

## **The Economics and Politics of Corporate Social Performance**

David P. Baron, Maretno A. Harjoto, and Hoje Jo\*

April, 2008

\* Jo (corresponding author) is in the Department of Finance, Leavey School of Business, Santa Clara University, 500 El Camino Real, Santa Clara, CA 95053-0388, (408) 554-4779, (408) 554-4029 (fax), Email: [hjo@scu.edu](mailto:hjo@scu.edu). Baron is in the Graduate School of Business, Stanford University, Stanford, CA 94305, (650) 723-3757, Email: [dbaron@stanford.edu](mailto:dbaron@stanford.edu). Harjoto is in the Graziadio School of Business and Management, Pepperdine University, 24255 Pacific Coast Highway, Malibu, CA 90263, (310) 506-7352, (310) 506-4126 (fax), Email: [Maretno.A.Harjoto@Pepperdine.edu](mailto:Maretno.A.Harjoto@Pepperdine.edu). Jo acknowledges the Dean Witter Foundation and the Breetwor Fellowship for financial support.

## **The Economics and Politics of Corporate Social Performance**

### **Abstract**

Corporate social performance (CSP) has received increased attention from business, the media, and researchers. Recently-developed theory has provided both normative and positive explanations for CSP. This paper provides an empirical test of a theory that relates corporate financial performance (CFP), CSP, and social pressure. Four positive explanations for a relation between CFP and CSP focus on parties that can reward, or penalize, a firm for its social performance. A firm can be rewarded by consumers, by investors, and by employees and other suppliers of factor inputs. In addition, CSP can deter or deflect potentially harmful social pressure. The fifth explanation is that CSP is a management perquisite, and as such behaves as predicted by agency theory. In addition, CSP could be morally motivated independently of its financial consequences.

CFP, CSP, and social pressure are jointly determined, and three-equation and five-equation structural models are estimated for a large universe of firms for 1992-2004. The estimates of the relations among CFP, CSP, and social pressure are consistent with the theory, and the estimated relations are statistically and economically significant. CSP is increasing in lagged CFP and lagged social pressure, and CFP is decreasing in social pressure and increasing in CSP. Social pressure is decreasing in lagged CFP and increasing in lagged CSP and the volatility of returns. Social pressure thus has a direct effect on financial performance and an indirect effect through increased CSP. CSP is also increasing in CEO ownership and the percent of independent directors and decreasing in the external monitoring by institutional investors and financial analysts. The empirical results thus indicate that CFP is penalized by social pressure and improved by CSP as rewarded by consumers, employees, or investors, and CSP is spurred by social pressure and better CFP. The estimates provide limited support for the hypothesis that management and independent board members consume CSP as a perquisite and provide stronger support for the hypothesis that CSP is morally motivated and independent of the competitiveness of the industry, management entrenchment, and external monitoring. The estimates provide strong support for the hypothesis that social pressure is directed to firms that are soft targets as revealed by their past provision of CSP and weak financial performance.

## **I. Introduction**

Corporate social responsibility (CSR) has received increased attention from business, the media, and researchers. A recent survey by the Economist Intelligence Unit found that approximately 47 percent of the firms responding agreed that corporate social responsibility (CSR) “is a necessary cost of doing business” and 47 percent agreed that it “gives us a distinctive position in the market.” (*Economist*, January 17, 2008) Only 4 percent of the respondents believed that corporate social responsibility was a “waste of time and money.” The *Economist* observed, “It is almost unthinkable today for a big global corporation to be without [a CSR policy].” More than half of the Fortune 1,000 companies regularly issue CSR reports, and a large number of firms around the world are engaged in a serious effort to define and integrate CSR into various aspects of their business (Tsoutsoura 2004). Despite the embrace by much of the business community, the relations between social performance, financial performance, and social pressure remain as much a matter of faith and speculation as of evidence, assessment, and calibration. This paper provides empirical evidence on the relations based on the underlying economics and politics of corporate social performance.

Definitions of CSR vary. Friedman (1970) defined CSR as follows: “Corporate social responsibility is to conduct the business in accordance with shareholders’ desires, which generally will be to make as much money as possible while conforming to the basic rules of society, both those embodied in law and those embodied in ethical custom.” McWilliams and Siegel (2001) defined CSR as actions that appear to further some social good, beyond the firm’s interests and that required by law. Hill et al (2007) defined CSR as the economic, legal, moral, and philanthropic actions of firms that influence the quality of life of relevant stakeholders. While definitions of CSR vary, it generally refers to serving people, communities, and the environment in a way that goes above and beyond what is legally required of a firm.

Recently-developed theory has provided both normative and positive explanations for corporate social responsibility. The normative explanation is based on moral principles. Corporate social responsibility arises from the combination of (1) an ethical violation that establishes a moral duty and (2) the assignment of that duty to the firm, where the duty is assigned to the party best placed to fulfill that duty. Corporate social performance (CSP) need not arise from moral considerations. CSP pertains to social activities that satisfy two conditions. First, the social activities extend beyond the requirements of the law and regulations. Second, the social activities involve the private provision of public goods or private redistribution. CSR

implies CSP, but CSP need not be morally motivated.<sup>1</sup> Most of the theoretical and empirical analyses pertain to CSP, since identifying moral duties and their assignment is difficult.

Although CSP could be morally-motivated, it could also be strategically chosen to serve the interests of the firm and its managers. For example, strategic CSP could be applied locally to strengthen local community relations and improve employee morale. Wal-Mart is one of the greatest corporate philanthropists, and most of its contributions are at the local level with employees participating in the allocation of the contributions. CSP could also strengthen a brand as in the case of Starbucks and Whole Foods or improve employee morale and productivity. CSP could also be pursued because it appeases a stakeholder or pressure group. CSP could also be a perquisite for management in the sense that managers receive a warm glow from the accolades of the advocates of broadened social performance. Under this hypothesis the consumption of perquisites should be increasing in the availability of slack resources and in the discretion available to management.

Empirical studies have examined the relation between CSP and corporate social performance (CFP), and while the results are mixed, much of the research has found a positive but weak correlation. Interpretations vary, however, and the direction of causality remains an open question. That is, good CSP could cause good CFP, but good CFP could provide slack resources to spend on CSP, or as the *Economist* put it, “Whether profitable companies feel rich enough to splash out on CSR, or CSR brings profits.”

This paper provides an empirical test of a positive theory of CSP and its relation to CFP and to social pressure. The theory and empirical analysis view CFP and CSP as jointly determined by a firm operating in product and capital markets and in the face of social pressure directed by government and social activists. Social pressure reflects both current pressure on the firm from government and NGO challenges as well as potential future actions such as legislation or regulation and private actions such as boycotts and media campaigns against a firm. The broad finding is that there is a synergy between CFP and CSP. Better CFP corresponds to greater CSP, possibly because CSP and operational decisions are strategic complements and possibly because the availability of slack resources allows managers to consume CSP as perquisites. Greater CSP also results in economically and statistically significant higher CFP, so CSP is rewarded by consumers, employees, or investors. Social pressure reduces CFP, possibly due to the influence of social pressure on the perceptions of consumers, employees, or investors, but the effect is smaller than the effect of CSP on CFP. CSP is increasing in (lagged) social pressure, so CSP is in

---

<sup>1</sup> The *Economist* survey found that 23 percent of the firms agreed that corporate social responsibility “is meaningless if it includes things that companies would do anyway.”

part undertaken in response to that pressure. Social pressure is greater for firms in controversial businesses such as cigarettes and gambling and is greater the higher is CSP and is lower the better is CFP. Firms with worse CFP and higher CSP encounter more social pressure, perhaps because they are softer targets for government and social activists. The effect of CSP on social pressure also suggests that firms do not receive credit from government and social activist for their social activities; i.e., higher CSP does not relieve social pressure.<sup>2</sup> The empirical model also allows examination of the perquisites hypothesis and whether CSP is morally motivated.

The empirics are based on a three-equation, structural model in which financial performance and social performance are chosen by a firm in the face of social pressure chosen in response to the financial and social performance of the firm. The empirical results are based on a large number (2,481) of firms for the years 1992-2004 and are robust to several estimation approaches. The magnitudes of the effects are economically significant. For the full population of firms a one standard deviation increase in (contemporaneous) social pressure results in a 5.0 percent decrease in CFP as measured by Tobin's q, and a one standard deviation increase in (contemporaneous) CSP results in a 13.3 percent increase in CFP. A one standard deviation increase in (lagged) CFP results in an increase of 9.5 percent in CSP and a decrease of 6.4 percent in social pressure. CSP and social pressure are positively associated with a one standard deviation increase in (lagged) social pressure resulting in a 25.6 percent increase in CSP and a one standard deviation increase in (lagged) CSP resulting in a 24.7 percent increase in social pressure. The latter magnitudes are large, but the high serial correlation of CSP and of social pressure means that the magnitudes are due more to cross-sectional variation among firms than to changes in these variables for individual firms over time.

The estimates indicate that both CSP and social pressure are increasing in firm size as measured by assets and sales, so large firms engage in a larger set of CSP activities than do small firms. The estimates also indicate that social pressure is directed toward financially weaker firms and firms with less entrenched management, supporting the soft target hypothesis. The consumption of perquisites should be mitigated by managerial compensation contracts, better corporate governance, and tighter external monitoring by the investment community. The estimates provide mixed support for the perquisites hypothesis in that CSP is increasing in CEO ownership of the firm and in the proportion of independent directors, who may also view CSP as a perquisite or may have been appointed in response to social pressure. CSP is increasing in

---

<sup>2</sup> Sarah Connolly of the Freedom From Oil campaign explained the group's demonstrations against Toyota, "Building the Prius does not give Toyota license to mass-produce the Tundra." (*The New York Times*, April 7, 2007.)

financial performance and decreasing in the external monitoring of firms by institutional investors and financial analysts, but it is also decreasing in an index of management entrenchment. Social pressure is significantly increasing in (lagged) CSP and the volatility of returns, and significantly decreasing in CFP, sales growth and capital expenditures, all of which are consistent with the soft target hypothesis. The empirical results provide weak support for the perquisites hypothesis and stronger support for the morally-motivated CSP hypothesis.

To explore the relations among CFP, CSP, and social performance in more detail, social pressure is decomposed into public (government) politics and private (social activists) politics components and CSP is decomposed into strategic components likely to increase profits directly and components likely to be a response to social pressure.<sup>3</sup> A five-equation, structural model is estimated with CFP, public politics pressure, private politics pressure, strategic CSP, and responsive CSP as endogenous variables. Consistent with the three-equation model, both components of CSP are increasing and both components of social pressure are decreasing in (lagged) CFP. The positive effect of CSP on CFP, however, is due to responsive CSP and not to strategic CSP.<sup>4</sup> The direct effect of social pressure on CFP is due to public rather than private politics, whereas both (lagged) private and public politics pressure increase both components of CSP. Similarly, both components of social pressure are increasing in both components of (lagged) CSP.

The estimates of the five-equation model provide support for the presence of morally-motivated CSP. The strategic component of CSP has no significant effect on CFP, and itself is independent of the competitiveness of the industry, managerial entrenchment, and external monitoring, suggesting that strategic CSP is required and may not be rewarded. Strategic CSP, however, is increasing in (lagged) CFP, which is consistent with the perquisites hypothesis but not the morally-motivated CSP hypothesis.

The next section reviews the literature on corporate social performance, and Section III summarizes the theory tested and the empirical model. Section IV elaborates on the implications of the theory and develops the principal hypotheses. Section V identifies the data, and Section VI presents the empirical results and their interpretation. Conclusions are offered in the final section.

## **II. Literature**

Vogel (2005) assesses the literature on corporate social responsibility and concludes that it has had a small impact on social issues and on financial performance. Margolis and Walsh

---

<sup>3</sup> Baron (2001)(2003) introduces the concept of private politics.

<sup>4</sup> A detailed analysis of this finding is given below.

(2003) identified 127 empirical studies and 13 surveys focusing on the relation between corporate social performance (CSP) and corporate financial performance (CFP). Although a number of studies found no relation, they concluded that the overall weight of the studies showed a positive but weak correlation between the two dimensions of corporate performance. These studies, however, generally do not explore causality. Since their survey, new theories have been developed and additional empirical studies have been conducted.

Moon (2007) found no relation between CSP and CFP after controlling for unobserved heterogeneity among firms. Distinguishing between positive and negative CSP, however, he found no relation between negative CSP and CFP but found a negative relation between positive CSP and CFP.<sup>5</sup> The results presented here are not inconsistent with these findings but provide a more complete picture of the relation between CSP, CFP, and social pressure.

Kotchen and Moon (2008) investigated the relation between KLD concerns and KLD strengths controlling for firm size, financial structure, and return on assets. They found that higher levels of negative CSP were associated with higher levels of positive CSP and that this effect is stronger in industries that receive public scrutiny.<sup>6</sup> They also found that concerns about corporate governance led firms to undertake social activities on matters other than corporate governance. They regress strengths on lagged concerns and find a positive coefficient which they interpret as a causal relation. If, however, they regressed concerns on lagged strengths, they would also find a positive and significant coefficient, leaving any causal relation in doubt. They also found that financial performance measured as return on assets has no effect on corporate social performance, whereas we find that CSP is strongly increasing and social pressure is strongly decreasing in CFP as measured by Tobin's *q*.

By using a two-stage approach, a first-stage probit regressions and a second-stage Heckman regression, Harjoto and Jo (2007a) control for the endogenous treatment effects, and find that CSR engagement enhances firm value. They also find evidence that the impact of external monitoring by security analysts is more significant than those of other governance and monitoring mechanisms. Harjoto and Jo (2007b) find that the CSR choice is positively associated with governance characteristics, including board independence, institutional ownership, and analyst following. In addition, after correcting for endogeneity, they show that CSR engagement positively influences operating performance and firm value, supporting the conflict-resolution hypothesis as opposed to the over-investment argument. Furthermore, their empirical results suggest that neither a

---

<sup>5</sup> What Moon refers to as negative CSP is used here to measure social pressure.

<sup>6</sup> In this paper KLD concerns and strengths are used as measures of social pressure and CSP, respectively.

strategic-choice explanation nor a product-signaling hypothesis is supported as a major motive of CSR engagement.

Chatterji and Toffel (2007) examined the toxic releases of firms that are newly covered by the social rating organization KLD. They concluded that firms with prior good environmental performance did not change their toxic releases performance, whereas firms with poor environmental performance improved their performance. This is consistent with social pressure being directed to firms with poor environmental performance.

Becchetti, Ciciretti, and Hasan (2007) considered the effect on stock prices of the exit from and entry into the Domini 400 Social Index. Using an event study methodology they found that firms exiting the Index experienced a significant negative abnormal return that persisted. They also found that the magnitude of the effects of exit and entry on abnormal returns increased over time and tentatively concluded that the effects were due to the investment practices of ethically screened funds rather than to information content. This study suggests that some investors may be willing to pay a premium for CSP and that there are sufficient numbers of them that the premium persists. Heinkle, Kraus, and Zechner (2001) provided a theory in which some investors shun certain stocks (e.g., non-green firms) and concluded that the proportion of such investors needed to have a market effect is approximately 20 percent. Hong and Kapperzyk (2007) found that returns on sin stocks are higher than market returns and calibration indicates magnitudes consistent with the theory by Heinkle, Kraus, and Zechner.

Hong and Kapperzyk found that the market value of sin stocks was depressed, and the findings of Becchetti, Ciciretti, and Hasan suggest that investors provide a premium for shares of firms that have good social performance. Our results are consistent with both of these results. We find that social pressure depresses CFP directly and that firms engaged in controversial businesses face greater social pressure. We also find that good CSP increases CFP. In the context of the theory on which this paper is based, the direct effect of social pressure could reflect an investor effect with some investors shunning firms that face social pressure.

Fernández-Kranz and Santaló (2007) explored the relation between competition and CSP and concluded that greater competition as measured by the Herfindahl-Hirschmann Index, import competition, and other indices of competition are associated with greater CSP. They conclude that this is consistent with the theory of strategic corporate social responsibility by Baron (2001)(2006) in which firms engage in social activities because consumers, employees, or investors are willing to reward firms for those activities. For example, CSP can provide product



differentiation as in Bagnoli and Watts (2003) and Baron (2008a)(2008b), and it may also improve recruitment and motivate employees to be more productive or accept lower wages.<sup>7</sup>

Siegel and Vitaliano (2007) conducted an empirical test of the motivation for corporate social responsibility. They hypothesized that CSP is strategic and provides product differentiation or signals high quality to consumers. The test whether firms producing experience and credence goods are more likely to engage in CSP than are firms that produce search and non-durable experience goods. Their estimates support the hypothesis that CSP is used more with experience and credence goods, which supports the concept of strategic CSR. They also find that large firms are not more likely to engage in CSR, and the evidence is mixed about whether more profitable firms are more likely to provide CSR.

