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Signaling Positive Corporate Social Performance

An Event Study of Family-Friendly Firms

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A firm's social performance can shape the impressions of key stakeholders, such as employees, customers, suppliers, and investors, that influence subsequent decision making and relationships to the firm. To test this notion, we examine how a firm's public recognition for exemplary social performance can serve as a positive signal of the firm's business performance to shareholders. We conduct an event study of firms named to *Working Mother* magazine's list of "Most Family-Friendly Companies" for the first time between 1989 and 1994. We find statistically significant, positive, abnormal returns for such firms, in particular for firms whose shares are traded on the NASDAQ stock exchange.

For the past two decades, a number of scholars have studied the relationship between a firm's social performance activities and its financial performance. As several scholars have shown (Griffin & Mahon, 1997; Ullman, 1985; Wood & Jones, 1995), empirical attempts to capture this relationship have produced complicated and inconclusive results. The challenge in demonstrating this relationship is understandable. Corporate social performance (CSP) activities such as community involvement, philanthropy, and providing exemplary benefits to employees do not always have direct and tangible ties to firm operations, particularly when performance outcomes are market-based. In addition, Harrison and Freeman (1999) argue that it may be unreasonable to expect individual investors who are evaluat-

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ing a firm's social performance activities to make sense of the true impact of social performance because humans are limited in their ability to absorb, process, and interpret all available information. Therefore, the impact of socially responsible activities on financial performance may be difficult to detect, particularly by individuals who are outside of the day-to-day operations and decision-making activities of the firm.

However complex, CSP can provide important information about the particular values embedded within the firm (see Agle & Caldwell, 1999, for an extensive review of values and CSP). For example, firms that actively comply with environmental regulations signal that they have some degree of concern for the natural environment. Firms that provide their employees with exemplary benefits packages show that they are willing to devote resources to the development and welfare of their employees. Similarly, firms that support community service activities signal that they are in some manner committed to community concerns. Thus, socially responsible activities of the organization can be a strong signal of what the firm values and believes to be deserving of the attention, resources, and efforts of the organization.

If CSP is a signal of what is important to a firm, then it is reasonable to conclude that these signals could be used by individuals who are seeking to form impressions about the firm, its values, direction, and overall worth. These individual evaluations of firms are relevant in a variety of settings and circumstances. Individuals make decisions such as whether they want to work for a firm, whether they will purchase a firm's goods and services, and whether they want to invest in a firm. For each of these decisions, information about these various dimensions of a firm can often be variable and incomplete—leaving an individual with unclear expectations or perceptions of the firm's capabilities. As the literature on cognitive processes in decision making shows, individuals are likely to fill in incomplete information using various heuristics and also simplify their evaluative decisions through the use of uncomplicated decision tools (Duhaine, 1985; Schwenk, 1985; Tversky & Kahneman, 1974). A CSP signal has the potential to serve as an uncomplicated decision tool for individuals making decisions about a firm. For example, an individual deciding whether or not to work for a firm could focus on what he or she knows with regard to how the firm has treated its employees in the past (Johnson & Greening, 1999; Turban & Greening, 1997). A potential customer deciding whether or not to purchase a firm's goods can focus on what he or she knows about the firm's product liability record (Porter & van der Linde, 1995). And an investor deciding whether or not to invest in a firm can focus on what he or she knows regarding the firm's recent expensive product recall crisis (Frooman, 1997).

We argue that firms need to pay attention to what they signal about their values, beliefs, and intentions in the environment because their key stakeholders are likely to use these signals as heuristics when making evaluations of the firm in decision making. We test this idea using an event study of CSP activities—the announcement that a firm has made *Working Mother* magazine's list of the top family-friendly companies for the first time between 1988 and 1994. We argue that the act of making the magazine's list for the first time is a salient signal of a firm's commitment to the welfare of its employees, that is, a signal that a firm is family-friendly to its employees. Although it is clear that this type of recognition should affect the attractiveness of the firm as an employer (Turban & Greening, 1997), we argue that the public acknowledgment of the firm's CSP enhances its overall reputation and image (Dutton & Dukerich, 1991), making it more attractive and salient to potential investors. Thus, to individuals evaluating the firm, the family-friendly label is an uncomplicated decision tool that one can use to evaluate the firm by focusing on its positive treatment of its employees. As Kotter and Heskett (1992) argued in their study of corporate culture and performance, an organization's values are an important component of its culture. Because an organization's culture can affect its performance, an organization's values can have a great impact on an organization's operations and ultimately, its success or failure. For investors, public recognition for providing exemplary employee benefits is a positive signal of future business performance as well as a sign that a firm is taking steps to maintain an exemplary workforce, an indication of future productivity (Chauvin & Guthrie, 1994).

SIGNALING CSP

Signaling is a key component of one of the main conceptual streams in the business and society literature—Tom Jones's instrumental stakeholder theory (see Jones & Wicks, 1999). The basic premise of instrumental stakeholder theory is that "if firms contract with their stakeholders on the basis of mutual trust and cooperation, they will have a competitive advantage over firms who do not" (Jones, 1995, p. 404). As Jones observed, "Firms do not signal their trustworthiness except by avoiding signals of opportunism" (p. 404). In essence, therefore, trust is ultimately a firm's reputation for trustworthy behavior, a reputation that is shaped via the firm's actions toward stakeholders. By conceptualizing trust as a firm's reputation, Jones is essentially establishing signaling as the mechanism through which CSP can enhance firm performance. A firm's ability to signal its reputation for nonopportunistic behavior (through positive

actions toward stakeholders) can lead to business performance gains. More recently, Turban and Greening (1997) and Johnson and Greening (1999) offered a signaling argument to support their idea that a firm's relationships with a variety of important stakeholders, including employees, can affect the firm's performance.

