

DETERMINANTS OF CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE: AN APPLICATION OF STAKEHOLDER THEORY

ROBIN W. ROBERTS

School of Accountancy, University of Missouri–Columbia

Abstract

A lack of sufficient theoretical support for models designed to explain corporate social responsibility activity led Ullmann (*Academy of Management Review*, 1985, pp. 540–577) to develop a framework for predicting corporate social activity based on a stakeholder theory of strategic management. This study empirically tests the ability of stakeholder theory to explain one specific corporate social responsibility activity — social responsibility disclosure. Results support this application, finding that measures of stakeholder power, strategic posture, and economic performance are significantly related to levels of corporate social disclosure

Ullmann (1985) critically evaluated prior research in the area of corporate social responsibility and concluded that several deficiencies exist in the current body of corporate social responsibility research. Foremost in his critique was the lack of a comprehensive social responsibility theory sufficient to explain why corporations engage in social responsibility endeavors. He argues that this lack of a comprehensive theory is responsible for the conflicting results of many studies. A conceptual framework was developed by Ullmann (1985) as sufficient to explain the relationships among social disclosure, and social and economic performance. This framework is based upon the stakeholder approach to strategic management that was forwarded by Freeman (1983) and others, in which conflicting external demands on the firm may be addressed. Some recent studies in the social responsibility area have recognized the role of stakeholders in influencing corporate decisions (e.g. McGuire *et al.*, 1988), but have not attempted to explicitly test stakeholder influences as determinants of the level of corporate social responsibility activity. The purpose of this study is to operationalize the stakeholder framework presented by Ullmann and empirically test the effect of overall firm strategy on one type of social responsibility

activity — social responsibility disclosure. The present study improves on prior research by predicting the level of corporate social disclosure within a comprehensive theoretical framework and by adopting independent, third-party evaluations as measures of the level of corporate social disclosure.

The remainder of the paper is organized as follows. The next two sections discuss prior research in the area of corporate social responsibility and stakeholder theory. Thereafter, consideration is given to Ullmann's framework for analyzing social responsibility disclosures. The social responsibility disclosure model designed to test Ullmann's framework is then explained and the sample is described. The results of the empirical tests and the conclusions and limitations of the study are presented in the final sections of the paper.

PRIOR RESEARCH ON CORPORATE SOCIAL RESPONSIBILITY

Prior research has defined corporate social responsibility activities as policies or actions which identify a company as being concerned with society-related issues. Studies have examined corporate social responsibility activities in

many areas including the following categories: (1) the environment, (2) affirmative action programs, (3) equal employment opportunity policies, (4) community involvement, (5) product safety, (6) policies toward South Africa, (7) energy policies, and (8) social responsibility disclosure (CEP, 1986; Cowen *et al.*, 1987). Studies of relationships among social disclosure, social performance, and economic performance of corporations include philosophical treatises on businesses' inherent responsibilities to society, research regarding the economic consequences or information content of social responsibility activities and studies of the determinants of social responsibility disclosures.¹ Each stream of research is reviewed below.

The social responsibilities of business

During the 1960s and 1970s the relationship between business and society was re-examined and with that re-examination emerged new theories regarding corporate responsibilities to society (Dierkes & Antal, 1986). Steiner (1972), Davis (1973) and others proposed that diffusion of corporate ownership made the traditional manager-owner model of the business entity misspecified. They argued that although business is, fundamentally, an economic institution, larger firms exert significant influence in society and have responsibilities to use some economic resources in an altruistic manner to aid in meeting social goals.

Keim (1978b) argued that social responsibility activities may be consistent with wealth maximization motives of the firm. He stated that as society changes societal constraints on business activity also change. In a social environment that expects all corporations to exhibit concern for social goals, corporations that do not may be punished. Similar conclusions were reached by Belkaoui (1976) and Watts & Zimmerman (1978). Stakeholder theory provides an avenue in which to integrate the hypotheses regarding corporate social responsibility activities

forwarded by Keim, Belkaoui, and Watts and Zimmerman into a model of corporate social responsibility disclosure.

Economic consequences and information content studies

Studies on the effects of corporate social responsibility activities on firm value have produced mixed results. Some studies have reported beneficial effects while others have concluded that the effects are negative or inconsequential. Belkaoui (1976) investigated the information content of pollution control disclosures by developing portfolios of disclosing and nondisclosing firms. His results supported an ethical investor hypothesis that rewarded companies for acting in a socially responsible manner. The findings of some additional studies produced results consistent with the notion that corporate social responsibility activities impact on the financial markets (Spicer, 1978a, b; Anderson & Frankle, 1980; Shane & Spicer, 1983).

Some studies replicated earlier research and found conflicting results. Frankle & Anderson (1978) rejected Belkaoui's interpretation and argued that nondisclosing firms had consistently performed better than the market. In a similar manner, Chen & Metcalf (1980) disagreed with Spicer's conclusions arguing that the results were driven by spurious correlations. In response, Spicer (1980) stated that Chen and Metcalf misinterpreted the purpose of his study emphasizing that associations, not causal relationships, were being investigated.

Ingram (1978) concluded that the information content of social responsibility disclosures was conditional upon the market segment with which a firm is identified, while Alexander & Buchholz (1978) and Abbott & Monsen (1979) found no significant relationship between a corporation's level of social responsibility activities and stock market performance. Chugh *et al.* (1978), Trotman & Bradley (1981) and

¹ In addition to developing a stakeholder framework for analyzing corporate social responsibility activities, Ullmann (1985) provides a detailed discussion of prior research in the area

Mahapatra (1984) concluded that corporate social responsibility activities may lead to increased systematic risk.

These studies were conducted prior to Ullmann (1985) and are subject to his criticism that empirical research in corporate social responsibility has not developed a solid theoretical foundation. While some studies extended earlier work through methodological improvements or by sampling from a different population of companies, theoretical advances were not substantial.

Determinants of social responsibility activities

Cochran & Wood (1984) used corporate social responsibility rankings developed by Moskowitz (1972) to test the relationship between corporate social responsibility activities and firm performance. After controlling for industry classification and corporate age, a weak, positive association between social responsibility activities and financial performance was found. Mills & Gardner (1984) concluded in their analysis of the relationship between social disclosure and financial performance that companies are more likely to disclose social responsibility expenditures when their financial statements indicate favorable financial performance.

Cowen *et al.* (1987) examined the relationships between several corporate characteristics and specific categories of social responsibility disclosures. Company size, industry classification, profitability, and the presence of a corporate social responsibility committee were hypothesized as potential influences on corporate social disclosure. The results of a multiple regression analysis concluded, in general, that company size and industry classification are associated with corporate social disclosures. McGuire *et al.* (1988) used *Fortune* magazine's ratings of corporate reputations to analyze the relationships between perceived corporate social responsibility performance and financial performance. Prior financial performance of the firms, as measured by both stock market returns and accounting-based measures, were found to be

more closely related to corporate social responsibility than was subsequent financial performance. McGuire *et al.* (1988) suggested that financial performance may be a variable influencing social responsibility activities.