Feddersen and Gilligan (2001) provide a signaling theory in which a social activist can signal to consumers the attributes of a credence good thus allowing product differentiation even though attributes are never observable. Fisman, Heal, and Nair (2006) provide a signaling theory in which firms can either be self-interested or altruistic and can signal their altruism with CSP, providing product differentiation. They hypothesize that product differentiation is more important in more competitive, and hence less differentiated, industries, and thus CFP and CSP should be more highly correlated in those industries. Measuring CSP by KLD measures of corporate philanthropy, they find some support for their hypothesis.

Fisman, Heal, and Nair (2005) find that corporate social responsibility is greater for consumer products companies that are advertising intensive, which is consistent with the view that corporate social responsibility is undertaken to enhance a brand or product. Navarro (1988) provides a model of corporate giving that increases profits and presents empirical evidence that corporate giving is like advertising and that the profit motive drives giving.

Besley and Ghatak (2007) consider a model in which a subset of caring consumers have a demand for public goods, where firms can provide those goods jointly with private goods. Firms differentiate their offerings, and Bertrand competition leaves the surplus with consumers, but the public good is undersupplied relative to the first-best. Besley and Ghatak also consider the sustainable level of private provision when consumers have an imperfect monitoring technology.

Some empirical studies have focused on a single dimension of social performance. Dowell, Hart, and Yeung (2000) found that firms with a stringent global environmental policy had better CFP as measured by Tobin's q than did firms without such a policy. King and Lenox

---

<sup>7</sup> Consumer willingness to pay for social performance may be limited to certain market segments. In an experiment Sen and Bhattacharya (2001) found that some subjects, those with little liking for CSP, were less inclined to purchase a product associated with positive CSP. Negative CSP was found to reduce subjects' inclination to purchase a product, so consumers may have an asymmetric response to CSP.

(2001) found a positive relation between pollution reduction and Tobin's  $q$  for a set of manufacturing firms that reported toxic releases. Both studies estimated single equation models and neither was able to reach a conclusion about the direction of causality.

A small empirical literature links social pressure and CSP. Maxwell, Lyon, and Hackett (2001) found that the release of toxic substances by firms was lower the greater the Sierra Club membership in the state. Hamilton (1993, p. 121) examined expansions of hazardous waste facilities and concluded that firms took "into account the potential for areas to mobilize and engage in collective action in their selection of counties in which to add capacity..." He found that a good proxy for that potential for collective action was voter turnout. Binder and Neumayer (2005) studied emissions of  $SO_2$ , smoke, and heavy particulates for a cross-section of 35 countries and found that emissions were lower the greater the presence of environmental NGOs in a country.

Empirical research on the relation between CSP and CFP is typically silent about the direction of causation. McGuire, Sundgren, and Schneeweis (1988) studied the relation between CSP and CFP using *Fortune* magazine's rankings of corporate reputation as an index of CSP and using a number of market and accounting measures of CFP. They regressed CSP on CFP prior and subsequent to the year in which CSP was measured and found that prior financial performance was a better predictor than subsequent performance. They concluded (p. 869), "it may be more fruitful to consider financial performance as a variable influencing social responsibility than the reverse." Waddock and Graves (1997) also found that CSP was positively related to prior financial performance and concluded that their results supported "the theory that slack resource availability and CSP are positively related." The present paper unravels this simultaneity to provide consistent estimates of both the effect of CFP on CSP and the effect of CSP on CFP.

### **III. A Theory of CFP, CSP, and Social Pressure**

The empirical specification and the categorization of the data are based on a theory by Baron (2007)(2008a)(2008b) in which CFP and CSP are jointly determined by a firm that may face social pressure from government or private citizens and the organizations they form as considered by Baron (2001) and Baron and Diermeier (2007). The theory also provides a framework for interpreting the empirical results. Baron (2008a) distinguishes between moral and self-interested motivations for corporate social activities. Moral motivations are independent of strategic considerations and social pressure, but could depend on firm and industry characteristics that determine the moral issues that firms encounter. For example, a firm in the oil industry

necessarily faces issues associated with the environment, operating in developing countries, and safety concerns. Similarly, social pressure can accompany the moral issues. After controlling for firm and industry characteristics, social activities undertaken because of moral duty should be independent of financial performance, the competitiveness of the industry, the governance structure of the firm, and the external monitoring by the investment community. The empirical model allows an assessment of the possibility of morally-motivated CSP.

Self-interested motivations imply that corporate social activities are chosen strategically and hence should depend on the competitiveness of the industry, consumers' willingness to pay for goods that have associated social activities, and firm attributes. The positive theory tested is based on recent research that treats both CFP and CSP as choices by firms that are embedded in product and capital markets as well as in a market for social pressure. Graff Zivin and Small (2005) and Baron (2007)(2008a)(2008b) have provided theories that yield an endogenous market value of CSP. The theory developed by Baron includes a continuum of citizens with heterogeneous preferences for social causes, two firms, a capital market and a product market, and an activist NGO that can put potentially harmful social pressure on firms to provide more CSP.<sup>8</sup> Citizens allocate their endowments between savings, personal giving to social causes, the purchase of shares of firms that do and do not have CSP, and contributions to the activist to fund its generation of social pressure. In the product market the firms produce identical products but can use CSP to differentiate (vertically) their products, and as in the basic theory of quality competition the firms separate with one providing CSP and the other providing none. The activist chooses one firm to target with social pressure, and the firms can ex ante take social actions intended to induce the activist to target the other firm (Baron 2008b). The extent of the social pressure depends on the contributions by citizens, which depend on their expectations about the effectiveness of the social pressure. Managers can also consume CSP as perquisites, and shareholders can use managerial compensation contracts to structure the incentives of management not only to consume perquisites but also to provide CSP possibly valued by consumers, employees, or investors.

Citizens have warm glow preferences with varying intensities for the social activities of the firm and have warm glow preferences for personal giving to social causes. In the capital market they trade shares and also can give personally to social causes. This allows the social activities of a firm to be priced in the capital market. The equilibrium yields an expression for the market value of the firm that is a linear function of the firm's profits from operations and its social performance, where the latter is valued at a social return determined in the equilibrium.

---

<sup>8</sup> Social pressure could also come from government.

The social return is less than one unless corporate social performance is a perfect substitute for personal giving.<sup>9</sup> This provides the basis for empirical specifications with the market value of the firm a function of its social performance as well as its operating profits.

In the theory firms choose CSP because it is rewarded. The rewards may come from consumers, investors, or employees and other suppliers of factor inputs.<sup>10</sup> In addition, firms may undertake social activities because managers or board members have (warm glow) preferences for those activities. That is, social activities can be perquisites or consumption for managers or board members. Shareholders may through compensation contracts structure the incentives for managers to engage in CSP, but with unobserved actions and effort and uncertainty about performance those contracts are second best, leaving opportunities for managers to consume CSP as perquisites. Baron (2008a) finds that the optimal compensation contracts specify compensation as a weakly increasing function of the social performance of the firm. Data on compensation contracts are not available, however, so measures of management entrenchment and external monitoring of management are used instead in the empirical analysis.

Firms may also engage in social activities if those activities reduce potentially harmful social pressure. Baron (2001)(2008b) and Baron and Diermeier (2007) show that a firm may engage in social activities to make itself a less attractive target for social pressure from NGOs and activists. That is, an activist seeking to increase aggregate CSP may target firms that do not voluntarily provide CSP. Baron (2008b) closes the theory by requiring that the social pressure generated by the activist be funded by voluntary contributions from citizens, who can also allocate their endowments directly to social causes and hold shares of firms that do and do not provide CSP.

Social pressure should directly affect the market value of a firm through investors' perceptions about future social pressure, possible brand or reputation damage, or possibly leading some investors to shun the shares of the firm. A firm facing potentially harmful social pressure could undertake CSP in the hope of reducing that pressure or mitigating its effect. Some firms are subject to social pressure directly from citizens but most are subject to organized social

---

<sup>9</sup> In the equilibrium the firm with CSP attracts a clientele of shareholders for whom the social performance of the firm is a close substitute for personal giving, whereas those citizens for whom it is a distant substitute do not hold shares of the firm but instead support social causes through personal giving. Although there is no shareholder unanimity in the theory, firms may be thought of as maximizing their market value, which provides an explanation for strategic CSR.

<sup>10</sup> Engaging in CSP could also have other effects on firm performance. For example, an eye to social activities could affect the capabilities of the firm and result in improved operating performance. That is, a greater sensitivity of firms to their nonmarket environment may help identify changes that can impact their operational performance. As the *Economist* (January 17, 2008) stated, "If [CSP] helps business look outwards more than they otherwise would and to think imaginatively about the risks and opportunities they face, it is probably worth doing."

pressure led by government, NGOs and activists, or interest groups as in the case of labor unions organizing pressure on Wal-Mart. Given that a firm is subject to social pressure and that social pressure is potentially harmful to the financial performance of the firm, responding by strengthening CSP could mitigate that harm.

Social pressure arising from the concerns of citizens and government can affect all firms, but, as indicated, much of social pressure targets selected firms. Some firms select themselves for social pressure because of their abusive actions or the failure to fulfill a moral duty; e.g., when a firm violates a regulation or law. Alternatively, some firms incur social pressure due to private politics. Selection could be due to the characteristics or operations of a firm, as in the case of environmental NGOs campaigning against oil companies on environmental issues. A firm could also be the target of social pressure as a result of its economic impact on others. Much of the social pressure against Wal-Mart was initiated and financed by organized labor that had failed to organize Wal-Mart employees and that feared the loss of union jobs in the grocery industry. Social pressure is thus a function of the operational and other activities of the firm and hence is a jointly determined variable. The theory developed in Baron (2008b) predicts that (1) an activist can have an incentive to direct private politics pressure to a soft firm, where soft is defined as having weak incentives to resist the pressure and hence be more likely to respond to demands, and (2) CSP might divert an activist to another firm that does not supply CSP. A soft firm could, for example, be one with weak financial performance. Social pressure, however, should not depend directly on the external monitoring of management by analysts and institutional investors.

To develop an empirical model from the theory, CFP will be measured by Tobin's  $q$ , which is defined as

$$q = \frac{MV}{TA}$$

where  $MV$  is the market value of the firm's securities and  $TA$  is its total assets. The market value can be expressed as a function of operational and social performance as follows:

$$MV = \pi(O, C, P) - C - H(S; C) + \rho_\theta C - P,$$

where  $\pi$  is the value of the cash flow resulting from operations of the firm including the effects of CSP expenditures  $C$  and the perquisites  $P$  consumed by managers,  $H(S; C)$  is the harm to the firm from social pressure  $S$  as mitigated by (lagged)  $C$ , and  $\rho_\theta C$  is the capital market premium for the social performance of the firm where  $\rho_\theta$  is the (endogenous) social return. The perquisites may or may not be valued by consumers or investors and would be expected to be increasing in management entrenchment and decreasing in external monitoring. Perquisites are not directly observable, which means that only  $\pi(O, C, P) - C + \rho_\theta C - P$  can be estimated.

The market value reflects all information available about the operations, organization, and governance of the firm as well as its contemporaneous CSP and the social pressure that can affect the perceptions of consumers, employees, and investors. The decisions of a firm determine its operational and social performance, and those decisions are influenced by its financial strength, its CSP practices, and the social pressure it faces. Each of these variables has high serial correlation, and hence they should be thought of as state variables that along with contemporaneous factors influence the operational and social decisions of the firm. These state variables are measured here by lagged values of CFP, CSP, and social pressure. In the empirical model CSP thus is represented by an equation with lagged CFP and lagged social pressure as explanatory variables, in addition to firm and industry characteristics, governance, and external monitoring.

The theory that underpins the empirical work thus views CFP and CSP are jointly chosen by a firm, given the environment in which it operates. That environment is characterized by a set of exogenous factors that reflect product and capital market characteristics as well as firm descriptors that take into account heterogeneity among firms. Social pressure is viewed as endogenous but controlled by parties outside the firm. It can directly affect CFP by leading some investors to shun a firm, and it could also mean that there are nonmarket factors that could affect financial performance in the future. Social pressure can be directed at the firm because of its operations and because of the industry in which it operates. The underlying theory is illustrated in Figure 1.

The empirical specification is:

$$q = f_1(C, S, \text{firm and industry characteristics, governance, monitoring}) \quad (1)$$

$$C = f_2(\text{lagged } q, \text{lagged } S, \text{firm and industry characteristics, governance, monitoring}) \quad (2)$$

$$S = f_3(\text{lagged } q, \text{lagged } C, \text{firm and industry characteristics, governance}) \quad (3)$$

CSP and social pressure are viewed as stocks; i.e., policies in place that are incremented or decremented, rather than as new choices each year. Evidence for this is the high correlation of 0.852 for CSP and lagged CSP. Social pressure is also a stock (as in the sense of reputation) with a correlation of 0.778 with lagged social pressure. Similarly, the correlation between  $q$  and lagged  $q$  is 0.639.

The system of equations in (1)-(3) is identified by the exclusion of independent variables. Five exclusions are incorporated in the specification. The first is that there are two variables, the debt ratio and the dividend ratio, associated with the financial structure of the firm that affect Tobin's  $q$  but should not directly affect either CSP or social pressure. The second pertains to governance and monitoring that affect the discretion of management to engage in CSP and

consume perquisites. Governance pertains to characteristics of the firm such as entrenchment that can affect discretion, whereas monitoring pertains to external factors, such as institutional holdings and analyst coverage, that can affect discretion. Social pressure is reasonably a function of the governance structure of a firm but not the external monitoring by the investment community. Consequently, monitoring controls, the percent of shares held by large investors, percent of shares held by institutions, and number of analysts covering the firm, are excluded from the social pressure equation. Third, KLD identifies “exclusionary” factors, such as cigarette production, nuclear power, and gambling, that may be thought of as controversial. Controversy should affect social pressure and not directly affect CFP or CSP, and hence it is excluded from those equations. Fourth, KLD counts as CSP a pension program, but that is a part of a firm’s compensation package and as such is a private good. That private good should affect CFP but neither CSP nor social pressure. The fifth is the lagged values of the endogenous variables. These exclusions are sufficient to (over) identify the system.

#### **IV. Elaborating on the Theory and Empirical Specification**

CSP could be morally-motivated as well as motivated by self-interest. In addition to morally-motivated CSP the theory incorporates five self-interested explanations for CSP. Four focus on parties that could value and hence reward or penalize the firm for its social performance. A firm could be rewarded by consumers, investors, and employees and other suppliers of factor inputs, and CSP could deter potentially harmful social pressure. Fifth, CSP could be a perquisite for or consumption by management.

**Consumer rewards:** Consumers could value CSP and be willing to pay a premium for the goods and services of a firm with social performance. Hiscox and Smyth (2006) and Elfenbein and McManus (2007) present empirical studies indicating that some consumers are willing to pay a premium for private goods that have social performance attached to them.<sup>11</sup> The firm then has a private incentive to undertake the activities. Corporate social responsibility then is a form of product differentiation and could be either a complement to or a substitute for

---

<sup>11</sup> Hiscox and Smyth conducted an experiment in which two identical products, towels and candles, were sold with and without a “Fair & Square” label that identified the products as being produced under good working conditions. Consumers were willing to pay a substantial premium for the labeled goods, but as the authors caution the retailer was known for selling cause-related goods to high income people. The authors state, “it is safe to say that we were looking for a market for labor standards in a place where one might expect to find it.” Elfenbein and McManus compared the prices of identical items auctioned on both eBay’s non-charity and charity auction formats, where the latter involves designating a share of the proceeds go to a charity. They found an average 6 percent premium for items sold on the charity auction.

advertising, branding, and product quality. Navarro and Fisman, Heal, and Nair (2005) view CSP as affecting sales in much the same way as advertising.

**Employee and supplier rewards:** Employees may be more productive for, or accept lower wages from, a firm that provides social activities they value. Similarly, a firm with good CSP may be able to attract more talented employees. Similarly, suppliers that embrace social performance may give the firm preference. Conversely, a firm such as Nike, for example, may require its suppliers to abide by a code of conduct for social performance with respect to workers rights, so a supplier that abides by the code is rewarded by Nike.

When the rewards exceed the cost of the CSP, these two explanations are referred to as strategic CSP, since the activities are undertaken to increase profits. Any value maximizing firm would conduct such social activities independent of any moral motivation. If CSP is strategic, theories predict both that CSP is decreasing in competitiveness (Bagnoli and Watts 2003) and increasing in competitiveness (Fisman, Heal, and Nair 2006). Our estimates show no statistically significant relation between competitiveness and CSP.

**Investor rewards:** Investors may value the social activities of a firm and be willing to pay a premium for its shares. The theory of warm glow preferences discussed above predicts that the capital market will incorporate shareholders' valuation  $\rho_\theta$  (at the margin) of CSP into the market value of the firm. This does not mean that CSP must increase the market value of the firm. Instead, it could mean that part of the cost of CSP can be offset by the premium investors pay for CSP. That is, if the cost of CSP is  $C$ , the market value of the firm decreases by  $(1 - \rho_\theta)C$ . Unless investors value CSP more highly than they value their personal giving to social causes, the social return  $\rho_\theta$  is less than one.<sup>12</sup> Investors that value CSP thus could provide a premium by investing through socially responsible investment funds.