More formally, signaling theory (Rynes, 1991) suggests that key attributes of the firm provide information that shapes the impressions that individuals form of the organization. This theory is often the basis of other research that examines firm reputation or image and its impact on individual behaviors, attitudes, and decision making (Dutton & Dukerich, 1991; Dutton, Dukerich, & Harquail, 1994). Together with principles outlined by social identity theory (Ashforth & Mael, 1989), these theoretical paradigms support the notion that people are attracted to organizations they view as having values and norms they perceive as important and are attracted to firms that have a favorable image or reputation that casts the firm's current conditions and future potential in a positive light. Similarly, the literature on organizational identity and identification (Ashforth & Mael, 1989, 1996; Dutton & Dukerich, 1991) suggests that information that highlights an organization's distinctive capabilities, such as information that reveals a firm's innovative employee or customer relations practices, is an important means of conveying an organization's competencies (Albert, Ashforth, & Dutton, 2000). CSP, therefore, provides a means for an organization to convey its distinctiveness in terms of how it values particular social issues compared to other firms within the competitive environment as well as information that can enhance or detract from a firm's reputation or image within the market.

Whereas CSP serves an important function for organizations in terms of allowing it to convey its distinctive qualities and features, it also serves an important signaling function for individuals (see Scott & Lane, 2000, for a related argument with regard to stakeholders and negotiated organizational images). In instances in which a person must evaluate an organization, he or she can (and often does) focus on information about a firm's commitment to various social issues. This information, or signal, can serve as an information-processing shortcut or heuristic when individuals make evaluations of or decisions concerning the firm. For instance, firms adopting socially responsible actions may develop more positive images that can attract a higher quality or quantity of human resources (Fombrun & Shanley, 1990). CSP, in this sense, is a means of conveying positive information to current and prospective employees (Breaugh, 1992; Chauvin & Guthrie, 1994; Rynes, 1991; Spence, 1974). Turban and Greening (1997) argue that organizations with higher ratings on CSP from the Kinder, Domini, and Lydenberg company profiles and index have

positive corporate reputations—a reputation effect that makes it more likely that such firms will be perceived as attractive employers than will organizations rated lower on CSP. Ultimately, the achievement of a reputation is a positive, proactive action that can lead to a positive labor market outcome that can translate into financial performance gains (Chauvin & Guthrie, 1994). Studies have also shown that consumers are often sensitive to the social performance of companies when making purchasing decisions (Porter & van der Linde, 1995).

The findings that individual employees and individual customers pay attention to various dimensions of a firm's social performance when evaluating a firm is consistent with the literature on human decision-making processes. As the literature on cognitive processes in decision making shows, individuals are likely to simplify their evaluative decisions through the use of uncomplicated decision tools. An uncomplicated decision tool, or heuristic, is a feature related to a particular decision that is widely understood, simple, and intuitively appealing (Duhaime, 1985; Schwenk, 1985; Tversky & Kahneman, 1974). Thus, although employees, customers, and shareholders are typically not able to engage in thorough assessments of a firm when forming their impressions of the firm, these individuals can rely on what firms signal about their values through their CSP activities. CSP, therefore, is a simple, available, and intuitively appealing heuristic on which individuals can focus when evaluating a firm.

A TEST OF SIGNALING: AN EVENT STUDY OF FAMILY-FRIENDLY FIRMS

To test our claim that CSP serves as a signal for individuals when evaluating a firm, we focus on a specific situation in which individuals make judgments on the basis of information they receive about the firm's behavior, namely, decisions made by investors to purchase a firm's securities in response to public information about the firm. We argue that in such contexts, CSP events can be useful signals about firms for individuals making investment decisions. We conduct an event study of firms that made *Working Mother* magazine's list of the top family-friendly companies between 1989 and 1994. This event study is the ideal means for testing whether CSP can serve a signaling function for individuals evaluating a firm for an investment decision because it is the typical method used to assess the impact of various firm behaviors on firms' financial performance.¹ The event study method is ideally suited for this research because it is a tool that assesses the specific financial impact of specific changes in corporate policy. The method makes it possible for a researcher to determine

whether there is an abnormal stock price effect associated with a particular event. In this case, one can evaluate whether investors respond to a signal of firms' CSP when making an investment decision.

A number of event studies have been conducted examining the market's reaction to events that are relevant to stakeholder management, in particular, the event studies that have consistently demonstrated negative returns to the stock price of companies that are identified with negative actions, such as announcements of corporate illegality (Davidson & Worrell, 1988) and product safety violations (Davidson & Worrell, 1992). The implication of these studies is that firms that attempt to lower their implicit costs (e.g., product quality costs, environmental protection costs) by engaging in negative actions toward stakeholders will incur higher explicit costs (e.g., payments to bondholders), resulting in strong competitive disadvantage (Waddock & Graves, 1997). Thus, there is empirical evidence and theoretical support of a specific financial disincentive for engaging in these particular types of socially irresponsible behaviors.