Conclusions drawn from this stream of empirical research were generally consistent with the theoretical model developed by Ullmann (1985), but none of the studies provided a comprehensive theory to predict corporate social performance or disclosure. McGuire *et al.* (1988) reference stakeholder considerations but do not incorporate measures of stakeholder power or strategic posture into their empirical tests.

STAKEHOLDER THEORY

The stakeholder concept

Freeman (1984) defines a stakeholder as "any group or individual who can affect or is affected by the achievement of the firm's objectives". Stakeholders of the firm include stockholders, creditors, employees, customers, suppliers, public interest groups, and governmental bodies. Ansoff (1965) was the first to use the term "stakeholder theory" in defining the objectives of the firm. A major objective of the firm was to attain the ability to balance the conflicting demands of various stakeholders in the firm.

Freeman (1983) categorized the development of the stakeholder concept into a corporate planning and business policy model and a corporate social responsibility model of stakeholder management. The corporate planning and business policy model of the stakeholder concept focuses on developing and evaluating the approval of corporate strategic decisions by groups whose support is required for the corporation to continue to exist. The behavior of various stakeholder groups is considered a constraint on the strategy that is developed by management to best match corporate resources with its environment. In this model stakeholders are identified as customers, owners, suppliers and public groups and are not adversarial in nature.

The corporate social responsibility model of stakeholder analysis extends the corporate planning model to include external influences on the firm that may assume adversarial positions. The adversarial groups are characterized as regulatory or special interest groups concerned with social issues. The corporate social responsibility model allows a strategic planning model to adapt to changes in the social demands of nontraditional power groups.

Freeman (1983) discusses the dynamics of stakeholder influences on corporate decisions. A major role of corporate management is to assess the importance of meeting stakeholder demands in order to achieve the strategic objectives of the firm. As the level of stakeholder power increases the importance of meeting stakeholder demands increases, also. From Freeman's model, Ullmann (1985) developed a conceptual model of corporate social responsibility activities. Thus, Ullmann provides a conceptual basis for studying corporate social responsibility activities in a stakeholder framework. Ullmann concluded that stakeholder theory provides an appropriate justification for incorporating strategic decision making into studies of corporate social responsibility activities. The Ullmann model is discussed in detail in the next major section of the paper.

Applications of stakeholder theory

Stakeholder theory has been applied to analytical and empirical analyses of the firm and the environment in which the firm operates. The proposition that stakeholder interests may conflict was tested by Sturdivant (1979). He used a survey to compare the social responsibility attitudes of activist group leaders and corporate managers. As hypothesized, there were significant differences between attitude scores of activists and corporate managers. The scores indicated that activists were stronger in their beliefs that businesses should be responsive to social issues. Sturdivant concluded that corporate management should not necessarily change their beliefs to conform to those of stakeholders, but managers should consider

conflicting stakeholder interests when planning corporate strategy.

In a study of strategic performance, Chakravarthy (1986) discussed the inadequacy of traditional profitability measures as indicators of strategic performance and proposed the use of a stakeholder satisfaction measure. He argued that well-adapted firms (i.e. firms whose strategic performance is considered excellent) realize that co-operation of a firm's multiple stakeholder groups is a "necessary condition for excellence". A *Fortune* magazine survey of corporate reputations in which stakeholder satisfaction was considered was cited by Chakravarthy as supporting his contention.

Cornell & Shapiro (1987) discuss the role of stakeholders other than investors and managers in the development of a firm's financial policy. They contend that a firm issues "implicit claims" to non-investor stakeholders that must be considered when developing a firm strategy regarding capital structure. Implicit claims, such as uninterrupted service to customers, cannot be separated from a firm's business dealings and impact a firm's total risk (i.e. expected cash flows). Barton *et al.* (1989) empirically tested Cornell and Shapiro's assertion that stakeholder theory may be used to explain cross-sectional variations in firms' capital structures. Using a diversification strategy variable to proxy for a stakeholder construct, they found empirical results consistent with stakeholder predictions. Their research, along with the other studies reviewed, provides evidence that stakeholder theory is a viable approach to predicting and explaining management behavior.

ULLMANN'S FRAMEWORK

Ullmann (1985) concluded that corporate social responsibility models developed in prior research are misspecified because the relationship of firm strategy to the social responsibility decision has not been incorporated into the empirical tests. He developed a contingency framework for predicting levels of corporate social responsibility activity and disclosure

based on the stakeholder concept formalized by Freeman (1984). Ullmann's framework is consistent with the conceptual view of corporate social reporting discussed by Dierkes & Antal (1985), that publicly disclosed information regarding corporate social responsibility activities provides a basis for dialogue with various business constituencies.

Ullmann (1985) presents a three-dimensional model as sufficient to explain almost all correlations among social disclosure and social and economic performance. Stakeholder power is discussed as the first dimension of the model, explaining that a firm will be responsive to the intensity of stakeholder demands. A stakeholder's (e.g. owners, creditors, or regulators) power to influence corporate management is viewed as a function of the stakeholder's degree of control over resources required by the corporation (Ullmann, 1985). The more critical stakeholder resources are to the continued viability and success of the corporation, the greater the expectation that stakeholder demands will be addressed. If social responsibility activities are viewed as an effective management strategy for dealing with stakeholders, a positive relationship between stakeholder power and social performance and social disclosure is expected.

As will be discussed below evidence suggests that social responsibility activities are useful in developing and maintaining satisfactory relationships with stockholders, creditors, and political bodies. Developing a corporate reputation as being socially responsible, through performing and disclosing social responsibility activities, is part of a strategic plan for managing stakeholder relationships.

The second dimension of the model is the firm's strategic posture toward corporate social responsibility activities. Strategic posture describes the mode of response of a company's key decision makers concerning social demands. Ullmann dichotomizes strategic posture as active or passive. A company whose management tries to influence their organization's status with key stakeholders through social responsibility activities possesses an active posture. If a company's management is not

continuously monitoring its position with stakeholders and is not developing specific programs to address stakeholder influences, then the company is perceived to possess a passive strategic posture. Thus, the more active the strategic posture the greater the expected social responsibility activities and disclosures.

The model's third dimension concerns the company's past and current economic performance. The importance placed on meeting social responsibility goals may be secondary to meeting the economic demands that impact directly on a company's continued viability. Economic performance directly affects the financial capability to institute social responsibility programs. Therefore, given certain levels of stakeholder power and strategic posture, the better the economic performance of a company, the greater its social responsibility activity and disclosures.