As in Heinkle, Kraus, and Zechner, green investors can shun firms with poor CSP, which yields an equilibrium premium for firms with good CSP. This can induce firms to improve their CSP to attract green investors. The same logic implies that a firm that is abusive in the sense of negative social performance should be penalized by investors in the capital market. Social pressure is a reflection of alleged abusive activities, and hence the market value of the firm should be decreasing in social pressure. Social pressure today also can mean social pressure in the future.

**Social pressure:** A firm could use CSP to reduce potentially harmful social pressure that originates from public politics or private politics. Relieving social pressure is consistent with stakeholder theory in which firms undertake social activities to balance the competing pressures

---

<sup>12</sup> If CSP is rewarded by consumers or employees, the market value can be higher.



from stakeholders.<sup>13</sup> Other things equal, however, the market value of the firm should be less than that of a firm not subject to social pressure. This can vary with the social issue. For example, Epstein and Schnietz (2002) conducted an event study of the share prices of firms designated by protestors as environmentally abusive in the context of the 1999 demonstrations during the failed Seattle WTO meetings. They found that those firms experienced a statistically significant decrease in their value as a result of the demonstrations. In contrast, they found that there was no significant change in the value of firms that had been identified as abusive of worker rights. Social activities undertaken to lessen the threat of social pressure are also strategic.

Social pressure originating from private politics can be directed by activists and NGOs to selected firms. That pressure could be directed to firms with bad CSP, but it could also be directed to soft targets. Soft targets could include those firms that have provided CSP in the past and those that have the weakest incentives to resist the activist demands. The soft target theory predicts that social pressure is increasing in CSP.

**Management perquisites:** Managers or board members could undertake social activities because of their own personal interests. That is, social activities could be perquisites for managers based on their own moral, warm glow, or self-interested preferences. Managers could enjoy the social accolades that can come from pressure groups and NGOs or receive moral satisfaction from benefitting others. Social activities could also be payoffs to social pressure groups in exchange for strengthening the job security of managers, as considered by Cespa and Cestone (2007).

CSP as a perquisite should depend on the discretion managers and board members have to serve their own interests and on the resources available to managers; i.e., the financial performance of the firm. The discretion should also be an increasing function of management entrenchment and a decreasing function of the external monitoring of management by the investment community.

**Moral management and CSP** The motivation for social activities is unobservable, and corporate statements regarding mission and responsibilities can be motivated by self-interest as well as by moral duties. If CSP is morally motivated as in Baron (2008b), then it should be independent of CFP, the competitiveness of the industry in which the firm operates, the financial structure of the firm, and its governance and external monitoring, whereas it could depend on the operations of the firm since they determine its interactions with the public and the moral issues it encounters. Morally-motivated CSP could be independent of social pressure, or social pressure

---

<sup>13</sup> Tirole (2001) considers stakeholder theory from the perspective of corporate governance focusing on incentive and control issues.

could be associated with the issues on which the firm acts morally. For example, moral duty could result from a consensus in society about which party is best placed to deal with a moral concern, and social pressure could accompany that consensus.<sup>14</sup>

Moral management could be rewarded by consumers, employees, and investors, and they could reward the firm more because of its motivation than they reward self-interested firms that practice strategic CSP. Consequently, little can be learned from the CFP equation, unless CFP is not increasing in CSP. Fernández-Kranz and Santaló (2007) argue that CSP should be independent of industry competitiveness if it is morally motivated. They found that KLD strengths were greater and concerns less in more competitive industries, suggesting that CSP is strategic rather than morally motivated. As indicated below, the empirical results are mildly supportive of the morally-motivated CSP hypothesis.

One alternative to the morally-motivated CSP hypothesis is that CSP is strategic with potential rewards from consumers, employees, or investors. Another alternative is the perquisites hypothesis with CSP satisfying the interests of management or board members. A third alternative is that CSP is pursued because it reduces potentially harmful social pressure.

**The soft target hypothesis:** The soft target hypothesis states that social pressure, particularly that from private politics, can be directed to firms already providing considerable CSP because they have weaker incentives to resist that pressure than do firms providing little CSP, as shown in Baron (2008b). Suppose that CSP provides a measure of product differentiation in the eyes of consumers, and consider a social activist that can target either a firm with high CSP or one with low CSP. Targeting consists of a demand for a high level of CSP and the threat of harm from a campaign such as a boycott or activist generated adverse media coverage. If the firm with low CSP is targeted and the campaign is successful in the sense that the firm concedes to the social pressure, its CSP will be high and competition between the two firms will be intense because of reduced product differentiation. The target then has a strong incentive to resist the campaign. In contrast if the firm with high CSP is targeted and the campaign is successful, product differentiation increases which lessens the intensity of competition and offsets some of the additional cost from the higher CSP. The incentive of the target with CSP to resist the campaign is then weaker.<sup>15</sup> Indeed, high CSP may be a sign that the

---

<sup>14</sup> A morally managed firm should have higher CSP than non-morally managed firms, and it may be informative to identify those firms with outlier residuals to see if they match with popular views about which firms are socially responsible.

<sup>15</sup> This conclusion also depends on other factors such as costs and the intensity of consumer preferences for CSP.

firm has succumbed to social pressure in the past.<sup>16</sup> Consequently, the activist can prefer to target the firm with the higher CSP. Social pressure thus should be positively related to (lagged) CSP. Firms with poor CFP and volatile earnings could also be softer targets, so social pressure should be negatively related to CFP and positively related to the volatility of returns.

The alternative to the soft target hypothesis is the pressure release hypothesis, which is that greater CSP reduces social pressure because it responds to the expectations and demands of government, activists and NGOs, and the public. This hypothesis is also consistent with selection of the worst offenders as targets, those with the highest cost of increasing their CSP, rather than the soft target, in which case social pressure should be a decreasing function of (lagged) CSP.

## **V. Data and Measurement**

### **A. Data**

The data set is assembled from KLD's Socrates database, the IRRC's governance and director database, CDA/Spectrum 13(f) filings, and the *I/B/E/S* database during the period from 1992 to 2004. The Socrates database includes social ratings data for more than 3,000 companies. KLD's inclusive social criteria contain strength ratings and concern ratings for community, diversity, employee relations, environment, governance, human rights, and product. KLD also has exclusionary screens, such as alcohol, gambling, military, nuclear power, and tobacco. The exclusionary screens differ from the inclusive screens in that only concern ratings, but no strength ratings, are assigned, so we use the inclusive screens as our main variables for measuring CSP and social pressure.<sup>17</sup> The exclusionary screens are viewed as affecting social pressure. Prior to 2001 KLD data include only approximately 650 firms listed on the S&P 500 or Domini 400 Social Index as of August of each year. For 2001 and 2002 (2003 and 2004), the KLD's ratings are a summary of strengths and concerns assigned to approximately 1,100 (3,100) firms listed on the S&P 500, the

---

<sup>16</sup> As an example of social pressure not giving credit for SCP, Argenti (2004, pp. 110-111) explained the decision by the activist organization Global Exchange to target Starbucks to sell Fair Trade Coffee: "truly socially responsible companies are actually more likely to be attacked by activist NGOs than those that are not, ... Our interviews with Global Exchange suggested that Starbucks was a better target for the fair trade issue because of its emphasis on social responsibility, as opposed to a larger company without a socially responsible bent."

<sup>17</sup> The KLD database has few firms (756 firm-year observations) with an exclusionary screen. For the KLD strength scores there are 4,174 firm-year observations, and there are 6,479 firm-year observations with either a strength or concern score. In addition, while the KLD database reflects whether a company is engaged in CSP activities and includes a list of the types of activities, it does not report how much each firm invests in CSP activities. Although we are not aware of the existence of CSP expenditure data, the availability of such data could provide additional benefits.

Domini 400 Social Indexes, or the Russell 1,000 (Russell 3,000) Indexes as of December 31<sup>st</sup> of each year. The data thus represent an unbalanced panel.

KLD's definition of corporate governance, which includes compensation, ownership, tax disputes, and other issues, is quite different from the concept of corporate governance used in finance. We include KLD's corporate governance dimension in CSP and social pressure, but we also use the IRRC governance database, the IRRC director database, CDA/Spectrum 13(f) filings, and the *I/B/E/S* database to obtain corporate governance and monitoring characteristics that include CEO ownership, the proportion of outside independent directors, the proportion of institutional holdings, the proportion of blockholdings, and the number of security analysts following the firm. Specifically, (i) our sample firm must be available from the IRRC director database; (ii) CEO ownership and insider blockholding data must be available; (iii) the data for outside institutional holdings must be available from CDA/Spectrum 13(f) filings. These filings contain quarterly information on common-stock positions greater than 10,000 shares or \$200,000 for each institution with more than \$100 million in securities under management; and (iv) the number of analysts following a firm must be available from the *I/B/E/S* database. We also require that sufficient COMPUSTAT and Center for Research in Security Prices (CRSP) data are available for our tests. This procedure yields a sample of 2,481 firm observations from 1992 to 2004. If there are any (no) observations in the KLD ratings, then we view them as firms with (no) CSP engagement. We verify our results based on the sample of firms with some positive entry for strengths or concerns.<sup>18</sup>

The IRRC does not publish volumes every year with volumes only for the years of 1993, 1995, 1998, 2000, 2002, and 2004. Following Bebchuk and Cohen (2005) and Gompers, Ishii, and Metrick (2003, 2006), we fill in the missing years by assuming that the governance provisions reported in any given year are also in place in the year preceding the volume's publication. For instance, in the case of 1999, for which there is no IRRC volume in the subsequent year, we assume that the governance provisions are the same as those reported in the IRRC volume published in 1998. To conduct the robustness test, we also examine firms containing various CSP information from KLD, governance characteristics from the IRRC, and analyst following from the *I/B/E/S* from only the IRRC's published years of 1993, 1995, 1998, 2000, 2002, and 2004. Our unreported results suggest that overall results are essentially identical and that the main results remain unchanged.

---

<sup>18</sup> Actual samples used in the analyses are slightly different because the data availability is different for each regression analysis.

## **B. Measurement**

CSP is assumed to be measured by the Strengths identified by KLD. These strengths may or not correspond to actual improvements in social welfare but instead could reflect measures that benefit a group favored by KLD but harms a less favored group. For example, KLD views “substantial emissions” of toxic chemicals as a concern, yet these are legal emissions. If the legal emissions limits were chosen efficiently, the reductions in toxic releases reduce social welfare. The strengths, however, tend to correspond to actions that seem to appear to favor citizens directly and seem to typically be cast that way by the media. KLD remains the most comprehensive available.

To investigate CSP in more detail the KLD strengths have been decomposed into those ( $C_1$ ) more likely and those less likely ( $C_2$ ) to be directly rewarded by consumers or employees. The former category corresponds to strategic CSP, and the latter category is viewed as responsive CSP; i.e., likely to be a direct response to social pressure. For example, strengths such as “indigenous peoples relations,” “innovative giving,” and diversity on board of directors seem unlikely to have a direct impact on profits. In contrast, strengths such as protecting the environment, philanthropy, and product quality, can be advertised to consumers and emphasized to employees as part of corporate culture. Our assignment of individual KLD strengths and concerns into categories is a matter of judgment. There has been no ex post tinkering with those judgments.

Social pressure is measured by the KLD Concerns, some of which, such as Community Other Concern reflecting “strong community opposition,” are direct measures of pressure, whereas others, such as the production of ozone depleting chemicals, are indirect measures. To investigate the source of social pressure, the social pressure measures are disaggregated into those that clearly are associated with government such as civil fines and liabilities for hazardous waste sites, those that are clearly independent of government such as workplace reductions and indigenous peoples relations, and those that may involve both such as the production of agricultural chemicals. The first category corresponds to public (government) politics and the second category corresponds to private (NGOs and the public) politics. The public and private politics measures are included in the estimation. Appendix A identifies the strengths and concerns in each of the sets.

The KLD data collection system does not conform exactly to the definition of CSP used here. KLD, for example, includes as an Employee Relations strength an employee retirement system, which is a private good for workers and a part of a compensation system with many components among which there are tradeoffs. Consequently, two strengths, “strong union

relations” and “employee involvement,” have been included in CSP, and the other measures in Employee Relations have been taken out and incorporated in the empirics as a separate independent variable affecting CFP. This variable does not have a statistically significant coefficient in any of the estimations.

CFP is measured by Tobin’s q, which is the market value of a firm’s securities divided by its total assets.<sup>19</sup> This is subject to two types of variation across firms that may be independent of the operational and social choices of a firm. The first includes factors that can affect overall market values. These include macroeconomic performance, security issues, and political risks. The second is industry-specific factors such as rising or falling prices due to shifts in industry demand or restrictions on supply, as in the case of oil or other raw materials. The first is taken into account using year dummy variables. The second is taken into account using the Fama and French (1997) industry dummy variables to capture differences across industries. To take into account the competitiveness of the industry, the industry HHI is included.

Industry dummy variables also serve two other purposes. First, they control for unobserved heterogeneity across industries. Second, some KLD concerns are much more likely in some industries than others. For example, “Investment Controversies” pertains only to financial institutions, whereas “Hazardous Waste” and “Ozone Depleting Chemicals” do not pertain to financial institutions. Similarly, “Indigenous Peoples Relations” pertains to firms with international operations.

The other controls may be thought of as being in three categories: variables that characterize the operations of the firm (e.g., advertising, R&D, sales, industry and its competitiveness), those that characterize the financial structure and risk of the firm (e.g., debt ratio, dividend ratio, variability of returns), and those that pertain to governance and monitoring of the firm and its managers (e.g., entrenchment, board independence, external monitoring).

The SEC does not require firms to report advertising expenditures or research and development expenditures, and 74 percent and 59 percent, respectively, of the firms do not do so. To identify this non-reporting, a dummy variable with a value of 1 is included if advertising is not reported and a dummy variable with a value of 1 is included if R&D is not reported. Also, a substantial number (1,066 of the 2,481) of firms have neither KLD strengths nor concerns. This could be because they faced no social pressure and had no social performance, but it could also be

---

<sup>19</sup> Tobin’s q is widely used as a measure of firm value. See, for example, Chung and Pruitt (1994) and Chung and Jo (1996), among others. Following Chung and Pruitt (1994), Tobin’s q is calculated as: {[Market value of common stock + Book value of preferred stock + Book value of long-term debt + Book value of current liabilities – (Book value of current assets – Book value of Inventories)] / Book value of total assets}.

that KLD's data collection system failed to uncover social pressure or CSP. Consequently, a dummy variable has been used for these firms. Another potential problem with the data is that the early years could contain a selection effect. That is, the firms covered by KLD in the 1990s include those in the S&P 500 plus those selected for the Domini 400 Index. That selection is based on CSP. This overrepresents the presence of CSP in the data set, and hence a dummy variable has been used to identify firms in the Domini 400 Index but not in either the S&P 500 or the Russell Indices. This variable is highly significant as expected.

Strengths and concerns are 0-1 variables and CSP is measured as the sum of the strengths or concerns indicator variables divided by the total possible strengths or weaknesses. Appendix B and C list the definitions and measures of the variables of interest. The decomposition of the strengths includes two categories, the first ( $C_1$ ) of which includes social activities that could easily be marketed to consumers, employees, and investors. The second ( $C_2$ ) includes social activities that are likely to be responses to social pressure.

Strategic CSP may be thought of as having two subcategories corresponding to revenue enhancing activities ( $C_{1r}$ ) and productivity enhancing activities ( $C_{1p}$ ). The revenue enhancing activities are those more likely to be rewarded by consumers, whereas the activities in  $C_{1p}$  are more likely to be rewarded by employees in the form of higher productivity. These measures are identified in Appendix A, Panel C.

## **VI. Empirical Results**

The estimation has two parts. The first provides descriptions of the data that identify how financial performance and the pattern of KLD strengths and concerns vary with firm characteristics and how social pressure relates to those characteristics. The second provides tests of the framework for explaining corporate social performance and its relation to financial performance and social pressure.

### **A. Descriptive Statistics and Bivariate Correlations**

Table 1 presents the means, standard deviations, minimums, and maximums of the variables of interest. There are 11,791 firm-year observations over 1992~2004 period. The mean of Tobin's  $q$  is 1.662, whereas the mean of CSP ( $C_1 + C_2$ ) is 0.082 and social pressure (public and private politics measure) is 0.069. The average of managerial entrenchment (G index) is 9.225 and the mean percentage of independent directors is 63.5 percent. The average CEO ownership is 1.575 percent and the mean percentage director ownership is 0.077 percent. Surprisingly, the sample firms have a high percentage of institutional share ownership at 61.2 percent.

Table 2 presents the Spearman correlation matrix for some of the main variables discussed in the previous section. Consistent with the positive (negative) association between CFP and CSP (social pressures), Tobin's q is positively (inversely) related to all CSP (all social pressure) variables. In addition, Tobin's q is positively associated with external monitoring measured by institutional ownership or analyst coverage. All CSP variables are highly and positively correlated with social pressure variables. Firm size measured by the log of sales or total assets is inversely related to CFP, but positively associated with CSP and social pressures. The G index is negatively (positively) related to Tobin's q (CSP or social pressures). As anticipated by the soft target hypothesis, the measure of social pressure, in particular, the private politics measure is positively associated with lagged CSP measures and volatile earnings while inversely related to lagged Tobin's q. All of the above correlations are statistically significant (p-values < 0.01).