Although there are consistent findings showing negative, abnormal returns in response to the announcements of corporate social irresponsibility (Frooman, 1997), only scant evidence exists demonstrating the appropriateness of the event study methodology on announcements of corporate social responsibility (Meznar, Nigh, & Kwok, 1994; Wright, Ferris, Hiller, & Kroll, 1995). Our event is a firm's being included for the first time in *Working Mother* magazine's press release of its annual list of family-friendly companies. It is a public announcement each year in which the magazine issues a press release containing the list of firms to all newspapers with a circulation in excess of 50,000, including *The Wall Street Journal*, and to a number of major radio and television networks as well (Chauvin & Guthrie, 1994, p. 547). Year after year, *The Wall Street Journal*, as well as several other major magazines and newspapers, provides coverage based on the content of this press release. Being designated a family-friendly firm for the first time by *Working Mother* provides new information to the market regarding the firm's standing in relation to other firms that have been identified for providing exemplary family benefits for their employees. Also, many firms expend significant resources in an attempt to secure this recognition because it is believed to enhance its overall reputation within the market. From this press release, investors and traders first learn that a firm has been identified by the magazine for its exemplary family-friendly policies. Thus, this can be viewed as a signal of the firm's commitment to providing exemplary benefits packages to its employees—a signal that may be viewed positively by the market and can be used by individual investors when evaluating a firm for an investment decision. Thus, we offer the following hypothesis in regard to the effect of

signaling when there is a public announcement of a firm's behavior that serves as a signal of the firm's CSP:

Hypothesis 1: The announcement that a firm has made *Working Mother's* list for the first time is a positive signal that will have a positive impact on firm performance as measured by a significant change in the firm's stock price.

In addition to expecting positive, abnormal returns in response to signaling CSP, we expect cross-sectional variation in abnormal returns to be caused by further variations in signaling—mostly in terms of the influence of the context in which the signal is presented. In short, based on the assumption that the value of a signal as a decision tool is based on the signal being widely understood, simple, and intuitively appealing (Schwenk, 1985), we argue that a signaling effect is likely to be stronger when the signal is more likely to be widely understood, simple, and intuitively appealing in a given investment environment. Thus, to more fully understand the degree to which the public announcement of a firm's socially responsible behavior is likely to serve as a positive signal of the firm's future performance, we will examine the concept of signaling in greater detail.

In terms of the likelihood of a signal being more widely understood, simple, and intuitively appealing in a given investment environment, we examined the work in corporate finance that examines how a market is more likely to value particular actions by firms when the firm's stock is traded in a market that exhibits high liquidity and less intensive information processing. The logic supporting this claim is as follows: Because signaling is the mechanism by which new information about a firm's change or changes in policies is dispersed in the market, the degree to which signaling will have an effect on a given firm's stock price is affected by the microstructure of the market in which the firm's stock is traded. Markets (i.e., the NYSE, NASDAQ, etc.) differ in terms of information structure, order-routing structure, and trade-execution system—factors that tend to differentiate markets in terms of liquidity and information processing (Stoll, 1978). The more liquid a market's assets, the greater the amount of expected returns on the market because assets are more readily available for investors who want to trade (Amihud & Mendelson, 1986).

With regard to information processing, deviations in security return distribution are affected by the intensity of information processing on the market. The intensity of information processing on a market's return distribution is a function of the relative number of analysts following the firms whose stocks are traded on the market. When fewer analysts follow firms on the market, the intervals between information releases about the firms and the market's subsequent analysis and valuation of these an-

nouncements is likely to be larger. Thus, when there is less intensive information processing in the market, the resulting larger intervals are likely to generate greater security return distributions (Aggarwal & Aggarwal, 1993).

Signaling effects are likely to be greater in markets exhibiting high liquidity and less intensive information processing. Signaling effects are likely to be stronger in markets exhibiting high liquidity because assets are more readily available for investors who want to trade (Reinganum, 1990). Signaling effects are also likely to be strong in markets exhibiting less intensive information processing because the actual realization of the information by investors is likely to be slower, meaning that the resulting larger intervals are likely to generate greater security return distributions (Grossman, Miller, Cone, Fischel, & Ross, 1997). The following hypothesis is offered in regard to the effect of signaling when there is a public announcement of an event revealing new information about a firm's social performance:

Hypothesis 2: When a firm makes *Working Mother's* list for the first time, signaling effects are likely to be stronger in markets exhibiting high liquidity and less intensive information processing than in markets exhibiting low liquidity and more intensive information processing.

Again, we are arguing that a signaling effect is likely to be stronger when the signal is more likely to be widely understood, simple, and intuitively appealing.

METHOD

Since 1986, *Working Mother* has published an annual list of "America's Most Family-Friendly Companies," a list of approximately 75 to 100 firms that its editorial staff, with the assistance of an independent consultant, selects according to the following criteria (Moskowitz & Townsend, 1994):

- (a) firm's salaries in relation to those of a firm's competitors;
- (b) advancement opportunities available to women in the firm;
- (c) availability and level of on-site child care support at the firm; and
- (d) availability of family-friendly benefits, including leave for childbirth, job sharing, flextime, and work-at-home options.