THE SOCIAL DISCLOSURE MODEL

The empirical tests in this study use measures of stakeholder power, strategic posture toward social responsibility, and economic performance to predict cross-sectional variations in one corporate social responsibility activity — corporate social responsibility disclosure. It is also hypothesized that in constructing the model, a time lag between measures of the explanatory factors and social disclosure is necessary. This lag is necessary due to: (1) the dynamic nature of strategic planning, (2) the focus of stakeholder theory on meeting the long-term interests of stakeholders, (3) the empirical findings of Cowen *et al.* (1987) and McGuire *et al.* (1988), and (4) the fact that social disclosures relate primarily to past social responsibility activities.

The empirical form of the model is:

$$\begin{aligned} \text{SOCDIS}_{i,t} = & b_0 + b_1 + b_2 (\text{PSH}_{i,t-1}) \\ & + b_3 (\ln \text{PAC}_{i,t-1}) + b_4 (\text{DERATIO}_{i,t-1}) \\ & + b_5 (\text{PUBAFF}_{i,t-1}) + b_6 (\text{FOUND}_{i,t-1}) \\ & + b_7 (\text{MGRROE}_{i,t-1}) + b_8 (\text{BETA}_{i,t-1}) \\ & + b_9 (\text{AGE}_{i,t-1}) + b_{10} (\text{INDEFF}_{i,t-1}) \\ & + b_{11} (\ln \text{SIZE}_{i,t-1}) + e_t \end{aligned}$$

where:

- b_0, b_1 = intercept terms;
- SOCDIS = level of corporate social responsibility disclosure for firm i in period t ; 0 = poor, 1 = good, 2 = excellent;
- PSH = percentage of ownership in firm i held by management and shareholders holding more than 5% of common stock at period $t - 1$;
- PAC = dollars contributed by firm i to its corporate political action committee in period $t - 1$;
- DERATIO = average debt to equity ratio for firm i in period $t - 1$;
- PUBAFF = average number of corporate public affairs staff members employed by firm i in period $t - 1$;
- FOUND = sponsorship of a philanthropic foundation by firm i in period $t - 1$; FOUND = 1 if a corporate philanthropic foundation exists. Otherwise, FOUND = 0;
- MGRROE = average annual change in return on equity for firm i in period $t - 1$;
- BETA = market model measure of systematic risk for firm i at period $t - 1$;
- AGE = age of corporation at period $t - 1$;
- INDEFF = presence of firm i in a high profile industry at period $t - 1$; INDEFF = 1 if a corporation is part of a high profile industry. Otherwise, INDEFF = 0;
- SIZE = average revenues of firm i in period $t - 1$.

In the empirical tests, period t represents the years 1984–1986. For the independent variables PSH, BETA, AGE, and INDEFF, $t - 1$ represents 1984. For PAC, DERATIO, MGRROE, and SIZE, $t - 1$ represents the years 1981–1984. The period $t - 1$ represents the years 1983–1984 for the variables PUBAFF and

FOUND.² Logarithmic transformations of the variables PAC and SIZE are used when estimating the social disclosure model. The transformation is performed because variables with observations that are large in absolute amounts can overwhelm other variables during the logistic regression iteration process. A complete description of the variables used in the model is presented in Table 1.

Dependent variable

The dependent variable for the social disclosure model (SOCDIS) is adapted from an extensive analysis of the social responsibility activities of 130 major corporations that was published by the Council on Economic Priorities (CEP) in 1986. The CEP analysis resulted in a rating of each corporation's level of disclosure of social responsibility activities from 1984 to 1986. This extensive search by the CEP involved: (1) direct communication with each company, (2) a review of corporate annual reports, 10K reports, and proxy statements, (3) an in-depth study of newspapers, magazines, and other publications, and (4) an analysis of secondary information sources such as *The Taft Corporate Giving Directory*, the *National Directory of Corporate Charity*, and the *National Data Book*.

The CEP evaluated each corporation's social disclosure performance and a rating of a = excellent, c = good, or f = poor was determined. If a corporation included in the sample received an "a" rating from the CEP, the dependent variable SOCDIS is set equal to 2. If a company received a CEP rating of "c", SOCDIS is set equal to 1, and for an "f" rating SOCDIS is set equal to 0.

Wiseman (1982) found significant discrepancies between some corporate social disclosures and actual corporate social responsibility activities. This led Ullmann (1985) to conclude that voluntary corporate disclosures should not be used as proxies for social responsibility performance. By evaluating many alternative sources

² The *National Directory of Corporate Public Affairs* is the source for data relating to the variables PUBAFF and FOUND. This directory was not published before 1983. Therefore, PUBAFF and FOUND are limited to two years of data.

TABLE 1. Description of variables

Variable name (expected sign)	Description	Data source
Dependent variable		
SOCDIS (n.a.)	Evaluation of corporate social disclosures 1984–1986 = 0 if disclosure is poor, 1 if good, 2 if excellent	Council on Economic Priorities
Independent variables		
Stakeholder power		
PSH (–)	% of corporation owned by management and by individual shareholders owning more than 5% of outstanding shares in 1984	Proxy statements
PAC (+)	Natural log of the dollars contributed by corporate PACs to political campaigns 1981–1984	Council on Economic Priorities
DERATIO (+)	Average debt to equity ratio 1981–1984	Compustat
Strategic posture		
PUBAFF (+)	Average size of corporate public affairs staff 1983–1984	National Directory of Corporate Public Affairs
FOUND (+)	FOUND = 1 if corporation sponsors a philanthropic foundation in 1983 & 1984, else FOUND = 0	National Directory of Corporate Public Affairs
Economic performance		
MGRROE (+)	Average annual change in return on equity 1981–1984	Compustat
BETA (–)	Beta for 1984 computed using market model with 60 month estimation period	Compustat
Control variables		
AGE (+)	Age of corporation in 1984	Compustat
INDEFF (+)	INDEFF = 1 if corporation is in the automobile, airline, or oil industry, else INDEFF = 0	Council on Economic Priorities
SIZE (+/–)	Natural log of average revenues 1981–1984	Compustat

to corroborative evidence regarding corporate social disclosure, the CEP ratings provide an improved measure of both the level and the reliability of corporate social responsibility disclosure.

Independent variables

The independent variables used in the empirical tests represent the level of stakeholder power, the strategic posture toward social responsibility activities, or the economic performance of a corporation. The proxies selected to represent these hypothesized influences on corporate social responsibility disclosures are discussed in this section.

Stakeholder power variables. Three stakeholder power variables are included in the social disclosure model. The variable PSH

represents the potential stakeholder power of passive investors (i.e. stockholders). The variable PAC provides a measure of governmental (i.e. political, legislative, or regulatory) risks faced by corporations and DERATIO proxies for potential creditor influences. The rationale for the selection of these proxies and their relationship to corporate social responsibility disclosures is presented below.