## **B. Simultaneous Equations Estimation**

### **(i) For the 3-equation model:**

The system of equations in (1)-(3) is estimated using 3SLS. Estimates for aggregated measures of CSP and social pressure are presented in the first three columns of Table 3. The estimates in the first three columns indicate that financial performance measured by Tobin's q is strongly and positively related to CSP, supporting the explanations for CSP based on consumers, employees, or investors rewarding the firm for its social activities. Financial performance is strongly decreasing in social pressure, suggesting that social pressure harms brands or corporate reputation or productivity or turns some investors away from the firm. CSP is strongly increasing in (lagged) social pressure, so CSP is responsive to social pressure, which thus has an indirect as well as a direct effect on CFP. Social pressure is greater for controversial businesses, as expected. CSP is strongly increasing in (lagged) CFP which is consistent with CSP as management perquisites (and also with CSP and operational decisions being strategic complements). Social pressure is decreasing in CFP and increasing in (lagged) CSP, both of which are consistent with activists having an incentive to target soft firms and to come back for more, as considered in more detail below.

As a check on the relations identified in the full sample, the last three columns of Table 3 present estimates for only the firms in the Domini 400 Index. These firms have been selected for inclusion in the Index for their superior social performance as identified by KLD. The estimated coefficients for the relations among q, CSP, and social pressure all have the same signs as for the full sample except for the coefficient of KLD Exclusion in the social pressure equation. But, only a very small number of firms in the Index have exclusions, and the coefficient is essentially equal



to 0. All of the other coefficients that are statistically significant in the full sample are also statistically significant in the Domini sample with the exception of the dummy variable for firms with neither strengths nor concerns, but again very few firms have such measures. The estimated relations thus are essentially the same for the Domini 400 firms as for the full sample, providing support for the robustness of the estimated relations among CFP, CSP, and social pressure.

The estimated model can be interpreted both as describing a pattern of conduct across a broad set of firms and as a representation of an individual firm, but since CSP and social pressure are stocks rather than fresh choices each period, the former interpretation is better. This also means that little can be said about causation at the individual firm level. Then, firms with, for example, better financial performance have greater CSP and face less social pressure, and firms with greater CSP have better financial performance but face greater social pressure. To assess the magnitudes are economically significant, firms with Tobin's  $q$  one standard deviation above the mean have 5.0 percent less social pressure, and firms with CSP one standard deviation above the mean have 24.6 percent greater social pressure. The net effect of both is 19.5 percent. Similarly, for firms with CSP one standard deviation above the mean have 7.6 percent higher Tobin's  $q$ , and firm with social pressure one standard deviation above the mean have 5.6 percent low Tobin's  $q$ .

The estimates do not establish causation but have the same predictive features as causal relations. That is, consider an exogenous shock that increases social pressure or damages the reputations of firms, as in the case of corporate scandals, media coverage of high management compensation or backdating of stock options, or foolish investments by banks in bonds backed by subprime mortgages. Under the framework of the theory the estimated equations imply that the CFP the firms should directly decrease due to consumer, employee, or investor reactions. Firms could respond to the increase in social pressure by increasing CSP, which would offset the impact of the increased social pressure. The offset could be from increased revenue from consumers who are willing to pay more for the firm's products, from investors who value the CSP, or employees who are motivated by the social performance. Similarly, the decrease in CFP resulting from the increased social pressure reduces CSP either because the marginal product of social activities is lower or slack is reduced. The net effects on CSP and CFP then affect subsequent social pressure. The estimates are consistent with social pressure being directed at firms that are more likely to respond to it.

Bailey and Moon (2008) identify a mechanism by which social pressure results in CSP. They studied S&P 500 firms that established public affairs/social responsibility board committees and found that those receiving social pressure established these committees in an attempt to mitigate the harm from social pressure. They "interpret this result as evidence that companies try

to defend themselves against negative social outcomes through forming a specialized Board level committee ...” As considered below the attempt to defend against social pressure and mitigate its effect appears not to be unsuccessful, since social pressure is increasing in (lagged) CSP.

CSP may be more prevalent in consumer goods industries where it could provide product differentiation and be a complement to advertising. CSP is significantly increasing in the ratio of advertising to sales with a one standard deviation increase corresponding to 6.3 percent higher CSP. In addition, of the 47 industry dummy variables only five are statistically significant. All five are positive and are for consumer goods industries: beer, toys, books, household, and clothing.

CSP is decreasing in management entrenchment, which is consistent with the theory of Cespa and Cestone that CSP can be used to support a management threatened by the market for control. They present a theory in which management uses CSP to obtain the support of stakeholder groups to oppose a takeover through, for example, public or private politics. A more entrenched management has less need to use CSP to protect their jobs. CSP is increasing in the size of the firm as measured by sales and assets, so larger firms have a more extensive set of social activities than do smaller firms.

To explore the hypothesis that social pressure is directed to softer targets, it is necessary to define soft. Three concepts are used here. The first is that a firm has engaged in CSP in the past, which can mean that the firm is responsive to social pressure and may again respond to social pressure. The second is economic weakness. The third is a management that is relatively unprotected from the market for control. Social pressure is strongly increasing in (lagged) CSP, which is consistent with the first concept. Social pressure is decreasing in CFP, increasing in the volatility of returns on a firm’s shares, and decreasing in sales growth and capital expenditure ratio both of which arguably are measures of strength.<sup>20</sup> This is consistent with the notion that weaker firms face more social pressure. Social pressure is decreasing in management entrenchment, which is consistent with the notion that a more entrenched management is a harder (in the sense of less responsive) target for social pressure. Although these estimates are consistent with social pressure being directed to weaker firms, social pressure is increasing in the HHI, so a firm in a less competitive industry with firms with greater market shares, faces more social pressure.

Support for the soft target hypothesis is provided by King and Soule (2007) who studied which firms were targeted by social and union protests. They estimated a Probit model and found

---

<sup>20</sup> CFP is decreasing in the volatility of returns indicating that higher volatility means weaker financial performance.

“that protestors tend to target large, weakly performing firms. Firms that have been targeted by protestors in the past are more likely to be protested against in the future.” We also find that social pressure is directed to larger firms.

The coefficients of the percent of independent board members are highly significant and negative for CFP and positive for CSP. One view of independent directors is that they represent investors and act as monitors of management which should improve financial performance. Another view is that independent directors are put on the board in response to social pressure and are thus accountable to the agents of social pressure as well as to investors. The estimates are consistent with the second view.<sup>21</sup>

The coefficient of the log of the number of financial analysts in the CFP equation is large and highly significant. This result is consistent with Chung and Jo (1996). A one standard deviation increase in the log of the number of financial analysts corresponds to an approximately 30 percent higher  $q$ , which seems beyond the realm of plausibility. One possible cause of this relation is that the number of analysts covering a firm could be endogenous. That is, analysts have incentives to serve their “clients,” who are largely institutional investors, and hence analysts would be expected to cover firms that are widely held by institutional investors and that represent increasing shares of their portfolios; i.e., are high flyers. Moreover, some institutional investors are prohibited from investing in financially weak firms. These factors would strengthen the apparent relation between CFP and the number of analysts, but the direction of causation could run from CFP to the number of analysts. Chung and Jo (1996) conduct a 2SLS analysis with Tobin’s  $q$  and the number of analysts covering a firm and found that Tobin’s  $q$  affect the number of analysts and vice versa.

The Gompers-Ishii-Metrick index (G index) can be interpreted as measuring management entrenchment; i.e., the extent to which management is protected from the market for corporate control. The G index measures anti-takeover provisions (ATPs) such as staggered boards, limits to shareholder bylaw amendments, supermajority requirements for mergers, and supermajority requirements for charter amendments, poison pills, and golden parachutes. The IRRC reports 24 ATPs at the firm level, so the G index ranges from 0 to 24, with a higher index indicating stronger managerial power and therefore a greater potential for managerial entrenchment. However, the index can also be thought of as reflecting the pressure coming from the market for

---

<sup>21</sup> The finding that CFP is decreasing in the percent of independent directors can be interpreted in the context of the finding by Klein (1998). She found no significant relation between board composition and financial performance measures such as return on market value, but financial performance was increasing in the percent of insider directors on board finance and investment committees. These committees should have the greatest impact on Tobin’s  $q$ , and more independent directors can mean fewer inside directors on those committees.

control in the form of potential takeover threats, and the stronger that pressure the more measures management would take to protect itself. If the latter were true, the pressure from the market for control should result in higher  $q$  than in the absence of that pressure, so CFP and the G index should be positively related. If the former is true, the greater entrenchment should deter pressure from the market for control, resulting in a lower  $q$  than with less entrenchment. In this case CFP and the G index would be negatively related. The coefficient of the G index in the CFP equation is negative and highly significant, suggesting that the index measures managerial entrenchment. With this interpretation CSP should be greater for firms with greater managerial entrenchment, which is consistent with the perquisites hypothesis. The observed inverse relation between CSP and G index, however, is contrary to the perquisites hypothesis. Social pressure is decreasing in entrenchment, which is consistent with firms with more entrenched management being tougher targets.

The unreported results based on all firms that have either KLD strengths or concerns are qualitatively the same with those of full sample.

**(ii) Five-equation model:**

The five-equation, structural model has the same form as the three-equation system, with dependent variables  $q$ ,  $C_1$ ,  $C_2$ ,  $S_u$ ,  $S_r$ . This system allows a more detailed investigation of the relations among CFP, strategic CSP ( $C_1$ ), responsive CSP ( $C_2$ ), public politics social pressure ( $S_u$ ), and private politics social pressure ( $S_r$ ). The independent variables are the same as for the three-equations system with both of the disaggregated variables substituted for the aggregated variables. The system is identified by the same exclusions.

CFP is decreasing in public politics pressure but is unaffected by private politics pressure. Both components of CSP and both components of social pressure are increasing in the size of the firm, and both components of CSP are increasing in both components of (lagged) social pressure. In addition, both components of social pressure are increasing in each component of (lagged) CSP. The effect of private politics is thus through CSP rather than on investors' perceptions of the performance of the firm. Both components of social pressure are increasing in the volatility of returns, which is consistent with the soft target hypothesis, and both components of CSP are increasing in the percent of independent directors, which is consistent with the perquisites hypothesis.

In the three-equation model CSP had a statistically and economically significant positive effect on CFP, but disaggregating CSP into strategic and responsive categories reveals that the effect is due entirely to responsive CSP. A one standard deviation higher responsive CSP results in a  $q$  that is 15.4 percent above the mean  $q$ , indicating considerable economic significance. This supports the view that responsive CSP addresses the effects of social pressure on financial performance. Moreover, responsive CSP is affected more (economically) by private politics pressure than by public politics pressure, as indicated in columns 2 and 3 of Table 4A. This could explain the insignificant coefficient of public politics pressure in the CFP equation in column 1.

In contrast, strategic CSP has no statistically significant effect on CFP. This could be due to the absence of a reward by consumers, employees, or investors for these aspects of CSP. It could also reflect the cost associated with providing strategic CSP, such as philanthropy and environmental programs. Further disaggregating strategic CSP into a category with measure that consumers (and investors) might reward and those that employees (and investors) might reward yields negative coefficients for both in the CFP equation but only the coefficient for the consumer reward is statistically significant (at the 0.05 level). (These estimates are not reported here.) This suggests that consumer rewards may not exceed the cost of the social activities. The coefficient of responsive CSP is unaffected by the disaggregation, reflecting the strong effect on CFP.

### **C. Morally-motivated CSP?**

The estimates in Table 4 for the five-equation model and the full sample indicate very different relations between CFP and the two components of CSP. The strategic component  $C_1$  has a negative but insignificant coefficient in the CFP equation, whereas the responsive component  $C_2$  has a large, positive, and significant effect on CFP. Both are strongly increasing in CFP. One interpretation of these findings is that those social activities in  $C_1$  are required and hence are undertaken regardless of their impact on profits. The negative coefficient on  $C_1$  in the CFP equation could, for example, mean that those activities are costly. Moreover, because they are required they are not sufficiently rewarded by consumers, employees, or investors to offset their cost. As considered above there is no predicted relation between social pressure and morally motivated CSP, but both the  $C_1$  and  $C_2$  components of CSP are strongly increasing in both (lagged) public and private politics pressure.

One possible reason that those social activities are required is that there is a moral duty on the firm to undertake those activities. But, if those social activities are morally motivated, they should be independent of the competitiveness of the industry and of the governance structure and monitoring of the firm. The evidence is mixed. The coefficient of HHI in the  $C_1$  equation is

negative but not significant, which is consistent with morally required activities.<sup>22</sup> The social activities in  $C_1$  are not significantly related to managerial entrenchment or to external monitoring by institutional investors and analysts, which also supports the moral management hypothesis. In contrast, the social activities in  $C_2$  are significantly decreasing in managerial entrenchment and institutional holdings.  $C_1$  is significantly decreasing in the percent of large block holdings, and so is CFP, which is consistent with predictions of finance theory that, like management, large holders may be able to take from the firm.

No unambiguous conclusion can be drawn from these results, but the possibility that the social activities in  $C_1$  are costly and not sufficiently rewarded but required by moral duty cannot be ruled out. The activities in  $C_1$  are significantly increasing in the percent of independent directors on the board, as are the activities in  $C_2$ , which supports the alternative hypothesis of CSP as perquisites.  $C_2$ , however, is significantly decreasing in managerial entrenchment, which is contrary to the perquisites hypothesis. One unambiguous conclusion is that the social activities in  $C_1$  are quite different from those in  $C_2$  with respect to their relation to CFP and the capital market pressures on management.

## **VII. Conclusions**

Despite the frequently claimed causal impact of corporate social performance and social pressure on corporate financial performance, the empirical evidence regarding the relation among CFP, CSP, and social pressure has been limited. This paper fills the void by examining the interrelation among CFP, CSP, and social pressure using a comprehensive sample of firms with CSR engagement in the United States for the 1992 to 2004 period.

The underlying theory is confirmed by the empirical estimates identifying the following relations across the set of firms. Greater CSP is associated with better financial performance, and better financial performance is associated with higher CSP. Social pressure is associated with weaker CFP possibly because a firm's brand or reputation is harmed or employee morale is worsened. Social pressure is significantly increasing in (lagged) CSP and the volatility of returns, and significantly decreasing in CFP, sales growth and capital expenditures, all of which is consistent with the soft target hypothesis. Social pressure is also decreasing in management entrenchment suggesting that more entrenched managements are tougher targets for social pressure. Overall, our empirical results support the soft target hypothesis based on the social pressure explanation.

---

<sup>22</sup> The negative coefficient is consistent with strategic CSP providing product differentiation, as predicted by Baron (2008b), Bagnoli and Watts, and Siegel and Vitaliano.

Our empirical results provide mixed support for the management perquisites hypothesis in that CSP is increasing in CEO ownership of the firm and in the proportion of independent directors. CSP, however, is decreasing in external monitoring by the investment community but is also decreasing in an index of management entrenchment, which is contrary to the perquisites hypothesis. CFP is decreasing in management entrenchment and increasing in external monitoring. CFP is also decreasing in the percent of independent directors, suggesting that they may prefer CSP at the expense of CFP. These findings and those from the five-equation model are more consistent with the morally-motivated CSP hypothesis than the perquisites hypothesis.

## References

- Argenti, Paul A. 2004. "Collaborating with Activists: How Starbucks Works with NGOs." *California Management Review*. 47: 91-114.
- Bailey, Elizabeth E. and Jon J. Moon. 2008. "Board Committees and Integrated Strategy: How Firms Integrate Market and Non-market Strategies for Mitigation." Working paper, University of Pennsylvania.
- Bagnoli, Mark and Susan G. Watts. 2003. "Selling to Socially Responsible Consumers: Competition and the Private Provision of Public Goods." *Journal of Economics and Management Strategy*. 12: 419-445.
- Baron, David P. 2001. "Private Politics, Corporate Social Responsibility, and Integrated Strategy," *Journal of Economics and Management Strategy*. 10 (Spring): 7-45.
- Baron, David P. 2003. "Private Politics." *Journal of Economics and Management Strategy*. 21: 31-66.
- Baron, David P. 2006. *Business and Its Environment*, 5<sup>th</sup> ed. Upper Saddle River, New Jersey: Prentice Hall.
- Baron, David P. 2007. "Corporate Social Responsibility and Social Entrepreneurship." *Journal of Economics and Management Strategy*. 16: 683-717.
- Baron, David P. 2008a. "Managerial Contracting and Corporate Social Responsibility." *Journal of Public Economics*. 92: 268-288.
- Baron, David P. 2008b. "A Positive Theory of Moral Management, Social Pressure, and Corporate Social Performance." *Journal of Economics and Management Strategy*. (forthcoming)
- Baron, David P. and Daniel Diermeier. 2007. "Strategic Activism and Nonmarket Strategy." *Journal of Economics and Management Strategy*. 16: 599-634.
- Becchetti, Leonardo, Rocco Ciciretti, and Iftekhar Hasan. 2007. "Corporate Social Responsibility and Shareholder's Value: An Event Study Analysis." Working Paper 2007-6, Federal Reserve Bank of Atlanta.
- Bebchuk, L., and A. Cohen. 2005. "The costs of entrenched boards." *Journal of Financial Economics* 78: 409-433.
- Besley, Timothy and Maitreesh Ghatak. 2007. "Retailing public goods: The economics of corporate social responsibility." *Journal of Public Economics*. 91: 1645-1663.
- Binder, Seth and Eric Neumayer. 2005. "Environmental pressure group strength and air pollution: An empirical analysis." *Ecological Economics*. 55: 527-538.
- Campbell, Harvey. 1996. "Understanding risk and return." *Journal of Political Economy* 104: 298-345.



