a blind conditioning process (Murray & Montanani, 1986). They may be assuming that the publics are cynical in their views of a firm’s social responsibility but can be induced to alter their opinions and attitudes toward the firm after exposure to a firm’s overall disclosures.

References


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