From these annual lists, we identified a set of publicly traded firms that experienced this event between 1989 and 1994. *Working Mother* includes both privately held and publicly traded firms on the list. Because stock

price is our dependent variable, we identified the publicly traded firms that made the list for the first time during a particular time period for our sample. Our initial sample consisted of 63 publicly traded firms that made the list for the first time between 1989 and 1994. The event date was operationalized as the date when the magazine first issued a press release revealing the contents of the list. This is an event in that the press release was issued annually to hundreds of newspapers, trade publications, and radio and television networks. The press release dates were identified by a media research service via a search of the Lexus-Nexus/Westlaw database, which has access to press release information for a wide variety of media outlets.

For the 63 firms in our sample, we controlled for announcements of the following confounding events: restructuring and/or divestiture, price changes, new products, dividends and/or earnings announcements, joint ventures, acquisition activities, litigation, executive turnover and/or labor activity, layoffs, financial forecasts, contract awards, and other various debt- or equity-related events. After a thorough check of *The Wall Street Journal* index for each of the 63 firms, we did not find any confounding events for 51 of the firms from the last day before the event through the first day following the event. Although McWilliams and Siegel (1997) found a number of confounding events in previous event studies of corporate social responsibility, this can be attributed to the fact that the studies in question (Meznar et al., 1994; Wright et al., 1995) had long event windows. Confounding events were less likely in our study due to our short event windows.

Due to the nature of the information being released, there are two appropriate event windows for our study: (a) the change in stock price from the last day before the event to the event date itself (-1,0 event window), and (b) the change in stock price from the last day before the event to the first day after the event (-1,1 event window). In short, both windows are standard in the event study method due to each's role in capturing the impact of new information on the investment decisions of insiders and investment decisions of the public. The change in stock price from the last day before the event to the event date itself (-1,0 event window) is relevant for this study because of a fundamental assumption of the window-of-opportunity hypothesis that suggests that individuals who are aware of the impending release of information that has the potential to affect the firm's value will try to exploit this knowledge for their own gain (Clarke, Dunbar, & Kahle, 2000). Thus, whenever important information is to be released, it is reasonable to expect to begin seeing a reaction to this information on the date of the press release because this is the time for insiders, who are aware of the impending release of information, to begin

exploiting their window of opportunity. The change in stock price from the last day before the event to the first day after the event ($-1,1$ event window) is also necessary for this study because *Working Mother's* press releases are not officially released to the public until 6:00 PM Eastern Standard Time. Therefore, public investors (i.e., those who do not have inside information about the press release) arguably do not have the opportunity to act on this information until the day following the press release.

We used the event study methodology to detect how the stock market responded to the announcement that a firm had made *Working Mother's* list for the first time. The average cumulative returns were calculated using a market model that shows the effect of the event on the cumulative security prices of the firms experiencing the event by producing an average return from the group of stocks in which each stock is weighed equally. Security price data for the dependent financial performance variable was obtained from the University of Chicago Center for Research in Security Prices daily tapes. The tapes contain the daily security prices of publicly traded firms from a number of different security exchange markets, including the NYSE and the NASDAQ. The procedures for the event study were based on similar event studies conducted by Chauvin and Guthrie (1994) and Davidson, Worrell, and El-Jelly (1995) as well as a discussion of the methodology by Frooman (1997).

RESULTS

We found firms that made the list for the first time experienced significant positive, abnormal returns following the announcement. In particular, the cumulative returns from the day before the event to the day after the event show positive, abnormal returns that were statistically significant. These findings replicate those of Chauvin and Guthrie (1994), who found significant positive, abnormal returns in their study of firms that made the *Working Mother* list for the first time.

The results of the study, shown in Table 1, support Hypothesis 1 in that the 51 publicly traded firms that were publicly identified for their exemplary actions toward employees with caregiving responsibilities experienced significant positive, abnormal returns both in terms of the significant binomial z statistic and in terms of the significant percentage of positive returns. We interpret this as evidence of a family-friendly financial signal for this nonfinancial indication of an increase in future cash flows.

In addition to the results supporting Hypothesis 1, we also found statistically significant support for Hypothesis 2. To test Hypothesis 2, we first measured liquidity and the intensity of information processing faced by

Table 1
*Firms That Made Working Mother Magazine's List of
 Top Family-Friendly Companies for the First Time, 1989-1994*

<i>Change in Average Cumulative Return for 51 Firms From</i>			
<i>The Day Before the Announcement to the Day of the Announcement (-1,0)</i>		<i>The Day Before the Announcement to the Day After the Announcement (-1,1)</i>	
Mean abnormal return	0.0075	Mean abnormal return	0.0089
Quartile 1	-0.0054	Quartile 1	-0.0083
Quartile 2 (median)	0.0049	Quartile 2 (median)	0.0071
Quartile 3	0.0188	Quartile 3	0.0210
Overall results			
<i>z</i>	1.7810*	<i>z</i>	1.5476*
PPOS	62.75*	PPOS	62.75*
EXCSSRT	0.0075*	EXCSSRT	0.0089*

Note: PPOS = percentage of firms experiencing positive, abnormal returns; EXCSSRT = percentage of excess return experienced by firms.