Cespa, Giovanni and Giacinta Cestone. 2007. "Corporate Social Responsibility and Managerial Entrenchment." *Journal of Economics & Management Strategy*. 16: 741-771.

Chatterji, Aaron K. and Michael W. Toffel. 2007. "Shamed and Able: How Firms Respond to Information Disclosure." Working paper, Duke University.

Chung, Kee H. and Hoje Jo. 1996. "The impact of security analysts' monitoring and marketing functions on the market value of firms." *Journal of Financial and Quantitative Analysis*. 31: 493-512.

Chung, K. and S.A. Pruitt. 1994. "A simple approximation of Tobin's q." *Financial Management* 23: 70-74.

Dowell, G., S. Hart and B. Yeung. 2000. "Do Corporate Global Environmental Standards Create or Destroy Market Value?" *Management Science*. 46: 1059-1074.

Elfenbein, Daniel W. and Brian McManus. 2007. "A Greater Price for a Greater Good? Evidence that Consumers Pay More for Charity-Linked Products." Working paper, Washington University.

Epstein, Marc J. and Karen E. Schnietz. 2002. "Measuring the Cost of Environmental and Labor Protests to Globalization: An Event Study of the Failed 1999 Seattle WTO Talks." *International Trade Journal*. 41:129-160.

Fama, Eugene F. and Kenneth R. French. 1997. "Industry Costs of Equity." *Journal of Financial Economics*. 43: 153-197.

Feddersen, Timothy J. and Thomas W. Gilligan. 2001. "Saints and Markets: Activists and the Supply of Credence Goods." *Journal of Economics and Management Strategy*. 10: 149-171.

Fernández-Kranz, Daniel and Juan Santaló. 2007. "When Necessity Becomes a Virtue: The Effect of Product Market Competition on Corporate Social responsibility." Working paper, Saint Louis University, Madrid.

Fisman, Ray, Geoffrey Heal, and Vinay B. Nair. 2005. "Corporate Social Responsibility: Doing Well by Doing Good?" Working paper, Columbia University.

Fisman, Ray, Geoffrey Heal, and Vinay B. Nair. 2006. "A Model of Corporate Philanthropy." Working paper, Columbia University.

Friedman, Milton. 1970. "The Social Responsibility of Business Is to Increase Its Profits." *The New York Times Magazine*. September 13, 1970: pp. 32-33, 122, 126.

Gompers, P., J. Ishii, and A. Metrick. 2003. "Corporate governance and equity prices." *Quarterly Journal of Economics*. 118: 107-155.

Gompers, P., J. Ishii, and A. Metrick. 2006. "Extreme governance: an analysis of dual-class firms in United States." Working paper, Harvard University.

- Graff Zivin, Joshua and Arthur Small. 2005. "A Modigliani-Miller Theory of Altruistic Corporate Social Responsibility." *Topics in Economic Analysis & Policy*. 5: Article 10.
- Hamilton, James T. 1993. "Politics and Social Costs: Estimating the Impact of Collective Action on Hazardous Waste Facilities." *RAND Journal of Economics*. 24: 101-125.
- Harjoto, Maretno A. and Hoje Jo. 2007a. "Corporate Governance and Firm value: The Impact of Corporate Social Responsibility." Working paper, Santa Clara University.
- Harjoto, Maretno A. and Hoje Jo. 2007b. "Why Do Firms Engage in Corporate Social Responsibility?" Working paper, Santa Clara University.
- Hill, R. P., T. Ainscough, T. Shank, and D. Manullang. 2007. "Corporate Social Responsibility and Socially Responsible Investing: A Global Perspective." *Journal of Business Ethics*. 70: 165-174.
- Hong, Harrison and Marcin Kacperczyk. 2007. "The Effects of Social Norms on Markets." Working paper, Princeton University.
- Heinkle, Robert, Alan Kraus, and Josef Zechner. 2001. "The Effect of Green Investment on Corporate Behavior." *Journal of Financial and Quantitative Analysis*. 36: 431-449.
- Hiscox, Michael J. and Nicholas F.B. Smyth. 2006. "Is There Consumer Demand for Improved Labor Standards? Evidence from Field Experiments in Social Product Labeling." Working paper, Harvard University.
- Hong, Harrison and Marcin Kacperczyk. 2007. "The Price of Sin: The Effects of Social Norms on Markets." Working paper, Princeton University.
- King, Andrew A. and Michael J. Lewis. 2001. "Does It Pay to Be Green?" *Journal of Industrial Ecology*. 5: 105-116.
- King, Brayden G. and Sarah A. Soule. 2007. "Social Movements as Extra-institutional Entrepreneurs: The Effect of Protests on Stock Price Returns." *Administrative Science Quarterly*. 52: 413-442.
- Klein, April. 1998. "Firm Performance and Board Committee Structure." *Journal of Law and Economics*. 41: 275-303.
- Kotchen, Matthew J. and Jon Jungbuen Moon. 2008. "Corporate Social Responsibility for Irresponsibility." Working paper, University of California-Santa Barbara.
- Margolis, Joshua D. and James P. Walsh. 2003. "Misery Loves Companies: Rethinking Social Initiatives by Business." *Administrative Sciences Quarterly*. 48: 268-305.
- Maxwell, John W., Thomas P. Lyon, and Steven C. Hackett. 2000. "Self-Regulation and Social Welfare: The Political Economy of Corporate Environmentalism." *Journal of Law and Economics*. 43: 583-618.

- McGuire, Jean B., Alison Sundgren, and Thomas Schneeweis. 1988. "Corporate Social Responsibility and Firm Financial Performance." *Academy of Management Journal*. 31: 854-872.
- McWilliams, A., and D. Siegel. 2001. "Corporate Social Responsibility and Firm Financial Performance: Correlation or Misspecification?" *Strategic Management Journal*. 21: 603-609.
- Moon, Jon Jungbien. 2007. "In Good Companies? A Critical Evaluation of the Corporate Social Performance-Corporate Financial Performance Link." Working paper, University of Pennsylvania.
- Navarro, Peter. 1988. "Why Do Corporations Give to Charity?" *Journal of Business*. 61: 65-93.
- Siegel, Donald S. and Donald F. Vitaliano. 2007. "An Empirical Analysis of the Strategic Use of Corporate Social Responsibility." *Journal of Economics & Management Strategy*. 16: 773-792.
- Sen, Sankar and C.B. Bhattacharya. 2001. "Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility." *Journal of Marketing Research*. 38: 225-243.
- Tirole, Jean. 2001. "Corporate Governance." *Econometrica*. 69: 1-35.
- Tirole, Jean. 2005. *The Theory of Corporate Finance*. MIT Press.
- Tsoutsoura, M., 2004. "Corporate social responsibility and financial performance." Working paper, Center for Responsible Business, Haas School of Business, University of California at Berkeley.
- Vogel, David. 2005. *The Market for Virtue: The Potential and Limits of Corporate Social Responsibility*. Washington, DC: Brookings Institute.
- Waddock, Sandra A. and Samuel B. Graves. 1997. "The Corporate Social Performance-Financial Performance Link." *Strategic Management Journal*. 18: 303-319.

## Appendix A: KLD Strengths and Concerns Categorization

### Panel A: KLD Strengths Categorization

Strategic CSR (C <sub>1</sub> )	Responses to social pressure (C <sub>2</sub> )
<p><b>Community</b> Generous giving Non-US charitable giving Other strength</p>	<p><b>Community</b> Innovative giving Support for housing Support for education Indigenous peoples relations</p>
<p><b>Environment</b> Beneficial products Pollution prevention Alternative fuels Property, plant, and equipment</p>	<p><b>Environment</b> Recycling Communications Other strength</p>
<p><b>Diversity</b> Promotion Family benefits</p>	<p><b>Diversity</b> CEO Board of directors Women/minority contracting Employment of the disabled Progressive gay &amp; lesbian policies Other strengths</p>
<p><b>Employee relations (Emp)</b> Cash profit sharing Strong retirement benefits Health and safety strength Other strength</p>	<p><b>Employee relations</b> No layoff policy Employee involvement Strong union relations</p>
<p><b>Human rights</b> Labor rights strength Other strength</p>	<p><b>Human rights</b> Positive record in South Africa Indigenous peoples relations</p>
<p><b>Product</b> Quality R&amp;D/Innovation</p>	<p><b>Product</b> Benefits to economically disadvantaged</p>
<p><b>Corporate governance c<sub>1</sub></b></p>	<p><b>Corporate governance c<sub>2</sub></b> Limited compensation Ownership strength</p>

**Panel B: KLD Concerns Categorization**

Concerns—Public Politics $s_u$	Concerns—Private Politics $s_r$	Concerns—Both ( $s_u$ and $s_r$ )
<b>Community</b>	Investment controversies Negative economic impact Indigenous peoples relations Other concerns	
<b>Environment</b> Regulatory problems	Ozone depleting chemicals Substantial emissions Climate change	Hazardous waste Agricultural chemicals Other concern
<b>Diversity</b> Controversies	Non-representation	Other concern
<b>Employee relations</b> Poor union relations Health safety concern	Workplace reductions Pension/benefits	Other concerns
<b>Human rights</b>	South Africa Northern Ireland Burma Mexico International labor Indigenous peoples relations	Other concerns
<b>Product</b> Product safety  Antitrust Other concerns		Marketing/contracting controversy
<b>Corporate governance</b> Tax disputes	High compensation Ownership concerns	Other concern

---

Source: The Kinder, Lydenberg, and Domini's (KLD) Socrates database

## **Appendix B: Strategic choice ( $C_1$ ), reaction to social pressure ( $C_2$ ), employee benefits index (Emp), public pressure ( $S_u$ ), private pressure ( $S_r$ ), and KLD Exclusionary indices**

---

Strategic CSP ( $C_1$ ): it is calculated from the sum of all strategic choice criteria ( $c_1$ ) defined in Panel A of Appendix A for each firm in year  $t$  divided by the maximum sum of all strategic choice criteria for all firms in year  $t$ .

Responsive CSP ( $C_2$ ): it is calculated from the sum of all reactions to social pressure ( $c_2$ ) criteria defined in Panel A of Appendix A for each firm in year  $t$  divided by the maximum sum of all reactions to social pressure criteria for all firms in year  $t$ .

Employee index (Emp): it is calculated from the sum of all employee benefits criteria defined in Panel A of Appendix A for each firm in each year  $t$  divided by the maximum sum of all employee benefits criteria for all firms in year  $t$ .

Public pressure index ( $S_u$ ): it is calculated from the sum of all public pressure criteria ( $S_u$ ) defined in Panel B of Appendix A for each firm in each year  $t$  divided by the maximum sum of all public pressure criteria for all firms in year  $t$ .

Private pressure index ( $S_r$ ): it is calculated from the sum of all private pressure criteria ( $S_r$ ) defined in Panel B of Appendix A for each firm in each year  $t$  divided by the maximum sum of all private pressure criteria for all firms in year  $t$ .

KLD Exclusionary index (KLD Exc): it is calculated from the sum of all KLD exclusionary screens (Alcohol, Gambling, Firearms, Military, Nuclear Power, and Tobacco) defined in KLD Socrates database for each firm in each year  $t$  divided by the maximum sum of all KLD exclusionary screens for all firms in year  $t$ .

---

## Appendix C: Variable Definitions and Measures

Variable	Definition
Tobin Q	(Market value of common equity + Preferred Stock + Total Debt)/Total Assets
Lg(Tobin Q)	One year lag of Tobin Q
Dummy KLD (C <sub>1</sub> +C <sub>2</sub> )	Dummy variable = 1 if firms do not have any KLD Strengths or Concerns Scores Strategic Choice (c <sub>1</sub> ) and reaction to Social Pressure (c <sub>2</sub> ) Index
Lg(C <sub>1</sub> +C <sub>2</sub> )	One year lag of (C <sub>1</sub> +C <sub>2</sub> )
C <sub>1</sub>	Strategic Choice Index
C <sub>2</sub>	Reaction to Social Pressure Index
Lg(C <sub>1</sub> )	One year lag of C <sub>1</sub>
Lg(C <sub>2</sub> )	One year lag of C <sub>2</sub>
Emp	Employee Index, consists of Strong union relationships, Cash profit sharing, Strong retirement benefits, Health and safety benefits, and Other strengths in KLD Employee Relations Strengths criteria.
(S <sub>u</sub> +S <sub>r</sub> )	Public (s <sub>u</sub> ) and Private (s <sub>r</sub> ) Pressures Index
Lg(S <sub>u</sub> +S <sub>r</sub> )	One year lag of Public and Private Pressure Index
S <sub>u</sub>	Public Pressure Index
S <sub>r</sub>	Private Pressure Index
Lg(S <sub>u</sub> )	One year lag of Public Pressure Index
Lg(S <sub>r</sub> )	One year lag of Private Pressure Index
Domini400	Dummy variable = 1 if firms are in Domini400 but not in SP500 or Russell 1000/2000 Firms with Domini400 = 1 is also known as the Subsample of Domini400
KLD Exc	KLD exclusionary criteria index from the KLD Exclusionary Screens including Alcohol, Gambling, Firearms, Military, Nuclear Power, and Tobacco
Ln(Sale)	Natural log of firm's annual net sales
Ln(Asset)	Natural log of firm's annual total assets
Debtr	Long term debt divided by total asset
Rndr	Research and development expense divided by total sales
Advr	Advertising expense divided by total sales
Rndumy	Dummy variable = 1 if firms do not have reported Research and development expense
Advdumy	Dummy variable = 1 if firms do not have reported advertising expense
IndusHHI	Industry Herfindahl-Hirschman Index calculated based on firms' annual sales using the Fama-French 48 Industries
Capxr	Capital expenditure expense divided by total sales
Salegrw	Sales growth rate from previous year to current year
Divr	Dividend divided by book value of equity
Stdret	Standard deviation of monthly stock returns three years prior to current year
Gindex	Gompers, Ishii and Metrick index
Pctdirshr	Percentage of director shares ownership
Pctceown	Percentage of CEO shares ownership
Pctindep	Number of independent outside directors/Number of total directors
Ln(Block)	Natural log of sum of total blockholdings (5% or more)
Pctinsti	Percentage of institutional share ownerships
Loganal	Natural log of (number of analysts + 1 )

Note: Strategic choice (C<sub>1</sub>), reaction to social pressure (C<sub>2</sub>), employee index (Emp), public pressure (S<sub>u</sub>), and private pressure (S<sub>r</sub>) indices are calculated based on the sum of KLD criteria for each of these measures indicated in Appendix A for each firm divided by the maximum sum of KLD criteria for each of these measures year by year since KLD criteria and availability of KLD scores in each criteria changes year by year. Appendix B provides description to construct these indices.

**Table 1. Descriptive Statistics**

This table presents the means, standard deviation, minimum, and maximum of the variables of interest. See Appendix C for variable definitions.

Variable	Obs	Mean	Std. Dev	Min	Max
Tobin Q	11,791	1.662	1.807	0.043	78.423
Lg(Tobin Q)	11,791	1.761	2.253	0.058	78.423
Dummy KLD	11,791	0.5391	0.4985	0	1
(C <sub>1</sub> +C <sub>2</sub> )	11,791	0.082	0.154	0	1
Lg(C <sub>1</sub> +C <sub>2</sub> )	11,791	0.066	0.144	0	1
C <sub>1</sub>	11,791	0.037	0.075	0	0.636
C <sub>2</sub>	11,791	0.045	0.097	0	0.8
Lg(C <sub>1</sub> )	11,791	0.030	0.070	0	0.636
Lg(C <sub>2</sub> )	11,791	0.036	0.090	0	0.778
Emp	11,791	0.046	0.134	0	1
(S <sub>u</sub> +S <sub>r</sub> )	11,791	0.069	0.133	0	1
Lg(S <sub>u</sub> +S <sub>r</sub> )	11,791	0.049	0.119	0	1
S <sub>u</sub>	11,791	0.031	0.094	0	1
S <sub>r</sub>	11,791	0.037	0.077	0	0.545
Lg(S <sub>u</sub> )	11,791	0.026	0.089	0	1
Lg(S <sub>r</sub> )	11,791	0.023	0.062	0	0.5
Domini400	11,791	0.057	0.232	0	1
KLD Exc	11,791	0.032	0.129	0	1
Ln(Sale)	11,791	7.299	1.451	1.078	12.484
Ln(Asset)	11,791	7.606	1.664	0.506	14.210
Debtr	11,791	0.240	0.193	0	5.464
Rndr	11,791	0.035	0.082	0	0.992
Advr	11,791	0.009	0.026	0	0.367
Rndumy	11,791	0.741	0.438	0	1
Advdumy	11,791	0.589	0.492	0	1
IndusHHI	11,791	0.117	0.110	0.019	1
Capxr	11,791	0.071	0.104	0	0.995
Salegrw	11,791	0.121	0.302	-0.967	7.110
Divr	11,791	0.037	0.360	-6.900	35.978
Stdret	11,791	11.816	6.332	0	122.987
Gindex	11,791	9.225	2.707	1	19
Pctdirshr	11,791	0.077	0.209	0	12.290
Pctceown	11,791	1.575	5.201	0	83.131
Pctindep	11,791	0.635	0.183	0	1
Ln(blks)	11,791	13.904	5.406	0	20.146
Pctinsti	11,791	61.214	19.313	0.000017	99.979
Loganal	11,791	2.232	0.699	0.693	3.800



**Table 2. Bivariate Correlation Coefficients**

This table reports Spearman correlation coefficients among variables for the 11,791 firm-year observations from 1992 to 2004. See Appendix C for variable definitions. <sup>a</sup> and <sup>b</sup> indicate statistical significance at 1% and 5% levels respectively.