Stockholder power. Keim (1978a) stated that as the distribution of ownership of a corporation becomes less concentrated, the demands placed on the corporation by share owners becomes broader. Disperse corporate ownership, especially by investors concerned with corporate social activities (e.g. social responsibility mutual funds, church and civic pension plans, and ethical investors), heightens pressure for

management to disclose social responsibility activities (Ullmann, 1985). The variable PSH represents the percentage of outstanding common stock held by corporate management and by other individuals who own 5% or more of the stock. Following from Keim and Ullmann, it is hypothesized that the wider the dispersion of corporate ownership the better the corporation's social responsibility disclosures. Thus, an inverse relationship is predicted between PSH and the dependent variable SOCDIS.

Governmental and regulatory influences. Freeman (1984) discussed the role of legislative bodies as corporate stakeholders. Watts & Zimmerman (1978) developed a political costs hypothesis to argue that corporations employ social responsibility activities to reduce the risk of governmental intrusions, such as regulation, that may adversely affect firm value. The political costs hypothesis and the stakeholder concept both recognize the ability of government to have an impact on corporate strategy and performance. Thus, government can be viewed as a corporate stakeholder whose interests must be addressed by management. Higher levels of perceived governmental influence on corporate activity would be expected to lead to a greater effort by management to meet expectations of government. Social responsibility disclosures may be used by management as a strategy designed to satisfy government demands.

Prior accounting research has relied on a corporate size variable to proxy for the impact of political activity on corporate strategy. Size has been criticized as a proxy for political exposure because it is correlated with many other corporate characteristics. This study uses corporate political action committee contributions from 1981–1984 as an indicator of government stakeholder power. Corporate political activity has been described as a set of managerial decisions designed to increase the firm's competitive advantage in the political arena, and political action committee contributions have been specifically discussed as a major type of strategy (Keim & Zeithaml, 1986; Keim

& Baysinger, 1988). Keim & Zardkoohi (1988) concluded that political action committee contributions may serve as protection against future political risks or to influence enactment of favorable legislation. In an analysis of environmental regulation, Hahn (1990) concluded that environmental policy decisions result from a struggle between key interest groups and specified industry influences as a critical component in the process. Hahn's conclusions provide further support for a comprehensive approach to analyzing pollution control expenditures and corporate social responsibility activities.

These studies in corporate political activity and environmental regulation infer that corporate political action committee contributions result from a corporate strategy designed to manage political risks. It follows that relatively larger amounts of corporate political action committee contributions result from management perceptions of higher regulatory and political pressure, and that social responsibility disclosures will more likely be of interest to regulatory agencies and political groups. Thus, it is hypothesized that PAC is directly related to the dependent variable SOCDIS.

Creditor influences. Creditors control access to financial resources that may be necessary for the continued operation of a corporation. Ullmann (1985) posited that if a corporation perceives stakeholders as concerned with social responsibility activities the corporation will have greater incentives to disclose its activities. Stakeholder analysis has been used in prior research to explain corporate decisions regarding financial policies (Cornell & Shapiro, 1987; Barton *et al.*, 1989). The analyses concluded that capital structure decisions are part of an overall corporate stakeholder strategy and that creditors are important stakeholders whose influences should be managed.

It follows that the greater the degree to which a corporation relies on debt financing to fund capital projects, the greater the degree to which corporate management would be expected to respond to creditor expectations

concerning a corporation's role in social responsibility activities. To test the hypothesis that the level of corporate social responsibility disclosure is directly related to the degree to which a corporation is leveraged, the variable DERATIO is included in the social disclosure model. DERATIO is defined as the corporation's average debt to equity ratio for 1981 to 1984. The debt to equity ratio is chosen as a measure of creditor stakeholder power because it captures the importance of creditors as stakeholders relative to equity investors. DERATIO is expected to have a direct relationship to the level of corporate social disclosure.

Strategic posture variables. Hatten *et al.* (1978) define corporate strategy as relating to the goals and objectives of the firm regarding the products it offers, the markets it will serve, and the environment in which it will operate. Bowman & Haire (1975) discussed corporate social responsibility from a strategic posture perspective. Ullmann (1985) discusses the role of strategy in defining how a corporation may respond to social demands. An active strategic posture toward social demands is expected to result in greater social responsibility activities.³ Two variables included in the social disclosure model to test the relationship between strategic posture toward social responsibility disclosure and the level of corporate social responsibility disclosures are discussed below.

Public affairs staff. Corporate public affairs departments are developed to initiate and monitor corporate policy regarding public relations, community affairs, governmental affairs, and issues management (Marcus & Kaufman, 1988). Marx (1990) and Blair (1986) emphasized the importance of integrating public affairs management into corporate strategic planning decisions. Due to corporate public affairs departments' success in helping maintain com-

petitive advantages, the public affairs function has been legitimized and corporate support increased (Marcus & Kaufman, 1988). Public affairs activities are designed to build long-term rapport and goodwill with various stakeholders, and to protect or enhance revenues by controlling business and political risks.

Given how prior studies have defined the mission of corporate public affairs departments, it follows that corporations that assume an active strategic posture toward social responsibility activities would establish and support a public affairs staff. The hypothesis that corporations with relatively larger public affairs departments will have higher levels of social responsibility disclosure is tested through the variable PUBAFF. PUBAFF represents the average size of the corporation's public affairs staff during 1983–1984.

Philanthropic foundation. Corporate contributions to charity are generally considered social responsibility activities (Rosebush, 1987). Navarro (1988) developed a formal structural model in which corporate contributions to charity are also consistent with a profit maximization objective. Profit motives consistent with charitable giving include: (1) promotion of the firm's image in order to help insulate the firm from unfavorable tax or regulatory policies; (2) educational support in order to increase the long-run labor supply of skilled employees; (3) an increase in goodwill support by customers; and (4) other promotional considerations that may reduce operational and capital costs (Navarro, 1988). The motives presented above describe anticipated responses from key stakeholders when information concerning corporate charitable contributions is disclosed.

Rosebush (1987) argued that charitable contributions are more effective when the strategy for corporate giving is organized and well executed. Corporate sponsored phil-

³ As a reviewer pointed out, an "active" strategic posture toward social responsibility could imply an overt policy of minimizing corporate social activities. I use the term "active strategic posture" to define a corporate strategy in which the corporation portrays a positive stance toward social responsibility activities

anthropic foundations are established for this specific purpose. Because corporate charitable giving can be considered a strategic tool for managing stakeholders and organized giving provides an effective method for monitoring this activity, the existence of a corporate sponsored charitable foundation is used as a measure of corporate strategic posture towards social responsibility disclosure. The independent variable FOUND equals one if the firm sponsors a foundation during 1983–1984 and is expected to be directly related to a corporation's level of corporate social responsibility disclosure.