*statistical significance at < .10.

each firm by dividing our sample based on the market on which each firm's stock is traded. Researchers have found that firm size is a proxy for liquidity, as firm size is correlated with a firm's average trading volume (Amihud & Mendelson, 1986; Edmister & James, 1983). Furthermore, researchers have also found that the number of analysts following a given firm is inversely correlated with the firm's average trading volume, meaning that fewer analysts are likely to follow small firms (Aggarwal & Aggarwal, 1993). The two largest markets in the United States, the NYSE and the NASDAQ, reflect these differences in liquidity and intensity of information processing as reflected by the vast differences in firm size between the firms in the two samples. Table 2 shows the differences in relative firm size among the NYSE sample of 41 firms and the NASDAQ sample of 10 firms. We measured the relative liquidity of firms in each sample by determining the market capitalization of each firm in the sample, as liquidity can be measured by the aggregate market capitalizations (number of common stock shares outstanding multiplied by the common stock share's end-of-year price; Reinganum, 1990) in the samples.²

We found that the average market capitalization of the NYSE firms in the sample was nearly \$15 billion, whereas the average market capitalization of the NASDAQ firms was approximately \$2.3 billion, a difference that is statistically significant at the < .01 level. Thus, dividing the original

Table 2
Size Difference Between NASDAQ and NYSE Firms

Firms listed on NASDAQ ($n = 10$)	Average market capitalization value:	\$2,313,848,130***
Firms listed on NYSE ($n = 41$)	Average market capitalization value:	\$14,953,609,902

***statistical significance at $< .01$.

sample of 51 firms into a NASDAQ and NYSE grouping allowed us to examine the effect of signaling on a market with high liquidity and less intensive information processing (NASDAQ) versus the effect of signaling on a market with low liquidity and more intensive information processing (NYSE).

Table 3 shows the results for Hypothesis 2. There was a substantial difference between the cumulative returns of the NYSE firms and those of the NASDAQ firms. The 10 NASDAQ firms experienced significant and highly significant positive, abnormal returns in both event windows in regard to the percentage of firms experiencing positive returns and in regard to the level of significance in their binomial z statistic. The 41 NYSE firms, on the other hand, experienced positive, abnormal returns but not at a rate that was statistically significant. This confirms our hypothesis that the signaling effect is stronger whenever the signal is widely understood, simple, and intuitively appealing, as shown by the difference in outcomes due to the influence of the liquidity and intensity of information processing in which the firm's stock is traded.

IMPLICATIONS

Signaling is an important function of CSP in that it serves the important purpose of simplifying the complex relationship between social and financial performance. CSP provides a means through which firms can convey their values and beliefs toward particular issues that can then be used by individuals as an information processing shortcut in making a decision about a firm. Our event study of firms who made *Working Mother* magazine's list of the most family-friendly companies for the first time shows how investors are likely to rely on a CSP signal that provides positive information on the firm's functioning. As the strong results for firms listed on the NASDAQ show, the effect of CSP signaling on financial performance is more powerful when there is less information and less complexity in the market.

Table 3
NASDAQ Firms Versus NYSE Firms—An Additional Test of the Effect of Signaling

	<i>The Day Before the Announcement to the Day of the the Announcement (-1,0)</i>	<i>The Day Before the Announcement to the Day After the Announcement (-1,1)</i>	
Firms listed on NASDAQ (<i>n</i> = 10)			
Mean abnormal return	0.0217	Mean abnormal return	0.0331
Quartile 1	0.0053	Quartile 1	0.0019
Quartile 2 (median)	0.0152	Quartile 2 (median)	0.0255
Quartile 3	0.0402	Quartile 3	0.0577
Overall results			
<i>z</i>	1.6972*	<i>z</i>	2.159**
PPOS	80.00**	PPOS	80.00**
EXCSSRT	0.0217*	EXCSSRT	0.033**
Firms listed on NYSE (<i>n</i> = 41)			
Mean abnormal return	0.0040	Mean abnormal return	0.0030
Quartile 1	-0.005	Quartile 1	-0.009
Quartile 2 (median)	0.0133	Quartile 2 (median)	0.0055
Quartile 3	0.0276	Quartile 3	0.0163
Overall results			
<i>z</i>	1.1482	<i>z</i>	0.6594
PPOS	58.54	PPOS	58.54
EXCSSRT	0.0040	EXCSSRT	0.0030

Note: PPOS = percentage of firms experiencing positive abnormal returns; EXCSSRT = percentage of excess return experienced by firms.

*statistical significance at < .10.

**statistical significance at < .05.

In addition to supporting the idea that CSP can signal a firm's values and beliefs toward particular issues—which can then be used by investors to judge a firm's likelihood of future success—the study provides a challenge to recent critiques of the assumptions of event studies of corporate social responsibility. In a recent special issue of the *Academy of Management Journal*, Harrison and Freeman (1999) suggest that “Event studies are based on the assumption that investors, in the aggregate, understand the extent to which an event will influence returns” (p. 483). They go on to argue that

if we researchers, as experts in the field, do not fully understand how an event such as the announcement of withdrawal of business assets from South Africa or inclusion on a list of socially responsible companies can increase future profits, how can we expect the market to know these things? (p. 483)

Finally, they conclude,

We should recognize that investors are no more capable of sorting out these issues than we are. Since most of the events that social responsibility researchers study are complicated with regard to their effects on financial performance, event studies have limited applications. (p. 484)

As our study shows, however, we can expect the market to know the significance of a CSP event, because the event is a signal of value creation. Conversely, if we can expect the market to understand the seemingly complex negative impacts of pollution, antitrust violations, product recalls, and the like—because of what these events signal about performance—there is every reason to expect a signal of socially responsible behavior to have a comparable impact. Harrison and Freeman's (1999) suggestion that investors cannot fully understand the impact of a CSP event places too strict a standard on event studies of positive CSP. Just as we would expect investors to have a basic, fundamental, negative reaction to the announcement of bad news that casts a negative shadow on a firm's future, it is reasonable to expect investors to have a basic, fundamental, positive reaction to good news. Although we agree that investors cannot possibly know the full impact, the more important point is simply that investors are likely to respond positively to the announcement of positive CSP, because this announcement is a positive signal of the firm's future well-being.