No		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Tobin Q	1															
2	Lg(TobinQ)	0.6389 <sup>a</sup>	1														
3	(C <sub>1</sub> +C <sub>2</sub> )	0.0532 <sup>a</sup>	0.0386 <sup>a</sup>	1													
4	Lg(C <sub>1</sub> +C <sub>2</sub> )	0.0484 <sup>a</sup>	0.0295 <sup>a</sup>	0.8522 <sup>a</sup>	1												
5	C <sub>1</sub>	0.0430 <sup>a</sup>	0.0283 <sup>a</sup>	0.8609 <sup>a</sup>	0.7247 <sup>a</sup>	1											
6	C <sub>2</sub>	0.0510 <sup>a</sup>	0.0393 <sup>a</sup>	0.9184 <sup>a</sup>	0.7895 <sup>a</sup>	0.5893 <sup>a</sup>	1										
7	Lg(C <sub>1</sub> )	0.0387 <sup>a</sup>	0.0202 <sup>b</sup>	0.7340 <sup>a</sup>	0.8671 <sup>a</sup>	0.8038 <sup>a</sup>	0.5403 <sup>a</sup>	1									
8	Lg(C <sub>2</sub> )	0.0472 <sup>a</sup>	0.0313 <sup>a</sup>	0.7885 <sup>a</sup>	0.9207 <sup>a</sup>	0.5298 <sup>a</sup>	0.8400 <sup>a</sup>	0.6039 <sup>a</sup>	1								
9	Emp	0.0387 <sup>a</sup>	0.0319 <sup>a</sup>	0.3951 <sup>a</sup>	0.3673 <sup>a</sup>	0.3694 <sup>a</sup>	0.3400 <sup>a</sup>	0.3441 <sup>a</sup>	0.3181 <sup>a</sup>	1							
10	(S <sub>u</sub> +S <sub>r</sub> )	-0.0333 <sup>a</sup>	-0.0372 <sup>a</sup>	0.4283 <sup>a</sup>	0.4040 <sup>a</sup>	0.3721 <sup>a</sup>	0.3907 <sup>a</sup>	0.3525 <sup>a</sup>	0.3702 <sup>a</sup>	0.2548 <sup>a</sup>	1						
11	Lg(S <sub>u</sub> +S <sub>r</sub> )	-0.0283 <sup>a</sup>	-0.0378 <sup>a</sup>	0.3963 <sup>a</sup>	0.4558 <sup>a</sup>	0.3411 <sup>a</sup>	0.3639 <sup>a</sup>	0.3973 <sup>a</sup>	0.4181 <sup>a</sup>	0.2417 <sup>a</sup>	0.7782 <sup>a</sup>	1					
12	S <sub>u</sub>	-0.0251 <sup>a</sup>	-0.0357 <sup>a</sup>	0.3589 <sup>a</sup>	0.3041 <sup>a</sup>	0.3201 <sup>a</sup>	0.3209 <sup>a</sup>	0.2697 <sup>a</sup>	0.2753 <sup>a</sup>	0.1761 <sup>a</sup>	0.8214 <sup>a</sup>	0.6475 <sup>a</sup>	1				
13	S <sub>r</sub>	-0.0268 <sup>a</sup>	-0.0206 <sup>b</sup>	0.2997 <sup>a</sup>	0.3246 <sup>a</sup>	0.2503 <sup>a</sup>	0.2812 <sup>a</sup>	0.2780 <sup>a</sup>	0.3016 <sup>a</sup>	0.2237 <sup>a</sup>	0.7198 <sup>a</sup>	0.5500 <sup>a</sup>	0.1954 <sup>a</sup>	1			
14	Lg(S <sub>u</sub> )	-0.0172	-0.0254 <sup>a</sup>	0.3300 <sup>a</sup>	0.3781 <sup>a</sup>	0.2871 <sup>a</sup>	0.3007 <sup>a</sup>	0.3353 <sup>a</sup>	0.3423 <sup>a</sup>	0.1747 <sup>a</sup>	0.6485 <sup>a</sup>	0.8613 <sup>a</sup>	0.7362 <sup>a</sup>	0.2192 <sup>a</sup>	1		
15	Lg(S <sub>r</sub> )	-0.0297 <sup>a</sup>	-0.0361 <sup>a</sup>	0.2865 <sup>a</sup>	0.3316 <sup>a</sup>	0.2422 <sup>a</sup>	0.2665 <sup>a</sup>	0.2808 <sup>a</sup>	0.3106 <sup>a</sup>	0.2131 <sup>a</sup>	0.5618 <sup>a</sup>	0.6818 <sup>a</sup>	0.1846 <sup>a</sup>	0.7415 <sup>a</sup>	0.2157 <sup>a</sup>	1	
16	Domini400	-0.0226 <sup>b</sup>	-0.0256 <sup>a</sup>	0.0998 <sup>a</sup>	0.0741 <sup>a</sup>	0.1506 <sup>a</sup>	0.0414 <sup>a</sup>	0.1216 <sup>a</sup>	0.0234	0.1449 <sup>a</sup>	-0.0464 <sup>a</sup>	-0.0439 <sup>a</sup>	-0.0453 <sup>a</sup>	-0.0247 <sup>a</sup>	-0.0445 <sup>a</sup>	-0.0203 <sup>b</sup>	1
17	Ln(Sale)	-0.0901 <sup>a</sup>	-0.1074 <sup>a</sup>	0.5043 <sup>a</sup>	0.4672 <sup>a</sup>	0.4189 <sup>a</sup>	0.4750 <sup>a</sup>	0.3875 <sup>a</sup>	0.4439 <sup>a</sup>	0.2648 <sup>a</sup>	0.4829 <sup>a</sup>	0.4469 <sup>a</sup>	0.4287 <sup>a</sup>	0.3085 <sup>a</sup>	0.3913 <sup>a</sup>	0.2956 <sup>a</sup>	-0.0753 <sup>a</sup>
18	Ln(Asset)	-0.1766 <sup>a</sup>	-0.1574 <sup>a</sup>	0.4892 <sup>a</sup>	0.4456 <sup>a</sup>	0.3871 <sup>a</sup>	0.4758 <sup>a</sup>	0.3547 <sup>a</sup>	0.4352 <sup>a</sup>	0.2457 <sup>a</sup>	0.4629 <sup>a</sup>	0.4286 <sup>a</sup>	0.3916 <sup>a</sup>	0.3193 <sup>a</sup>	0.3574 <sup>a</sup>	0.3092 <sup>a</sup>	-0.1205 <sup>a</sup>
19	Debtr	-0.1702 <sup>a</sup>	-0.1672 <sup>a</sup>	0.0444 <sup>a</sup>	0.0490 <sup>a</sup>	0.0392 <sup>a</sup>	0.0400 <sup>a</sup>	0.0435 <sup>a</sup>	0.0444 <sup>a</sup>	0.0079	0.0908 <sup>a</sup>	0.0939 <sup>a</sup>	0.1023 <sup>a</sup>	0.0315 <sup>a</sup>	0.0975 <sup>a</sup>	0.0401 <sup>a</sup>	-0.0084
20	Rndr	0.2933 <sup>a</sup>	0.3114 <sup>a</sup>	0.0119	0.0052	0.0131	0.0087	0.0083	0.0018	0.0303 <sup>a</sup>	-0.0031	-0.0122	-0.0428 <sup>a</sup>	0.0467 <sup>a</sup>	-0.0349 <sup>a</sup>	0.0269 <sup>a</sup>	-0.0575 <sup>a</sup>
21	Advr	0.1282 <sup>a</sup>	0.1084 <sup>a</sup>	0.1198 <sup>a</sup>	0.1150 <sup>a</sup>	0.0838 <sup>a</sup>	0.1251 <sup>a</sup>	0.0790 <sup>a</sup>	0.1221 <sup>a</sup>	0.0306 <sup>a</sup>	0.0127	0.0129	0.0171	0.0009	0.0182 <sup>b</sup>	-0.0015	0.0060
22	IndusHHI	0.0264 <sup>a</sup>	0.0111	-0.0111	-0.0097	-0.0151	-0.0059	-0.0170	-0.0023	0.0078	0.0602 <sup>a</sup>	0.0538 <sup>a</sup>	0.0601 <sup>a</sup>	0.0304 <sup>a</sup>	0.0496 <sup>a</sup>	0.0321 <sup>a</sup>	-0.0308 <sup>a</sup>
23	Capxr	0.0306 <sup>a</sup>	0.0567 <sup>a</sup>	-0.0281 <sup>a</sup>	-0.0337 <sup>a</sup>	-0.0038	-0.0416 <sup>a</sup>	-0.0125	-0.0441 <sup>a</sup>	0.0543 <sup>a</sup>	0.0295 <sup>a</sup>	0.0247 <sup>a</sup>	0.0323 <sup>a</sup>	0.0113	0.0236 <sup>b</sup>	0.0136	-0.0027
24	Salegrw	0.1857 <sup>a</sup>	0.2275 <sup>a</sup>	-0.0576 <sup>a</sup>	-0.0710 <sup>a</sup>	-0.0482 <sup>a</sup>	-0.0540 <sup>a</sup>	-0.0598 <sup>a</sup>	-0.0668 <sup>a</sup>	-0.0133	-0.0421 <sup>a</sup>	-0.0579 <sup>a</sup>	-0.0557 <sup>a</sup>	-0.0047	-0.0574 <sup>a</sup>	-0.0286 <sup>a</sup>	-0.0390 <sup>a</sup>
25	Divr	0.0214 <sup>b</sup>	0.0073	0.0396 <sup>a</sup>	0.0386 <sup>a</sup>	0.0359 <sup>a</sup>	0.0349 <sup>a</sup>	0.0352 <sup>a</sup>	0.0342 <sup>a</sup>	0.0169	0.0376 <sup>a</sup>	0.0292 <sup>a</sup>	0.0376 <sup>a</sup>	0.0189 <sup>b</sup>	0.0266 <sup>a</sup>	0.0178	-0.0013
26	Stdret	0.1564 <sup>a</sup>	0.2392 <sup>a</sup>	-0.1399 <sup>a</sup>	-0.1231 <sup>a</sup>	-0.1380 <sup>a</sup>	-0.1149 <sup>a</sup>	-0.1208 <sup>a</sup>	-0.1023 <sup>a</sup>	-0.0685 <sup>a</sup>	-0.0722 <sup>a</sup>	-0.0818 <sup>a</sup>	-0.1653 <sup>a</sup>	0.0770 <sup>a</sup>	-0.1431 <sup>a</sup>	0.0488 <sup>a</sup>	-0.0954 <sup>a</sup>
27	Gindex	-0.1209 <sup>a</sup>	-0.1236 <sup>a</sup>	0.0883 <sup>a</sup>	0.0924 <sup>a</sup>	0.1143 <sup>a</sup>	0.0514 <sup>a</sup>	0.1166 <sup>a</sup>	0.0565 <sup>a</sup>	0.0443 <sup>a</sup>	0.0843 <sup>a</sup>	0.0814 <sup>a</sup>	0.0772 <sup>a</sup>	0.0510 <sup>a</sup>	0.0713 <sup>a</sup>	0.0539 <sup>a</sup>	0.0370 <sup>a</sup>

Correlation Coefficients (continued)

No		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
28	Pctdirshr	0.0339 <sup>a</sup>	0.0417 <sup>a</sup>	-0.0708 <sup>a</sup>	-0.0525 <sup>a</sup>	-0.0639 <sup>a</sup>	-0.0628 <sup>a</sup>	-0.0402 <sup>a</sup>	-0.0524 <sup>a</sup>	-0.0586 <sup>a</sup>	-0.0976 <sup>a</sup>	-0.0808 <sup>a</sup>	-0.0747 <sup>a</sup>	-0.0769 <sup>a</sup>	-0.0634 <sup>a</sup>	-0.0640 <sup>a</sup>	0.0226 <sup>b</sup>
29	Pctceown	0.0528 <sup>a</sup>	0.0637 <sup>a</sup>	-0.0780 <sup>a</sup>	-0.0663 <sup>a</sup>	-0.0734 <sup>a</sup>	-0.0668 <sup>a</sup>	-0.0647 <sup>a</sup>	-0.0553 <sup>a</sup>	-0.0612 <sup>a</sup>	-0.0979 <sup>a</sup>	-0.0888 <sup>a</sup>	-0.0763 <sup>a</sup>	-0.0756 <sup>a</sup>	-0.0714 <sup>a</sup>	-0.0679 <sup>a</sup>	0.0179
30	Pctindep	-0.0688 <sup>a</sup>	-0.0606 <sup>a</sup>	0.1666 <sup>a</sup>	0.1678 <sup>a</sup>	0.1602 <sup>a</sup>	0.1399 <sup>a</sup>	0.1596 <sup>a</sup>	0.1435 <sup>a</sup>	0.0945 <sup>a</sup>	0.1749 <sup>a</sup>	0.1646 <sup>a</sup>	0.1082 <sup>a</sup>	0.1690 <sup>a</sup>	0.1149 <sup>a</sup>	0.1509 <sup>a</sup>	-0.0276 <sup>a</sup>
31	Ln(Block)	-0.0038	0.0038	-0.0488 <sup>a</sup>	-0.0288 <sup>a</sup>	-0.0385 <sup>a</sup>	-0.0476 <sup>a</sup>	-0.0175	-0.0324 <sup>a</sup>	-0.0155	0.0324 <sup>a</sup>	0.0339 <sup>a</sup>	-0.0141	0.0729 <sup>a</sup>	-0.0007	0.0662 <sup>a</sup>	-0.0346 <sup>a</sup>
32	Pctinsti	0.0830 <sup>a</sup>	0.0445 <sup>a</sup>	0.0405 <sup>a</sup>	0.0507 <sup>a</sup>	0.0513 <sup>a</sup>	0.0244 <sup>a</sup>	0.0617 <sup>a</sup>	0.0328 <sup>a</sup>	0.0118	0.1161 <sup>a</sup>	0.0829 <sup>a</sup>	0.0244 <sup>a</sup>	0.1699 <sup>a</sup>	0.0316 <sup>a</sup>	0.1139 <sup>a</sup>	-0.0731 <sup>a</sup>
33	Loganal	0.1757 <sup>a</sup>	0.1668 <sup>a</sup>	0.3696 <sup>a</sup>	0.3202 <sup>a</sup>	0.3055 <sup>a</sup>	0.3494 <sup>a</sup>	0.2631 <sup>a</sup>	0.3062 <sup>a</sup>	0.2096 <sup>a</sup>	0.3143 <sup>a</sup>	0.2792 <sup>a</sup>	0.2718 <sup>a</sup>	0.2096 <sup>a</sup>	0.2402 <sup>a</sup>	0.1908 <sup>a</sup>	-0.1321 <sup>a</sup>

Table 2 Bivariate Correlation Coefficients (continued)