Economic performance variables. Belkaoui (1976), Ingram (1978), Mahapatra (1984), McGuire *et al.* (1988) and others have empirically tested the relationship between corporate social disclosure and economic performance. While some of the tests have controlled for firm size, industry classification, or systematic risk, the social disclosure/economic performance association has not been investigated empirically in a comprehensive social disclosure framework. In this study, an accounting-based measure (MGRROE) and a stock-market-based measure (BETA) of economic performance are employed to test the impact of prior economic performance on a company's level of corporate social responsibility disclosure.

Return on equity. Sustained growth in economic returns to equity investors is a primary goal that is common to all corporate managers. Trends in earnings-based measures of economic performance, such as return on equity, are frequently used in evaluating the performance of corporate officers. Given that in periods of low profitability economic demands take priority over discretionary social responsibility expenditures, satisfactory financial performance has a definite influence on the level of support top corporate decision makers can commit to future social responsibility activities (Ullmann, 1985). Thus, stakeholder theory predicts a positive association between accounting-based measures of prior economic performance and corporate

levels of social responsibility disclosure. The average annual percentage change in a firm's return on equity from 1981 through 1984 (MGRROE) is included in the social disclosure model to test for this positive relationship.

Systematic risk. Systematic risk is defined as the covariance between returns on a risky asset (e.g. a corporation's common stock) and market portfolio, divided by the variance of the market portfolio (Copeland & Weston, 1983). Corporations that have low measures of systematic risk are expected to have higher levels of social responsibility activities for at least two reasons. First, corporations exhibiting low systematic risk have a more stable pattern of stock market returns. Given that economic considerations influence corporate decision makers regarding social responsibility activities, stable economic performance should enhance a corporation's ability to commit to involvement in social responsibility endeavors. Second, because research suggests that social responsibility activities may improve a firm's access to capital and increase employee morale and productivity (Moskowitz, 1972; McGuire *et al.*, 1988), market participants may view socially responsible firms as better managed and, thus, less risky. Disclosures of social responsibility activities would then provide information that the market uses in establishing firm value.

For the reasons stated above, corporations with low systematic risk are expected to have higher levels of corporate social responsibility disclosure. A measure of a firm's systematic risk (BETA) is included in the estimation of the social disclosure model. It is expected that BETA is inversely related to SOCDIS.

Control variables. Results of prior studies have found significant relationships between company size, the age of a corporation, industry classification, and social responsibility activities. While no theory was forwarded to explain these empirical associations, prior research suggests that corporate size, industry classification and corporate age are likely to act as intervening variables and should be controlled

for in empirical tests (Cochran & Wood, 1984; Ullmann, 1985; Cowen *et al.*, 1987). In addition, arguments can be made that corporate age and industry classification represent some aspect of stakeholder power, strategic posture, and/or economic performance.

Age. As a corporation matures, its reputation and history of involvement in social responsibility activities can become entrenched.⁴ Stakeholder expectations regarding sponsorship and involvement could make any drastic change in corporate strategy very costly. Sponsorship withdrawal could signal to stakeholders that the corporation expects financial or managerial disturbances. The age of each corporation in 1984 is included in the model through the variable AGE and is expected to be directly related to SOCDIS.⁵

Industry classification. Industry classifications used in prior research may have captured some systematic relation between broad industry characteristics, such as intensity of competition, consumer visibility, or regulatory risk, and social responsibility activities. Studies have used samples from the metals, oil, chemical, electronic computing, food processing, airline, and numerous other industries in analyses of corporate social disclosures either because of data availability or because of a perception that the particular industry faced unique social pressures. In this study, as in prior studies, the approach to controlling for possible industry effects is rather *ad hoc*. Of the seven industries included in the sample used in this study, the automobile, airline, and oil industries have the most intuitive appeal as industries with consumer visibility, a high level of political risk, and concentrated, intense competition. Thus, if a sample company is identified with one of these

high profile industries, the variable INDEFF is set equal to one. If a company belongs to the food, health and personal products, hotel, or appliance and household products industry, INDEFF is set equal to zero. Corporations in high profile industries are expected to have higher levels of social responsibility disclosures.

Company size. Company size has been suggested in several studies as a correlate of the level of corporate social responsibility activity. These studies posited that corporate size would be related to social responsibility activities because larger companies are more likely to be scrutinized by both the general public and socially sensitive special interest groups. In addition, larger companies (1) may have more shareholders interested in corporate social activity, and (2) are more likely to use formal communication channels to relate results of social endeavors to interested parties (Cowen *et al.*, 1987).

Although Ullmann (1985) does not incorporate company size into his stakeholder framework, variables used to represent stakeholder power or strategic posture dimensions (e.g. size of public affairs staff, dollars contributed to corporate political action committees) may be correlated with company size. To control for possible corporate size effects, the variable SIZE is included in the logistic regression. SIZE is defined as the corporation's average revenues during 1981–1984.

SAMPLE SELECTION AND DESCRIPTION

Companies used to estimate the social disclosure model are drawn from 130 major corporations that were investigated in 1984, 1985 and 1986 by the Council on Economic

⁴ Navarro (1988) uses Texaco's sponsorship of the Metropolitan Opera broadcasts and AT & T's support of the public affairs program, the MacNeil–Lehrer News Hour, as examples of well-known corporate sponsorship

⁵ A precise measure for the age of a corporation is difficult due to the possibility of mergers, reorganizations, and/or significant changes in business activities. The Compustat measure supplies a consistent application of an age calculation method

Priorities (CEP). The CEP studies focus on large Fortune 500 companies because, in general, these companies are influential in establishing corporate trends in the social responsibility area. Seven industry categories were represented: (1) the automobile industry, (2) the food industry, (3) the health and personal care industry, (4) the airline industry, (5) the oil industry, (6) the hotel industry, and (7) the appliance and household products industry. The results of their study were published in a book entitled *Rating America's Corporate Conscience* (1986). Previous CEP reports have been used extensively in social responsibility research (Spicer, 1978; Chen & Metcalf, 1980; Shane & Spicer, 1983). This study is the first to

use the 1986 CEP report in evaluating levels of corporate social disclosure. As discussed previously, the CEP investigators rated the level of corporate social responsibility disclosures for each company included in their study. Data for the dependent variable in the social disclosure model (SOCDIS) were taken from the 1986 CEP report.