In addition to this challenge to signaling, a recent critique of event studies in management research presented a convincing account of how management scholars have not paid adequate attention to theoretical and research design issues when using event studies in management research, particularly in event studies of corporate social responsibility (McWilliams & Siegel, 1997). According to these authors, "Event studies of corporate social responsibility may be quite sensitive to research design issues, especially the length of event windows used and confounding economically relevant events" (p. 647). Although McWilliams and Siegel offer an insightful critique of how the event study methodology has previously not been designed and executed properly in the analysis of corporate social responsibility, it is important to note that McWilliams and Siegel made this claim solely on the basis of three such event studies by two sets of authors—Meznar et al., (1994) and Wright et al., (1995).

Although we agree that event studies of corporate social responsibility in and of themselves are not a valid measure of the overall relationship between a firm's social performance and its financial performance, we contend that event studies may provide an accurate depiction of how announcements of a firm's social performance activities can serve as a signal of the

firm's performance that investors can use when evaluating the firm. Our study is a challenge to McWilliams and Siegel's (1997) critique of the use of event studies to examine corporate social performance because it follows McWilliams and Siegel's procedures for the proper design and use of the event study method to assess the impact of firms' specific actions toward a specific stakeholder. Contrary to McWilliams and Siegel's (1997) claims, we offer our study as evidence of the relevance and validity of event study research in the study of the relationship between social and financial performance.

Finally, additional research should be conducted on how corporate social performance can serve as a means through which firms can signal their values and beliefs on particular issues so that individuals will focus on these signals when evaluating the firm. In one sense, CSP signaling could be studied as a strategy to see whether firms are able to manipulate or control their images or reputations for various issues by engaging in activities that are likely to receive a great deal of attention. In this sense, corporate social performance could be a means through which firms could signal a positive image of various dimensions to potential customers, employees, investors, and suppliers. CSP signaling could also be studied from the perspective of merely identifying how various stakeholder groups, such as customers, employees, and investors, respond to various actions by firms. Although the event study method provides a rather clear means for assessing how announcements of CSP events are likely to be interpreted by investors and subsequently used in investment decisions, similar approaches need to be developed to assess the impact of announcements of CSP in the decision-making processes of potential and current employees, suppliers, and customers.

NOTES

1. In 1994, Chauvin and Guthrie published a similar event study of firms that for the first time made *Working Mother's* list that takes a different theoretical approach to this event. The authors found a small but statistically significant increase in the stock prices of firms that made the list for the first time. Chauvin and Guthrie viewed the announcement that a firm had made the list for the first time as new information that signaled the firm's positive labor market practices. This initial announcement represents a positive contribution to the firm's labor market reputation that promises to improve a firm's ability to attract, retain, and motivate employees. In addition, the company's inclusion on the list for the first time is also a signal that the company is outstanding in regard to providing benefits to assist key employee needs. Our study differs from Chauvin and Guthrie's, however, in that we offer an alternative explanation of the same event, showing how this event is a signal of positive social performance that investors use to make positive judgments about a firm's likelihood of future cash flows.

We also conduct a more in-depth examination of this signaling effect to show what additional factors influence the intensity of signaling.

2. Our claim that "firm size is a proxy for liquidity" reflects the simple fact that the firms traded on the NYSE tend to be much larger than the firms traded on the NASDAQ. Contrary to the notion that "large firms tend to be more liquid," the finance literature explains in great detail that firm size does not determine liquidity. Rather, a market's microstructure (the mechanisms that determine a market's bid-ask spreads and the regulations the market imposes on its trading specialists) determines liquidity. Finance scholars claim that "firm size is a proxy for liquidity," however, because larger firms tend to list on the less liquid NYSE, whereas smaller firms tend to list on the more liquid NASDAQ. This point has a great deal of face validity in that the NYSE tends to appeal to large, established firms that seek stability, whereas the NASDAQ tends to appeal to smaller firms in industries with a great deal of growth potential.

In terms of the difference between bid-ask spreads on the two markets, the differences are the function of the fact that the NYSE is a monopoly dealer, whereas the NASDAQ is a competitive dealer. On the NYSE, only the exchange-appointed specialist may act as a market maker for a given stock. Thus, on the NYSE, each firm essentially has one trading specialist. On the NASDAQ, however, any dealer meeting net capital requirements may act as a market maker for any given stock. Thus, on the NASDAQ, multiple specialists may act as market makers for any given stock at any one time (Cowan, Carter, Dark, & Singh, 1992).

Because competition among market makers tends to reduce the equilibrium market (bid-ask) spread for a given stock, spreads tend to be lower on NASDAQ, and thus, the NASDAQ is arguably more liquid in terms of being able to offer potential investors opportunities to trade the stock (Cowan et al., 1992). (Note: although the advent and proliferation of modern online/day trading has since altered the impact of this difference in liquidity, this distinction in liquidity was clearly in place during the time period covered in this study.)