No		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
17	Ln(Sale)	1															
18	Ln(Asset)	0.8339 <sup>a</sup>	1														
19	debt	0.1704 <sup>a</sup>	0.2112 <sup>a</sup>	1													
20	Rndr	-0.2825 <sup>a</sup>	-0.2098 <sup>a</sup>	-0.1932 <sup>a</sup>	1												
21	Advr	0.0459 <sup>a</sup>	-0.0316 <sup>a</sup>	-0.0224	0.0251 <sup>a</sup>	1											
22	IndusHHI	-0.0141	-0.0593 <sup>a</sup>	0.0584 <sup>a</sup>	-0.0150	0.0473 <sup>a</sup>	1										
23	Capxr	-0.1101 <sup>a</sup>	-0.0154	0.1852 <sup>a</sup>	0.0328 <sup>a</sup>	-0.0422 <sup>a</sup>	0.0642 <sup>a</sup>	1									
24	Salegrw	0.0094	0.0125	-0.0056	0.0566 <sup>a</sup>	-0.0129	-0.0148	0.0828 <sup>a</sup>	1								
25	Divr	0.0396 <sup>a</sup>	0.0378 <sup>a</sup>	0.0391 <sup>a</sup>	-0.0262 <sup>a</sup>	0.0379 <sup>a</sup>	0.0515 <sup>a</sup>	-0.0105	-0.0155	1							
26	Stdret	-0.3469 <sup>a</sup>	-0.3545 <sup>a</sup>	-0.1605 <sup>a</sup>	0.4433 <sup>a</sup>	0.0409 <sup>a</sup>	0.0029	0.0384 <sup>a</sup>	0.0719 <sup>a</sup>	-0.0593 <sup>a</sup>	1						
27	Gindex	0.1871 <sup>a</sup>	0.1669 <sup>a</sup>	0.0803 <sup>a</sup>	-0.1264 <sup>a</sup>	-0.0578 <sup>a</sup>	-0.0411 <sup>a</sup>	-0.0443 <sup>a</sup>	-0.0782 <sup>a</sup>	0.0329 <sup>a</sup>	-0.2160 <sup>a</sup>	1					
28	Pctdirshr	-0.1041 <sup>a</sup>	-0.1156 <sup>a</sup>	0.0172	-0.0355 <sup>a</sup>	0.0797 <sup>a</sup>	0.0556 <sup>a</sup>	-0.0086	0.0094	-0.0110	0.0859 <sup>a</sup>	-0.1585 <sup>a</sup>	1				
29	Pctceown	-0.1425 <sup>a</sup>	-0.1546 <sup>a</sup>	-0.0485 <sup>a</sup>	-0.0051	0.0757 <sup>a</sup>	0.0410 <sup>a</sup>	-0.0034	0.0157	-0.0158	0.1162 <sup>a</sup>	-0.1554 <sup>a</sup>	0.4015 <sup>a</sup>	1			
30	Pctindep	0.1620 <sup>a</sup>	0.1845 <sup>a</sup>	0.0149	0.0274 <sup>a</sup>	-0.0559 <sup>a</sup>	-0.0629 <sup>a</sup>	-0.0392 <sup>a</sup>	-0.0803 <sup>a</sup>	0.0323 <sup>a</sup>	-0.0822 <sup>a</sup>	0.2699 <sup>a</sup>	-0.2368 <sup>a</sup>	-0.2036 <sup>a</sup>	1		
31	Ln(Block)	-0.0235 <sup>b</sup>	-0.0884 <sup>a</sup>	0.0137	0.0499 <sup>a</sup>	-0.0164	0.0278 <sup>a</sup>	-0.0003	0.0037	-0.0195 <sup>b</sup>	0.1535 <sup>a</sup>	-0.0065	-0.0309 <sup>a</sup>	0.0247 <sup>a</sup>	0.0306 <sup>a</sup>	1	
32	Pctinsti	0.1092 <sup>a</sup>	0.0282 <sup>a</sup>	-0.0322 <sup>a</sup>	0.0354 <sup>a</sup>	-0.0213	0.0481 <sup>a</sup>	0.0018	0.0451 <sup>a</sup>	-0.0182	0.1193 <sup>a</sup>	0.0551 <sup>a</sup>	-0.1546 <sup>a</sup>	-0.0905 <sup>a</sup>	0.1809 <sup>a</sup>	0.5081 <sup>a</sup>	1
33	Loganal	0.5767 <sup>a</sup>	0.5942 <sup>a</sup>	0.0110	0.0568 <sup>a</sup>	0.0411 <sup>a</sup>	-0.0821 <sup>a</sup>	0.1330 <sup>a</sup>	0.1107 <sup>a</sup>	0.0145	-0.0762 <sup>a</sup>	0.0836 <sup>a</sup>	-0.1444 <sup>a</sup>	-0.1478 <sup>a</sup>	0.1215 <sup>a</sup>	-0.0118	0.1753 <sup>a</sup>

**Table 3 Three-Stage Least Square Regressions of CFP, CSP, and Social Pressures with the 3-equation system**

This table shows the results from the three stage estimation method in which the dependent variables are CFP measured by Tobin's Q, CSP measured by (C<sub>1</sub>+C<sub>2</sub>), and (S<sub>u</sub>+S<sub>r</sub>) as social pressures from public and private politics. The data is from the Kinder, Lydenberg, and Domini's (KLD) Socrates database. The Full Sample includes all firms and Domini 400 Firms includes only firms in Domini 400 Index. T-statistics are adjusted for robust and clustered (by firm) standard errors and reported in parentheses. F-F industry dummy is based on Fama and French (1997) industry classification. See Appendix C for variable definitions. \*\* and \* statistically significant at the 1% and 5% levels, respectively.

	Full Sample			Domini 400 Firms		
	Tobin Q	(C1+C2)	(Su+Sr)	Tobin Q	(C1+C2)	(Su+Sr)
Lg(C1+C2)			0.11765 (15.00)**			0.06430 (5.14)**
(C1+C2)	1.53225 (9.30)**			0.89592 (3.75)**		
Emp	0.14513 (1.20)			0.12590 (0.84)		
Lg(TobinQ)		0.00346 (6.44)**	-0.00195 (4.31)**		0.00384 (2.77)**	-0.00249 (2.72)**
Dummy KLD	-0.21864 (4.46)**	-0.11301 (38.51)**	-0.08874 (34.72)**	-0.06954 (0.60)	-0.17928 (16.33)**	-0.04910 (6.53)**
Lg(Su+Sr)		0.17677 (16.60)**			0.14055 (4.83)**	
(Su+Sr)	-0.69589 (3.19)**			-0.97068 (2.14)*		
KLD Exc			0.09759 (12.47)**			-0.00089 (0.03)
Ddomini400	-0.35789 (5.21)**	0.03591 (7.21)**	-0.04209 (9.81)**			
Ln(Sale)	0.14572 (4.66)**	0.02447 (10.79)**	0.00677 (3.48)**	0.23390 (3.57)**	0.02909 (4.26)**	0.01071 (2.37)*
Ln(Asset)	-0.51783 (17.29)**	0.01198 (5.56)**	0.01974 (10.74)**	-0.46880 (7.50)**	0.02814 (4.45)**	0.02476 (5.86)**
Debtr	-0.45586 (5.39)**			-1.11946 (5.54)**		
Rndr	1.96809 (7.83)**	0.04277 (2.37)*	0.05258 (3.32)**	2.51228 (3.24)**	0.05655 (0.71)	0.09708 (1.79)
Advr	3.48697 (4.94)**	0.19965 (3.85)**	-0.10579 (2.36)*	6.93755 (5.23)**	0.27349 (1.94)	0.00005 (0.00)
Rndumy	-0.32637 (6.60)**	-0.02791 (7.71)**	0.00471 (1.50)	-0.13458 (1.20)	-0.08022 (6.91)**	0.01763 (2.24)*
Advdumy	0.10717 (2.48)*	-0.00472 (1.49)	-0.00088 (0.32)	0.51216 (6.23)**	-0.00124 (0.14)	0.01013 (1.72)
IndusHHI	0.49807 (1.32)	-0.02278 (0.82)	0.06414 (2.69)**	-0.27913 (0.24)	0.01136 (0.09)	-0.00705 (0.09)
Capxr	0.34773 (1.92)	0.03962 (2.99)**	-0.05376 (4.74)**	0.53044 (1.26)	-0.09559 (2.18)*	-0.17066 (5.79)**
Salegrw	0.85917 (17.69)**	-0.02303 (6.34)**	-0.01332 (4.24)**	0.81523 (7.71)**	-0.03129 (2.78)**	-0.01041 (1.37)
Divr	0.11585 (2.92)**			0.18569 (1.37)		

Stdret	-0.02463 (7.80)**		0.00133 (6.77)**	-0.04947 (5.29)**		0.00332 (5.19)**
Gindex	-0.03435 (6.02)**	-0.00216 (5.21)**	-0.00213 (5.91)**	-0.04033 (3.45)**	-0.00408 (3.34)**	0.00093 (1.12)
Pctdirshr	0.10590 (1.36)	-0.00197 (0.34)	-0.00103 (0.21)	0.03752 (0.37)	0.01746 (1.63)	0.00103 (0.14)
Pctceown	0.00894 (2.95)**	0.00058 (2.60)**	0.00016 (0.82)	0.00613 (0.84)	0.00059 (0.77)	0.00039 (0.76)
Pctindep	-0.36813 (4.15)**	0.03664 (5.63)**	0.00185 (0.33)	-0.48039 (2.59)**	0.06188 (3.15)**	-0.00884 (0.67)
Ln(Block)	-0.01866 (6.04)**	-0.00065 (2.88)**		-0.02000 (3.77)**	-0.00068 (1.23)	
Pctinsti	0.00471 (4.72)**	-0.00027 (3.77)**		0.00537 (2.33)*	-0.00002 (0.09)	
Loganal	0.78975 (25.50)**	-0.00397 (1.74)		0.83742 (11.98)**	-0.02108 (2.94)**	
Intercept	3.12226 (2.41)*	-0.11414 (1.20)	-0.17258 (2.09)*	1.99014 (2.09)*	0.03128 (0.32)	-0.21877 (3.24)*
F-F industry dummy	Yes	Yes	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,791	11,791	11,791	2,831	2,831	2,831
Adjusted R <sup>2</sup>	0.2984	0.4785	0.4757	0.3939	0.3890	0.3580
Number of Firms	2,481	2,481	2,481	507	507	507

**Table 4A. Three-Stage Least Square Regressions of CFP, CSP, and Social Pressures with the 5-equation system**

This table shows the results from the three stage estimation method in which the dependent variables are CFP measured by Tobin's Q, CSP measured by  $C_1$  and  $C_2$ , and social pressures from public ( $S_u$ ) and private ( $S_r$ ) politics. The data is from the Kinder, Lydenberg, and Domini's (KLD) Socrates database. T-statistics are adjusted for robust and clustered (by firm) standard errors and reported in parentheses. F-F industry dummy is based on Fama and French (1997) industry classification. See Appendix C for variable definitions. \*\* and \* statistically significant at the 1% and 5% levels, respectively.

	Tobin Q	Full Sample			
		$C_1$	$C_2$	$S_u$	$S_r$
Lg( $C_1$ )				0.04897 (3.56)**	0.04127 (4.04)**
Lg( $C_2$ )				0.05471 (5.03)**	0.08316 (10.29)**
$C_1$	-0.17941 (0.48)				
$C_2$	2.64195 (9.65)**				
Emp	0.16446 (1.36)				
Lg(TobinQ)		0.00080 (2.80)**	0.00260 (7.19)**	-0.00118 (3.26)**	-0.00078 (2.88)**
KLD Dummy	-0.24194 (4.86)**	-0.05619 (36.16)**	-0.05713 (28.91)**	-0.04578 (22.22)**	-0.04328 (28.16)**
Lg( $S_u$ )		0.05544 (7.84)**	0.09103 (10.13)**		
Lg( $S_r$ )		0.09461 (8.96)**	0.13988 (10.42)**		
$S_u$	-0.96456 (3.54)**				
$S_r$	-0.25788 (0.66)				
KLD Exc				0.08211 (13.02)**	0.01526 (3.26)**
Domini400	-0.32821 (4.75)**	0.02690 (10.18)**	0.00772 (2.30)*	-0.03470 (10.04)**	-0.00691 (2.68)**
Ln(Sale)	0.15105 (4.83)**	0.01123 (9.35)**	0.01330 (8.71)**	0.00609 (3.90)**	0.00069 (0.59)
Ln(Asset)	-0.52475 (17.51)**	0.00200 (1.75)	0.00981 (6.77)**	0.01256 (8.50)**	0.00707 (6.42)**
Debtr	-0.45428 (5.37)**				
Rndr	1.90463 (7.57)**	0.00034 (0.04)	0.04010 (3.30)**	0.00752 (0.59)	0.04453 (4.68)**
Advr	3.53722 (5.01)**	0.09603 (3.49)**	0.10364 (2.97)**	-0.05560 (1.54)	-0.04979 (1.85)
Rndumy	-0.33946 (6.86)**	-0.01573 (8.21)**	-0.01213 (4.97)**	0.00233 (0.93)	0.00221 (1.18)
Advdumy	0.11834	0.00187	-0.00653	-0.00009	-0.00060

	(2.74)**	(1.11)	(3.06)**	(0.04)	(0.37)
IndusHHI	0.45448	-0.01779	-0.00948	0.00425	0.06006
	(1.21)	(1.21)	(0.51)	(0.22)	(4.20)**
Capxr	0.37456	0.02506	0.01465	-0.02962	-0.02381
	(2.07)*	(3.58)**	(1.64)	(3.25)**	(3.50)**
Salegrw	0.85516	-0.00773	-0.01547	-0.01737	0.00414
	(17.56)**	(4.02)**	(6.32)**	(6.88)**	(2.20)*
Divr	0.11680				
	(2.95)**				
Stdret	-0.02499			0.00056	0.00076
	(7.91)**			(3.53)**	(6.51)**
Gindex	-0.03198	-0.00014	-0.00201	-0.00087	-0.00123
	(5.59)**	(0.62)	(7.18)**	(3.00)**	(5.67)**
Pctdirshr	0.11570	0.00208	-0.00427	0.00137	-0.00216
	(1.48)	(0.69)	(1.11)	(0.35)	(0.73)
Pctceown	0.00912	0.00026	0.00032	0.00025	-0.00010
	(3.01)**	(2.20)*	(2.13)*	(1.63)	(0.85)
Pctindep	-0.35559	0.01742	0.01988	0.00940	-0.00752
	(4.01)**	(5.05)**	(4.53)**	(2.09)*	(2.25)*
Ln(Block)	-0.01905	-0.00038	-0.00026		
	(6.16)**	(3.18)**	(1.69)		
Pctinsti	0.00487	-0.00006	-0.00022		
	(4.88)**	(1.53)	(4.41)**		
Loganal	0.78922	-0.00103	-0.00279		
	(25.46)**	(0.85)	(1.82)		
Intercept	3.23762	-0.00348	-0.10330	-0.09325	-0.07830
	(2.50)*	(0.07)	(1.61)	(1.41)	(1.58)
F-F Industry dummy	Yes	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	Yes	Yes	Yes
Adjusted R <sup>2</sup>	0.2973	0.3910	0.4038	0.3257	0.4414
Observations	11,791	11,791	11,791	11,791	11,791
Number of firms	2,481	2,481	2,481	2,481	2,481

**Table 4B. Three-Stage Least Square Regressions of CFP, CSP, and Social Pressures with 5-equations system**

This table shows the results from the three stage estimation method in which the dependent variables are CFP measured by Tobin's Q, CSP measured by  $C_1$  and  $C_2$ , and social pressures from public ( $S_u$ ) and private ( $S_r$ ) politics. The data is from the Kinder, Lydenberg, and Domini's (KLD) Socrates database. T-statistics are adjusted for robust and clustered (by firm) standard errors and reported in parentheses. F-F industry dummy is based on Fama and French (1997) industry classification. See Appendix C for variable definitions. \*\* and \* statistically significant at the 1% and 5% levels, respectively.