In addition to the information provided by the CEP, financial and ownership data were required to test the social disclosure model. Financial statement information was taken from the 1981, 1982, 1983, and 1984 COMPUSTAT files and used to calculate the variables DERATIO, MGRROE, AGE, and SIZE. The monthly stock price data necessary to compute a measure of

TABLE 2 Descriptive statistics for independent variables by level of social responsibility disclosure

<i>Part A: Continuous variables</i>							
Independent variables	Variable name	Companies with poor social disclosure (n = 26)		Companies with good social disclosure (n = 14)		Companies with excellent social disclosure (n = 40)	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Percentage of ownership held by management and principal shareholders in 1984	PSH	17.488	26.943	11.659	16.403	9.417	16.588
Contributions to corporate political action committee for 1981-1984 (\$)	PAC	57,652	85,292	89,221	65,854	83,982	88,149
Average debt/equity ratio for 1981-1984	DERATIO	1.719	1.395	0.941	1.767	1.967	5.108
Number of public affairs staff members in 1984	PUBAFF	8.731	10.332	14.143	8.465	14.188	12.642
Average growth in return on equity for 1981-1984 (%)	MGRROE	-22.519	131.352	7.918	20.920	27.835	111.032
Market model measure of systematic risk (beta) in 1984	BETA	0.860	0.338	0.715	0.299	0.693	0.293
Age of corporation from inception to 1984 (years)	AGE	53.346	25.197	65.785	28.412	71.075	23.314
Average revenues 1981-1984 (million \$)	SIZE	5500.4	9482.6	13,271.0	17,075.4	10,479.4	19,665.4
<i>Part B: Indicator variables</i>							
Independent variables	Variable name	Companies with poor social disclosures (n = 26)		Companies with good social disclosures (n = 14)		Companies with excellent social disclosures (n = 40)	
		Number	(%)	Number	(%)	Number	(%)
Corporate sponsor of a philanthropic foundation	FOUND	8	(31)	11	(79)	29	(73)
High profile industry status	INDEFF	11	(42)	8	(57)	20	(50)

TABLE 3 Pearson correlation coefficients

	SOCDIS	PSH	PAC	DERATIO	PUBAFF	FOUND	MGRROE	BETA	AGE	INDEFF
PSH*	-0.172† (0.12)									
PAC	0.172 (0.12)	-0.226 (0.04)								
DERATIO	0.037 (0.73)	0.083 (0.45)	0.086 (0.44)							
PUBAFF	0.206 (0.06)	-0.269 (0.02)	0.356 (0.01)	-0.090 (0.43)						
FOUND	0.361 (0.01)	-0.031 (0.78)	0.138 (0.22)	-0.220 (0.05)	0.256 (0.02)					
MGRROE	0.203 (0.07)	0.097 (0.38)	-0.312 (0.01)	-0.105 (0.35)	-0.036 (0.74)	0.161 (0.15)				
BETA	-0.231 (0.03)	0.390 (0.01)	0.036 (0.74)	0.286 (0.01)	-0.058 (0.61)	-0.176 (0.11)	-0.064 (0.56)			
AGE	0.303 (0.01)	-0.020 (0.85)	-0.029 (0.79)	-0.184 (0.10)	0.163 (0.14)	0.216 (0.05)	0.033 (0.76)	-0.152 (0.17)		
INDEFF	0.061 (0.59)	-0.003 (0.97)	0.012 (0.91)	-0.108 (0.34)	-0.190 (0.09)	-0.173 (0.12)	-0.041 (0.72)	-0.144 (0.20)	-0.142 (0.21)	
SIZE	0.120 (0.29)	-0.274 (0.01)	0.386 (0.01)	-0.089 (0.43)	0.727 (0.01)	0.156 (0.17)	-0.101 (0.37)	-0.155 (0.17)	0.177 (0.12)	-0.104 (0.36)

* See Table 1 for a complete description of the variables.

† The top number represents the degree of correlation and the bottom number represents the level of significance

each firm's systematic risk (BETA) was taken from the COMPUSTAT files, also. The data for the variable PSH were gathered from each company's 1984 proxy statements, and the 1986 CEP report contained the information necessary for the variables PAC and INDEFF. Information for PUBAFF and FOUND came from the *National Directory of Corporate Public Affairs* (Close & Colgate, 1983, 1984). Of the 130 corporations profiled by the CEP, 80 met the data requirements of the study. Twenty-six of the companies included in the sample were rated by the CEP as having poor social disclosure. Fourteen of the companies received good social disclosure ratings and 40 companies were rated as excellent.

Table 2 presents the descriptive statistics for the independent variables for each category of social disclosure. Table 3 presents the bivariate correlations between the CEP evaluation of corporate social disclosure and measures of stakeholder power, strategic posture toward social responsibility activities, economic performance, and control variables.

All bivariate correlations between SOCDIS and the independent variables possess the expected sign. The strategic posture variables PUBAFF and FOUND, the economic performance variables MGRROE and BETA, and the control variable AGE are all significantly correlated (p value < 0.10) with the dependent variable.

Correlations between independent variables provide no indication that an unacceptable level of multicollinearity is present in the data. Farrar & Glauber (1967) concluded that harmful levels of multicollinearity were not present until bivariate correlations reached 0.8 or 0.9. In this study no correlations between independent variables reach this level, however, the correlation between company size (SIZE) and the number of public affairs personnel (PUBAFF) is 0.727. To further test for potential multicollinearity problems an OLS regression was used to generate variance inflation factors for the independent variables in the social disclosure model. Marquardt (1970) concluded that multicollinearity is a potential problem if a

TABLE 4 Logistic regression results for the social responsibility disclosure model

Dependent variable = rating of corporate social responsibility disclosures for 1984–1986					
Independent variable	Variable name	Expected sign	Parameter estimate	Standard error	Chi-square statistic
Percentage of ownership held by management and principal shareholders for 1984	PSH	–	–0.013	0.015	0.74
Contributions to corporate political action committee for 1981–1984	PAC	+	0.058	0.033	3.02**
Average debt/equity ratio for 1981–1984	DERATIO	+	0.166	0.105	2.51*
Corporate public affairs staff members in 1984	PUBAFF	+	0.048	0.038	1.63*
Corporate sponsor of a philanthropic foundation	FOUND	+	1.255	0.545	5.30***
Average growth in return on equity for 1981–1984	MGRROE	+	0.007	0.004	3.41**
Market model measure of systematic risk (beta) for 1984	BETA	–	–1.118	0.872	1.64*
Age of corporation since inception as of 1984	AGE	+	0.030	0.011	7.63***
High profile industry status	INDEFF	+	1.033	0.548	3.55**
Average revenues 1981–1984	SIZE	+/-	–0.413	0.330	1.56
b_0		n.a.	0.931	2.613	0.13
b_1		n.a.	–0.132	2.611	0.00

Model chi-square = 34.29 with 10 d.f., significant at less than the 0.001 level; $R = 0.296$

One-tailed tests (except for intercept terms): *** significant at 0.01 level; ** significant at 0.05 level, * significant at 0.10 level

variance inflation factor exceeds 10.0. In this analysis, the variance inflation factors for the SIZE and PUBAFF variables were 2.33 and 2.36, respectively. The OLS findings mitigate, to some extent, multicollinearity concerns.