This difference in liquidity is further exacerbated by the fact that the NYSE market makers face more intricate regulations requiring price stability for a security than their NASDAQ counterparts. Reinganum (1990) demonstrated the impact of the greater liquidity on NASDAQ due to smaller bid-ask spreads and less regulation and monitoring. His study shows that for portfolios of firms on the NASDAQ that are at least as large as the smallest NYSE firms, the returns of NASDAQ firms contain a smaller liquidity premium than the returns of NYSE portfolios. Thus, for comparably sized firms, the NASDAQ arguably provides more liquidity than the NYSE.

APPENDIX

Firms That Made Working Mother Magazine's List of Top Family-Friendly Companies for the First Time, 1989-1994

<i>Firm</i>	<i>Press Release (Event) Date & Market Listed</i>		<i>Firm</i>	<i>Press Release (Event) Date & Market Listed</i>	
Aetna	09/20/89	NYSE	Barnett Bank	09/22/92	NASDAQ
American Bankers	09/20/89	NASDAQ	Bausch and Lomb	09/22/92	NYSE
Arthur Andersen	09/20/89	NASDAQ	Bell Atlantic	09/22/92	NYSE
AT&T	09/20/89	NYSE	CIGNA	09/22/92	NYSE

APPENDIX Continued

<i>Firm</i>	<i>Press Release (Event) Date & Market Listed</i>		<i>Firm</i>	<i>Press Release (Event) Date & Market Listed</i>	
Corning	09/20/89	NYSE	Colgate-Palmolive	09/22/92	NYSE
Dow	09/20/89	NYSE	Donnelly	09/22/92	NYSE
Genentech	09/20/89	NYSE	Hoechst-Celanese	09/22/92	NYSE
NCSB	09/20/89	NASDAQ	MBNA America	09/22/92	NASDAQ
Time	09/20/89	NYSE	Motorola	09/22/92	NYSE
UNUM	09/20/89	NYSE	Northern States Power	09/22/92	NYSE
Warner Lambert	09/20/89	NYSE	Nynex	09/22/92	NYSE
Allstate	09/18/90	NYSE	Pacificare	09/22/92	NASDAQ
Citibank	09/18/90	NYSE	Sequent	09/22/92	NASDAQ
Con Edison	09/18/90	NYSE	Upjohn	09/22/92	NYSE
Marriott	09/18/90	NYSE	American Airlines	09/15/93	NYSE
Oracle	09/18/90	NYSE	Amoco	09/15/93	NYSE
Tenneco	09/18/90	NYSE	Exxon	09/15/93	NYSE
Travelers	09/18/90	NYSE	Helene Curtis	09/15/93	NYSE
Wells Fargo	09/18/90	NYSE	Household Intl.	09/15/93	NYSE
Axiom	09/18/91	NASDAQ	Levi Strauss	09/15/93	NYSE
Baxter International	09/18/91	NYSE	Mattel	09/15/93	NYSE
Ben & Jerry's	09/18/91	NASDAQ	Mentor Graphics	09/15/93	NASDAQ
Dayton Hudson	09/18/91	NYSE	Nike	09/15/93	NASDAQ
Honeywell	09/18/91	NYSE	Quaker Oats	09/15/93	NYSE
Lotus	09/18/91	NASDAQ	Schering-Plough	09/15/93	NYSE
Marquette Electronics	09/18/91	NASDAQ	Silicon Graphics	09/15/93	NASDAQ
Northern Trust	09/18/91	NASDAQ	United Technologies	09/15/93	NYSE
Pacific Gas and Electric	09/18/91	NYSE	AMS	09/13/94	NASDAQ
St. Paul	09/18/91	NASDAQ	Corestates Financial	09/13/94	NYSE
Sprint	09/18/91	NYSE	Dow Jones	09/13/94	NASDAQ
TRW	09/18/91	NYSE	First Chicago	09/13/94	NYSE
Westinghouse	09/18/91	NYSE			

REFERENCES

- Aggarwal, R., & Aggarwal, R. (1993). Security return distributions and market structure: Evidence from the NYSE/AMEX and the NASDAQ Markets. *Journal of Financial Research*, 16(3), 209-220.