Full Sample Without the firms in Domini 400 but not S&P or Russell					
	Tobin Q	$C_1$	$C_2$	$S_u$	$S_r$
Lg( $C_1$ )				0.05741 (3.87)**	0.05267 (4.84)**
Lg( $C_2$ )				0.05884 (5.13)**	0.08584 (10.21)**
$C_1$	-0.64901 (1.63)				
$C_2$	3.00026 (10.38)**				
Emp	0.10427 (0.79)				
Lg(TobinQ)		0.00065 (2.33)*	0.00267 (7.35)**	-0.00125 (3.35)**	-0.00086 (3.13)**
KLD Dummy	-0.26617 (5.14)**	-0.05284 (33.78)**	-0.05527 (27.22)**	-0.04757 (22.08)**	-0.04367 (27.52)**
Lg( $S_u$ )		0.05619 (8.07)**	0.09357 (10.35)**		
Lg( $S_r$ )		0.10384 (9.87)**	0.14047 (10.29)**		
$S_u$	-1.05083 (3.76)**				
$S_r$	-0.37945 (0.93)				
KLD Exc				0.07976 (12.35)**	0.01382 (2.92)**
Domini400	-	-	-	-	-
Ln(Sale)	0.15863 (4.86)**	0.01089 (9.06)**	0.01350 (8.65)**	0.00513 (3.15)**	0.00141 (1.18)
Ln(Asset)	-0.53583 (17.14)**	0.00328 (2.88)**	0.01078 (7.28)**	0.01298 (8.42)**	0.00621 (5.47)**
Debtr	-0.43447 (4.97)**				
Rndr	1.85449 (7.19)**	0.00325 (0.35)	0.04354 (3.57)**	0.00291 (0.22)	0.04359 (4.53)**
Advr	3.68506 (4.93)**	0.07471 (2.68)**	0.13036 (3.60)**	-0.06459 (1.69)	-0.04034 (1.44)
Rndumy	-0.35311 (6.86)**	-0.01372 (7.15)**	-0.01079 (4.33)**	0.00132 (0.50)	0.00158 (0.82)
Advdumy	0.10691	0.00111	-0.00604	-0.00012	-0.00033

	(2.36)*	(0.66)	(2.76)**	(0.05)	(0.20)
IndusHHI	0.47438	-0.01891	-0.00691	0.01067	0.06024
	(1.23)	(1.31)	(0.37)	(0.54)	(4.16)**
Capxr	0.33177	0.02435	0.01886	-0.03354	-0.02079
	(1.76)	(3.47)**	(2.07)*	(3.53)**	(2.97)**
Salegrw	0.85428	-0.00841	-0.01560	-0.01729	0.00435
	(17.04)**	(4.42)**	(6.32)**	(6.65)**	(2.27)*
Divr	0.11467				
	(2.85)**				
Stdret	-0.02465			0.00059	0.00080
	(7.56)**			(3.60)**	(6.67)**
Gindex	-0.03268	-0.00030	-0.00187	-0.00096	-0.00131
	(5.46)**	(1.38)	(6.52)**	(3.15)**	(5.85)**
Pctdirshr	0.11398	0.00129	-0.00520	0.00228	-0.00168
	(1.38)	(0.42)	(1.30)	(0.54)	(0.55)
Pctceown	0.01071	0.00029	0.00030	0.00028	-0.00013
	(3.33)**	(2.44)*	(1.91)	(1.72)	(1.07)
Pctindep	-0.34907	0.01698	0.01755	0.01056	-0.00722
	(3.75)**	(4.90)**	(3.90)**	(2.24)*	(2.08)*
Ln(Block)	-0.02001	-0.00038	-0.00031		
	(6.22)**	(3.21)**	(2.03)*		
Pctinsti	0.00484	-0.00004	-0.00020		
	(4.64)**	(1.10)	(4.02)**		
Loganal	0.80852	-0.00082	-0.00436		
	(24.95)**	(0.68)	(2.77)**		
Intercept	3.25416	-0.01085	-0.11369	-0.09838	-0.07796
	(2.46)*	(0.22)	(1.77)	(1.46)	(1.57)
F-F Industry dummy	Yes	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	Yes	Yes	Yes
Adjusted R <sup>2</sup>	0.2973	0.3990	0.4183	0.3309	0.4528
Observations	11,119	11,119	11,119	11,119	11,119
Number of firms	2,439	2,439	2,439	2,439	2,439



**Table 5. Fama-French 47 Industries Specific and Year Dummies from three-stage least square with 3-equation model**

	Full Sample			Full Sample without firms in Domini 400 but not in S&P or Russell		
	Tobin Q	(C <sub>1</sub> +C <sub>2</sub> )	(S <sub>u</sub> +S <sub>r</sub> )	Tobin Q	(C <sub>1</sub> +C <sub>2</sub> )	(S <sub>u</sub> +S <sub>r</sub> )
Food	-0.29346 (0.66)	0.01635 (0.50)	0.04945 (1.75)	-0.30072 (0.66)	0.00735 (0.23)	0.05471 (1.91)
Soda	-0.86024 (1.83)	-0.01709 (0.49)	-0.01859 (0.62)	-0.86528 (1.81)	-0.01983 (0.58)	-0.01633 (0.54)
Beer	0.53611 (1.16)	0.08798 (2.58)**	-0.05566 (1.89)	0.49564 (1.05)	0.08529 (2.52)*	-0.05270 (1.77)
Smoke	0.84116 (1.57)	-0.02717 (0.70)	0.00669 (0.20)	0.83659 (1.54)	-0.02888 (0.75)	0.00953 (0.28)
Toys	-1.22554 (2.74)**	0.08331 (2.53)*	0.04154 (1.46)	-1.20473 (2.62)**	0.08490 (2.57)*	0.05270 (1.82)
Fun	-0.77251 (1.83)	0.03644 (1.17)	0.00461 (0.17)	-0.76926 (1.79)	0.03459 (1.12)	0.00906 (0.33)
Books	-0.50510 (1.12)	0.08044 (2.43)*	0.00730 (0.26)	-0.54664 (1.18)	0.08916 (2.69)**	0.00305 (0.10)
Hshld	-0.61956 (1.44)	0.09862 (3.11)**	0.01288 (0.47)	-0.63197 (1.43)	0.12260 (3.87)**	0.00894 (0.32)
Clths	-0.67574 (1.52)	0.06486 (1.99)*	0.05155 (1.83)	-0.77912 (1.72)	0.06680 (2.05)*	0.05361 (1.87)
Hlth	-0.55420 (1.26)	0.01058 (0.33)	0.03929 (1.41)	-0.54147 (1.21)	0.00976 (0.30)	0.04454 (1.58)
Medeq	-0.25537 (0.58)	0.03862 (1.19)	0.03900 (1.39)	-0.21310 (0.47)	0.04562 (1.41)	0.04202 (1.48)
Drugs	0.46462 (1.06)	0.05869 (1.82)	0.09523 (3.42)**	0.50284 (1.13)	0.06103 (1.91)	0.09968 (3.54)**
Chems	-0.87069 (1.98)*	0.01048 (0.32)	0.09291 (3.33)**	-0.81347 (1.81)	0.01219 (0.38)	0.10256 (3.63)**
Rubbr	-0.75529 (1.71)	0.00735 (0.23)	0.03556 (1.26)	-0.74874 (1.66)	0.00906 (0.28)	0.03898 (1.37)
Txtls	-1.00325 (2.24)*	0.02663 (0.81)	0.04871 (1.71)	-1.01608 (2.21)*	0.03481 (1.05)	0.04175 (1.44)
Bldmt	-0.68080 (1.54)	-0.00065 (0.02)	0.05951 (2.12)*	-0.64568 (1.43)	0.00256 (0.08)	0.06416 (2.25)*
Cnstr	-0.96144 (2.17)*	-0.00083 (0.03)	0.02660 (0.94)	-0.94714 (2.09)*	0.00048 (0.01)	0.03159 (1.11)
Steel	-1.10034 (2.52)*	0.00317 (0.10)	0.07190 (2.59)**	-1.07594 (2.42)*	0.00398 (0.12)	0.07626 (2.71)**
Fabpr	-0.96272 (2.10)*	0.04962 (1.47)	0.02907 (1.00)	-0.94732 (2.03)*	0.04940 (1.48)	0.03153 (1.07)
Mach	-0.81312 (1.83)	0.00884 (0.27)	0.04655 (1.65)	-0.83090 (1.83)	0.01041 (0.32)	0.04804 (1.68)
Elceq	-0.75470 (1.75)	0.00961 (0.30)	0.05229 (1.90)	-0.79808 (1.80)	0.01944 (0.61)	0.06176 (2.20)*
Misc	-0.62422 (1.45)	0.03813 (1.20)	0.03176 (1.16)	-0.62441 (1.43)	0.03554 (1.13)	0.03213 (1.16)
Autos	-1.04939	0.00426	0.07963	-1.02337	-0.00024	0.08608

	(2.54)*	(0.14)	(3.04)**	(2.43)*	(0.01)	(3.24)**
Aero	-1.03764	0.02646	0.07948	-1.00743	0.02641	0.08251
	(2.34)*	(0.81)	(2.81)**	(2.23)*	(0.82)	(2.89)**
Ships	-1.20384	-0.01879	0.01026	-1.19775	-0.01893	0.01275
	(2.66)**	(0.56)	(0.36)	(2.61)**	(0.57)	(0.44)
Guns	-1.32505	0.03302	0.05231	-1.31920	0.03198	0.05247
	(2.88)**	(0.98)	(1.79)	(2.83)**	(0.95)	(1.78)
Gold	-1.15848	0.05206	0.06420	-1.14649	0.05244	0.06630
	(2.50)*	(1.53)	(2.18)*	(2.43)*	(1.55)	(2.23)*
Mines	-0.70113	0.01563	0.02764	-0.63503	0.01166	0.02548
	(1.54)	(0.46)	(0.95)	(1.36)	(0.35)	(0.86)
Coal	-0.90912	-0.07503	0.16857	-0.87598	-0.07739	0.17246
	(1.32)	(1.49)	(3.87)**	(1.26)	(1.55)	(3.92)**
Enrgy	-1.18284	0.01398	0.10749	-1.15170	0.01277	0.11248
	(2.80)**	(0.45)	(4.01)**	(2.68)**	(0.41)	(4.15)**
Util	-0.75783	0.01029	0.06167	-0.71058	0.00456	0.07052
	(1.68)	(0.31)	(2.15)*	(1.54)	(0.14)	(2.43)*
Telcm	-0.30354	0.03488	0.03874	-0.30236	0.03276	0.04521
	(0.69)	(1.08)	(1.39)	(0.67)	(1.02)	(1.60)
Persv	-0.27678	0.03444	0.03832	-0.37599	0.03427	0.04039
	(0.62)	(1.05)	(1.35)	(0.82)	(1.04)	(1.39)
Bussv	-0.03815	0.03773	0.03012	-0.02001	0.03968	0.03408
	(0.09)	(1.19)	(1.10)	(0.05)	(1.26)	(1.23)
Comps	-0.26420	0.06072	0.00879	-0.24972	0.06334	0.01104
	(0.61)	(1.89)	(0.32)	(0.56)	(1.99)*	(0.39)
Chips	-0.28363	0.02235	0.04398	-0.28831	0.02600	0.04905
	(0.65)	(0.69)	(1.58)	(0.65)	(0.81)	(1.74)
Labeq	-0.41678	0.04440	0.03903	-0.47727	0.04458	0.04113
	(0.94)	(1.36)	(1.39)	(1.06)	(1.38)	(1.44)
Paper	-0.76251	0.02807	0.05047	-0.71500	0.02209	0.05782
	(1.72)	(0.86)	(1.79)	(1.58)	(0.68)	(2.03)*
Boxes	-0.94479	0.00195	0.00676	-0.88750	-0.00611	0.01654
	(2.10)*	(0.06)	(0.24)	(1.92)	(0.18)	(0.57)
Trans	-0.72236	-0.00024	0.08988	-0.69194	0.00425	0.09258
	(1.63)	(0.01)	(3.19)**	(1.53)	(0.13)	(3.24)**
Whlsl	-0.78302	0.00374	0.02494	-0.78171	0.00565	0.02825
	(1.77)	(0.11)	(0.89)	(1.74)	(0.17)	(0.99)
Rtail	-0.57822	0.02442	0.03533	-0.57970	0.01981	0.04097
	(1.31)	(0.75)	(1.26)	(1.29)	(0.61)	(1.44)
Meals	-0.77578	0.04754	0.04790	-0.77676	0.05305	0.04675
	(1.76)	(1.47)	(1.71)	(1.73)	(1.64)	(1.65)
Banks	-0.64259	0.05408	-0.02707	-0.60440	0.04684	-0.02045
	(1.43)	(1.64)	(0.95)	(1.32)	(1.43)	(0.71)
Insur	-0.89005	0.01633	-0.00735	-0.85673	0.01219	-0.00132
	(1.99)*	(0.50)	(0.26)	(1.88)	(0.37)	(0.05)
Rlest	0.09836	0.01532	-0.00030	0.11094	0.01327	-0.00104
	(0.14)	(0.29)	(0.01)	(0.15)	(0.25)	(0.02)
Fin	0.25120	0.02252	0.02974	0.30380	0.01660	0.03724
	(0.59)	(0.72)	(1.09)	(0.70)	(0.53)	(1.35)
Y1993	-0.00233	-0.00033	-0.00050	-0.00458	-0.00040	-0.00039

	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)
Y1994	0.17030	0.03978	0.03135	0.12748	0.04790	0.02721
	(0.09)	(0.29)	(0.26)	(0.07)	(0.35)	(0.23)
Y1995	0.33377	0.05243	0.01036	0.30600	0.05846	0.00755
	(0.22)	(0.47)	(0.11)	(0.20)	(0.53)	(0.08)
Y1996	0.72300	0.01315	0.04340	0.74372	0.01395	0.05099
	(0.64)	(0.16)	(0.61)	(0.65)	(0.17)	(0.70)
Y1997	0.85017	0.00324	0.03776	0.86802	0.00402	0.04592
	(0.75)	(0.04)	(0.53)	(0.76)	(0.05)	(0.63)
Y1998	0.98187	0.00005	0.03779	0.99830	-0.00003	0.04645
	(0.87)	(0.00)	(0.53)	(0.87)	(0.00)	(0.64)
Y1999	1.28678	-0.00688	0.03259	1.33904	-0.00663	0.03732
	(1.14)	(0.08)	(0.45)	(1.17)	(0.08)	(0.52)
Y2000	1.04991	-0.00987	0.02943	1.06620	-0.00772	0.03475
	(0.93)	(0.12)	(0.41)	(0.93)	(0.09)	(0.48)
Y2001	1.11705	-0.00300	0.03340	1.15080	-0.00256	0.03887
	(0.99)	(0.04)	(0.47)	(1.00)	(0.03)	(0.54)
Y2002	0.93951	-0.00894	0.05119	0.96165	-0.00863	0.05685
	(0.83)	(0.11)	(0.71)	(0.84)	(0.10)	(0.79)
Y2003	0.94024	-0.01435	0.04294	0.96646	-0.01254	0.04770
	(0.83)	(0.17)	(0.60)	(0.84)	(0.15)	(0.66)
Y2004	0.96140	-0.03501	0.07378	0.99290	-0.03279	0.07830
	(0.85)	(0.42)	(1.03)	(0.87)	(0.40)	(1.08)

---

**Excluded industry dummy is Agriculture and excluded year dummy is 1992.**

**Figure 1**

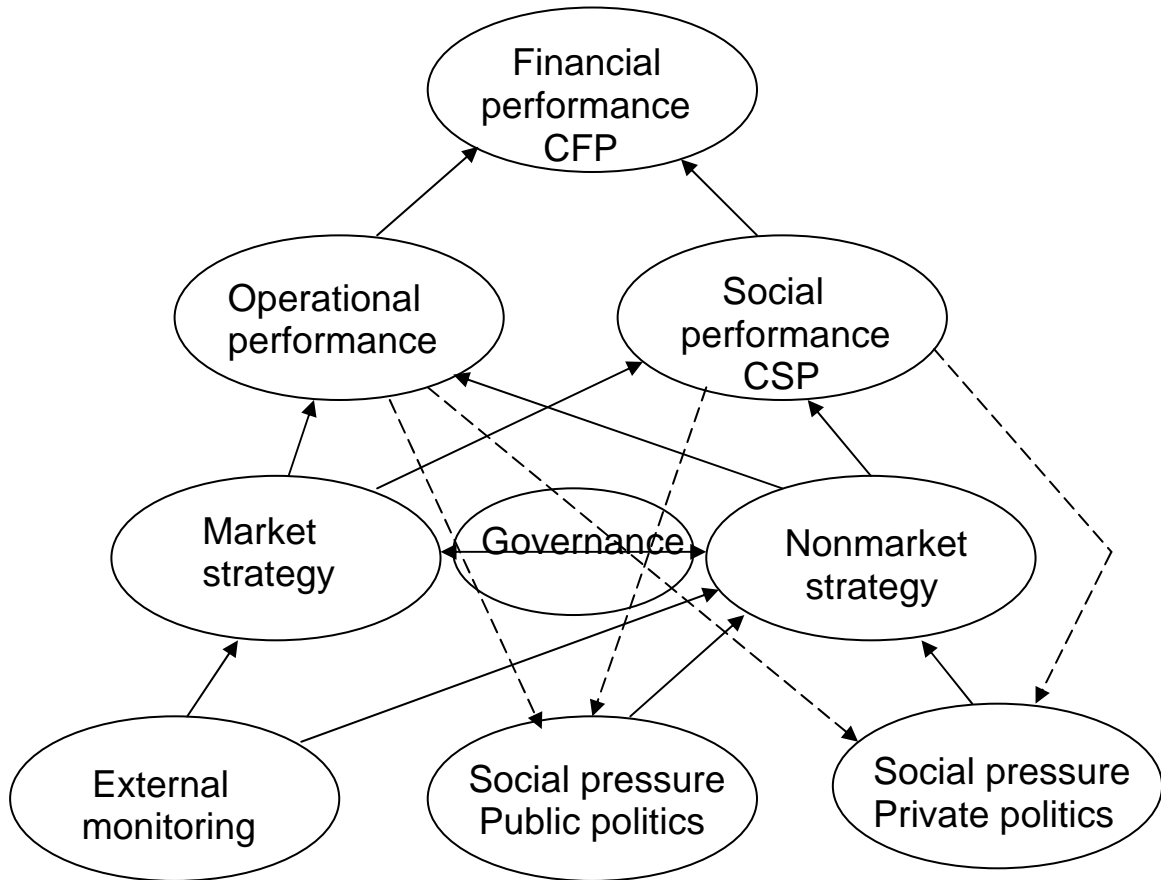


Figure 1 shows the framework of corporate financial performance (CFP), corporate social performance (CSP), and social pressures from public and private politics influenced by corporate governance and external monitoring, and both market and nonmarket strategy.