ANALYSIS OF THE RESULTS

Estimation of the social disclosure model

The empirical model was estimated using logistic regression and is significant at the 0.001 level with a Chi-square score statistic of 34.29. The coefficient of correlation for the logistic regression (R) is 0.296 and is interpreted in a manner similar to that in OLS regression. The estimation of the model is presented in Table 4.

As can be seen by analyzing Table 4, all three stakeholder power variables (PSH, PAC, and DERATIO) possess the expected signs. PAC is significant at the 0.05 level and DERATIO at the 0.10 level. The strategic posture variables (PUBAFF and FOUND) have the expected positive relationships to levels of corporate social disclosure, with PUBAFF significant at the 0.10 level and FOUND significant at the 0.01 level. MGRROE and BETA, the economic performance variables, are significantly related to SOCDIS at the 0.05 and 0.10 level, respectively. Of the model's three control variables, AGE and IND have the expected positive relationship to SOCDIS and are significant at the 0.01 and 0.05 level. MSALES possesses a negative sign and is not significant.

Discussion of research findings

The results of the empirical tests are of interest for several reasons. First, the significance of the model provides evidence that stakeholder theory is an appropriate foundation for empirical analyses of corporate social disclosure and that factors other than economic performance are important in social responsibility disclosure research. Second, the results support the argument that current period levels of social responsibility disclosure relate to prior period measures of economic performance, stakeholder power, and strategic posture toward social responsibility activities. Also, the significance of individual variables supports arguments regarding relationships between social disclosures and specific empirical measures of Ullmann's constructs.

Given that prior research views corporate political action committee contributions as a major part of corporate political strategy (Keim & Zeithaml, 1986; Keim & Baysinger, 1988), the significance of PAC suggests that corporations confronted with a high level of political exposure are more likely to disclose social responsibility activities. It suggests that social responsibility disclosures and political action committee contributions may be aspects of an overall corporate strategy for managing government stakeholders. The significance of DERATIO complements the empirical findings of Barton *et al.* (1989) regarding stakeholder considerations in planning corporate financial policy. In addition, it supports the contention that social responsibility disclosures may be viewed by management as a way to meet certain creditor stakeholder expectations. The lack of significance for the stockholder power variable PSH does not support the proposition that widespread stock ownership increases corporate incentives to make social responsibility disclosures. The finding that dispersion of stock ownership is not significantly related to the level of social disclosure may be explained by limitations of the PSH measure. Other measures of dispersion of stock ownership could produce a different outcome.

The significance of the strategic posture

variables representing corporate sponsorship of a philanthropic foundation (FOUND) and the size of the corporation's public affairs department (PUBAFF) implies that an active posture toward social responsibility leads to greater levels of social disclosure. This finding supports arguments forwarded in the fifth section that were based on Rosebush (1987) and Navarro (1988).

The results also indicate that corporations exhibiting relatively strong economic performance in prior periods, as measured by growth in return on equity (MGRROE), are more likely to have high current levels of social disclosure. This is consistent with Ullmann's notion that acceptable levels of economic performance are necessary before company resources will be devoted to meeting social demands. The significant, negative relationship found between the level of corporate social disclosure and systematic risk (BETA) provides evidence that companies with less stable patterns of stock market returns are relatively less likely to commit resources to social activities. The results of this study concerning the relationship between economic performance, systematic risk, and social responsibility disclosure also support the empirical findings of McGuire *et al.* (1988).

Suggestions that corporate age and industry classification may act as intervening variables in empirical tests regarding social responsibility activities are supported by the results presented in this study (Ullmann, 1985; Cochran & Wood, 1984). These findings may be explained in part by the arguments that age and industry status are macro-level proxies for aspects of stakeholder power, strategic posture toward social responsibility, or economic performance. Additional work is needed to improve our understanding of the empirical associations between corporate age and industry classification and levels of social disclosure.

CONCLUSIONS AND LIMITATIONS

The purpose of this study was to empirically test a stakeholder theory analysis of the deter-

minants of corporate social responsibility disclosure. The empirical results support a stakeholder theory approach to analyzing corporate social decisions and are consistent with the framework developed by Ullmann (1985).

The results of this study provide strong evidence that applications of stakeholder theory to empirical corporate social responsibility research can move future research in this area beyond *ad hoc* analyses relating corporate social responsibility actions to selected corporate characteristics. Stakeholder theory forms a theoretical foundation in which to analyze the impact of prior economic performance, strategic posture toward social responsibility activities, and the intensity of stakeholder power on levels of corporate social disclosure. The empirical results may enhance the descriptive power of future models designed to predict or explain corporate social responsibility actions by providing insights into social, political, and economic external pressures that probably influence corporate social responsibility decisions.

Several new directions for future research are suggested by the findings of this study. First, the influence of other types of stakeholders on

levels of corporate social disclosure could be tested. In addition to shareholders, creditors, and legislative bodies, Freeman (1984) included customers, suppliers, and special interest groups as corporate stakeholders. This study could also be replicated using direct measures of corporate social performance as the dependent variable. Finally, the stakeholder model could be adapted to investigate specific types of social disclosure along the lines suggested by Cowen *et al.* (1987).

The findings of this study are subject to several limitations. While extensive efforts were made to develop accurate proxies for the stakeholder power, strategic posture, and economic performance dimensions of the social disclosure model, data constraints may limit the construct validity of the selected variables. Likewise, the empirical tests were performed on large, U.S.-based corporations and may limit the generalizability of the findings. Finally, given the exceedingly complex nature of the business environment, there are inherent limits in the ability of positive empirical research to capture all of the dimensions that influence corporate social responsibility decision making.

BIBLIOGRAPHY

- Abbott, W. & Monsen, R., On the Measurement of Corporate Social Responsibility self-reported Disclosure as a Measure of Corporate Social Involvement, *Academy of Management Journal* (1979) pp 501-515
- Alexander, G. & Buchholz, R., Corporate Social Responsibility and Stock Market Performance, *Academy of Management Journal* (1978) pp. 479-486.
- Anderson, J. & Frankle, A., Voluntary Social Reporting: an Iso-Beta Portfolio Analysis, *Accounting Review* (July 1980) pp 468-479
- Ansoff, I., *Corporate Strategy* (New York: McGraw-Hill, 1965).
- Barton, S., Hill, N. & Sundaram, S., An Empirical Test of Stakeholder Predictions of Capital Structure, *Financial Management* (Spring 1989) pp 36-44
- Belkaoui, A., The Impact of the Disclosure of the Environmental Effects of Organization Behavior on the Market, *Financial Management* (1976) pp 26-31
- Blair, C., Scanning the Corporate Horizon Public Affairs in the Strategically Managed Organization, *Canadian Business Review* (Autumn 1986) pp 33-36
- Bowman, E. & Haire, M., A Strategic Posture Toward Corporate Social Responsibility, *California Management Review* (1975) pp 49-58
- Chakravarthy, B., Measuring Strategic Performance, *Strategic Management Journal* (1986) pp 437-458
- Chen, K. & Metcalf, R., The Relationship Between Pollution Control Record and Financial Indicators Revisited, *Accounting Review* (January 1980) pp. 168-177