- Agle, B. R., & Caldwell, C. B. (1999). Understanding research on values in business: A level of analysis framework. *Business and Society*, 38(3), 326-386.
- Albert, S., Ashforth, B. E., & Dutton, J. E. (2000). Organizational identity and identification: Charting new waters and building new bridges. *Academy of Management Review*, 25(1), 13-17.
- Amihud, Y., & Mendelson, H. (1986). Asset pricing and the bid-ask spread. *Journal of Financial Economics*, 17, 223-249.
- Ashforth, B. E., & Mael, F. A. (1989). Social identity theory and the organization. *Academy of Management Review*, 14, 20-39.
- Ashforth, B. E., & Mael, F. A. (1996). Organizational identity and strategy as a context for the individual. *Advances in Strategic Management* (pp. 17-62). Greenwich, CT: JAI.
- Breaugh, J. A. (1992). *Recruitment: Science and practice*. Boston: PWS-Kent.
- Chauvin, K. W., & Guthrie, J. P. (1994). Labor market reputation and the value of the firm. *Managerial and Decision Economics*, 15, 543-552.
- Clarke, J., Dunbar, C., & Kahle, K. M. (2000). *The long-run performance of secondary equity issues: A direct test of the windows of opportunity hypothesis*. Unpublished manuscript, Katz Graduate School of Business, University of Pittsburgh, PA.
- Cowan, A. R., Carter, R. B., Dark, F. H., & Singh, A. K. (1992). Explaining the NYSE listing choices of NASDAQ firms. *Financial Management*, 21(4), 73-87.
- Davidson, W., & Worrell, D. (1988). The impact of announcements of corporate illegalities on shareholder returns. *Academy of Management Journal*, 31, 195-200.
- Davidson, W., & Worrell, D. (1992). The effect of product recall announcements on shareholder wealth. *Strategic Management Journal*, 13, 467-473.
- Davidson, W., Worrell, D., & El-Jelly, A. (1995). Influencing managers to change unpopular corporate behavior through boycotts and divestitures: A stock market test. *Business and Society*, 34, 171-196.
- Duhaime, I. M. (1985). Conjectures on cognitive simplification in acquisition and divestment decision making. *Academy of Management Review*, 10, 287-295.
- Dutton, J. E., & Dukerich, J. M. (1991). Keeping an eye on the mirror: Image and identity in organizational adaptation. *Academy of Management Journal*, 34, 517-554.
- Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational images and member identification. *Administrative Science Quarterly*, 39, 239-263.
- Edmister, R. O., & James, C. (1983). Is illiquidity a bar to buying small cap stocks? *Journal of Portfolio Management*, 9, 14-19.
- Fombrun, C., & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. *Academy of Management Journal*, 33, 233-258.
- Frooman, J. S. (1997). Socially irresponsible and illegal behavior and shareholder wealth: A meta-analysis of event studies. *Business and Society*, 36(3), 221-249.
- Griffin, J. J., & Mahon, J. F. (1997). The corporate social performance and corporate financial performance debate: Twenty-five years of incomparable research. *Business and Society*, 36, 5-31.
- Grossman, S. J., Miller, M. H., Cone, K. R., Fischel, D. R., & Ross, D. J. (1997). Clustering and competition in asset markets. *Journal of Law and Economics*, 40(1), 23-60.
- Harrison, J. S., & Freeman, R. E. (1999). Stakeholders, social responsibility, and performance: Empirical evidence and theoretical perspectives. *Academy of Management Journal*, 42(5), 479-485.
- Johnson, R. A., & Greening, D. W. (1999). The effects of corporate governance and institutional ownership types on corporate social performance. *Academy of Management Journal*, 42(5), 564-580.

- Jones, T. M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *Academy of Management Review, 20*, 404-437.
- Jones, T. M., & Wicks, A. C. (1999). Convergent stakeholder theory. *Academy of Management Review, 24*, 206-221.
- Kotter, J. P., & Heskett, J. L. (1992). *Corporate culture and performance*. New York: Free Press.
- McWilliams, A., & Siegel, D. (1997). Event studies in management research: Theoretical and empirical issues. *Academy of Management Journal, 40*(3), 626-657.
- Meznar, M. B., Nigh, D., & Kwok, C. C. (1994). Effect of announcements of withdrawal from South Africa on stockholder wealth. *Academy of Management Journal, 37*, 1633-1645.
- Moskowitz, M., & Townsend, C. (1994, October). The one hundred best companies for working mothers. *Working Mother*, p. 21-68.
- Porter, M. E., & van der Linde, C. (1995). Green and competitive. *Harvard Business Review, 73*(5), 120-134.
- Reinganum, M. R. (1990). Market microstructure and asset pricing: An empirical investigation of NYSE and NASDAQ securities. *Journal of Financial Economics, 28*(1/2), 127-148.
- Rynes, S. L. (1991). Recruitment, job choice, and post-hire consequences: A call for new research directions. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 399-444). Palo Alto, CA: Consulting Psychologists Press.
- Scott, M. G., & Lane, V. R. (2000). A stakeholder approach to organizational identity. *Academy of Management Review, 25*(1), 43-63.
- Schwenk, C. R. (1985). Cognitive simplification processes in strategic decision-making. *Strategic Management Journal, 5*, 111-128.
- Spence, A. M. (1974). *Market signaling: Informational transfer in hiring and related screening processes*. Cambridge, MA: Harvard University Press.
- Stoll, H. R. (1978). The pricing of security dealer services: An empirical study of NASDAQ stocks. *Journal of Finance, 33*, 1153-1172.
- Turban, D. B., & Greening, D. W. (1997). Corporate social performance and organizational attractiveness to prospective employees. *Academy of Management Journal, 40*, 658-672.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science, 185*, 1124-1131.
- Ullman, A. (1985). Data in search of theory: A critical examination of the relationship among social performance, social disclosure, and economic performance. *Academy of Management Review, 10*, 540-577.
- Waddock, S. B., & Graves, S. B. (1997). Quality of management and quality of stakeholder relations: Are they synonymous? *Business and Society, 36*(3), 250-279.
- Wood, D. J., & Jones, R. E. (1995). Stakeholder mismatching: A theoretical problem in empirical research on corporate social performance. *International Journal of Organizational Analysis, 3*, 229-267.
- Wright, P., Ferris, S. P., Hiller, J. S., & Kroll, M. (1995). Competitiveness through management of diversity: Effects on stock price valuation. *Academy of Management Journal, 38*, 272-287.

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