- Chugh, L., Haneman, M. & Mahapatra, S., Impact of Pollution Control Regulations on the Market Risk of Securities in the U.S., *Journal of Economic Studies* (May 1978) p. 67
- Close, A. & Colgate, C., Jr (eds), *National Directory of Corporate Public Affairs* (Washington, DC: Columbia Books, 1983)
- Close, A. & Colgate, C., Jr (eds), *National Directory of Corporate Public Affairs* (Washington, DC: Columbia Books, 1984)
- Cochran, P. & Wood, R., Corporate Social Responsibility and Financial Performance, *Academy of Management Journal* (1984) pp. 42–56
- Copeland, T. & Weston, J., *Financial Theory and Corporate Policy* (Reading, MA: Addison-Wesley, 1983).
- Cornell, B. & Shapiro, A., Corporate Stakeholders and Corporate Finance, *Financial Management* (1987) pp. 5–14
- Council on Economic Priorities (Lydenberg, S., Martin, A. & Strub, S.), *Rating America's Corporate Conscience* (Reading, MA: Addison-Wesley, 1986)
- Cowen, S., Ferreri, L. & Parker, L., The Impact of Corporate Characteristics on Social Responsibility Disclosure: a Typology and Frequency-Based Analysis, *Accounting, Organizations and Society* (1987) pp. 111–122.
- Davis, K., The Case For and Against Business Assumptions of Social Responsibilities, *Academy of Management Journal* (1973) pp. 312–322.
- Dierkes, M. & Antal, A., The Usefulness and Use of Social Reporting Information, *Accounting, Organizations and Society* (1985) pp. 29–34.
- Dierkes, M. & Antal, A., Whither Corporate Social Reporting: Is It Time to Legislate?, *California Management Review* (1986) pp. 106–120.
- Farrar, D., & Glauber, R., Multicollinearity in Regression Analysis: the Problem Revisited, *Review of Economics and Statistics* (February 1967) pp. 92–107.
- Frankle, A. & Anderson, J., The Impact of the Disclosure of Environmental Effects of Organizational Behavior on the Market: Comment, *Financial Management* (Summer 1978) pp. 76–78
- Freeman, R., Strategic Management: a Stakeholder Approach, *Advances in Strategic Management* (1983) pp. 31–60.
- Freeman, R., *Strategic Management: a Stakeholder Approach* (Marshall, MA: Pitman, 1984)
- Hahn, R., The Political Economy of Environmental Relations, *Public Choice* (April 1990) pp. 21–47
- Hatten, K., Schendel, D. & Cooper, A., A Strategic Model of the Brewing Industry: 1952–1971, *Academy of Management Journal* (1978) pp. 592–610.
- Ingram, R., An Investigation of the Information Content of (Certain) Social Responsibility Disclosures, *Journal of Accounting Research* (1978) pp. 270–285
- Keim, G., Managerial Behavior and the Social Responsibilities Debate: Goals Versus Constraints, *Academy of Management Journal* (1978a) pp. 57–68.
- Keim, G., Corporate Social Responsibility: an Assessment of the Enlightened Self-Interest Model, *Academy of Management Review* (January 1978b) pp. 32–39
- Keim, G. & Baysinger, B., The Efficacy of Business Political Activity: Competitive Considerations in a Principal-Agent Context, *Journal of Management* (June 1988) pp. 163–180
- Keim, G. & Zardkoobi, A., Looking for Leverage in PAC Markets: Corporate and Labor Contributions Considered, *Public Choice* (July 1988) pp. 21–34
- Keim, G. & Zeithaml, C., Corporate Political Strategy and Legislative Decision Making: a Review and Contingency Approach, *Academy of Management Review* (October 1986) pp. 828–843.
- Mahapatra, S., Investor Reaction to Corporation Social Accounting, *Journal of Business Finance and Accounting* (Spring 1984) pp. 29–40
- Marcus, A. & Kaufman, A., The Continued Expansion of the Corporate Public Affairs Function, *Business Horizons* (March 1988) pp. 58–62
- Marquardt, D., Generalized Inverses, Ridge Regression, Biased Linear Estimation and Nonlinear Estimation, *Technometrics* (August 1970) pp. 591–612
- Marx, T., Strategic Planning for Public Affairs, *Long Range Planning* (February 1990) pp. 9–16.
- McGuire, J., Sundgren, A. & Schneeweis, T., Corporate Social Responsibility and Firm Financial Performance, *Academy of Management Journal* (December 1988) pp. 854–872.
- Mills, D. & Gardner, M., Financial Profiles and the Disclosure of Expenditures for Socially Responsible Purposes, *Journal of Business Research* (December 1984) pp. 407–424
- Moskowitz, M., Choosing Socially Responsible Stocks, *Business and Society* (1972) pp. 71–75.
- Navarro, P., Why Do Corporations Give to Charity?, *Journal of Business* (1988) pp. 65–93

- Rosebush, J., Corporate Contribution and the Bottom Line, *Business and Economic Review* (Fall 1987) pp 26–28
- Shane, P. & Spicer, B., Market Response to Environmental Information Produced Outside the Firm, *Accounting Review* (July 1983) pp 521–538
- Spicer, B., Investors, Corporate Social Performance and Information Disclosure: an Empirical Study, *Accounting Review* (January 1978a) pp 94–111
- Spicer, B., Market Risk, Accounting Data and Companies Pollution Control Records, *Journal of Business, Finance and Accounting* (1978b) pp 67–83
- Spicer, B., The Relationship Between Pollution Control Record and Financial Indicators Revisited: Further Comment, *Accounting Review* (January 1980) pp 178–185
- Steiner, G., Social Policies for Business, *California Management Review* (1972) pp 17–24
- Sturdivant, F., Executive and Activists' Test of Stakeholder Management, *California Management Review* (Fall 1979) pp 53–59
- Trotman, K. & Bradley, G., Association Between Social Responsibility Disclosure and Characteristics of Companies, *Accounting, Organizations and Society* (1981) pp 355–362
- Ullmann, A., Data in Search of a Theory: a Critical Examination of the Relationship Among Social Performance, Social Disclosure, and Economic Performance, *Academy of Management Review* (1985) pp 540–577
- Watts, R. & Zimmerman, J., Towards a Positive Theory of the Determination of Accounting Standards, *Accounting Review* (January 1978) pp 112–134.
- Wiseman, J., An Evaluation of Environmental Disclosures Made in Corporate Annual Reports, *Accounting, Organizations and Society* (1982) pp 53–63