CORPORATE SOCIAL RESPONSIBILITY, CUSTOMER SATISFACTION, AND MARKET VALUE

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ABSTRACT

Although prior research has addressed the influence of corporate social responsibility (CSR) on perceived customer responses, it is not clear whether CSR affects market value of the firm. This study develops and tests a conceptual framework, which predicts that (1) customer satisfaction partially mediates the relationship between CSR and firm market value (i.e., Tobin’s q and stock return), (2) corporate abilities (innovativeness capability and product quality) moderate the financial returns to CSR, and (3) these moderated relationships are mediated by customer satisfaction. Based on a large-scale secondary dataset, the results show support for this framework. Interestingly, it is found that in firms with low innovativeness capability, CSR actually reduces customer satisfaction levels and, through the lowered satisfaction, harms market value. The uncovered mediated and asymmetrically moderated results offer important implications for marketing theory and practice.
In today’s competitive market environment, corporate social responsibility (CSR) represents a high-profile notion that has strategic importance to many companies. As many as 90% of the *Fortune 500* companies now have explicit CSR initiatives (Kotler and Lee 2004; Lichtenstein et al. 2004). According to a recent special report by *BusinessWeek* (2005a, p.72), large companies disclosed substantial investments in CSR initiatives (i.e., Target’s donation of $107.8 million in CSR represents 3.6% of its pretax profits, with GM $51.2 million at 2.7%, General Mills $60.3 million at 3.2%, Merck $921 million at 11.3%, HCA $926 million at 43.3%). By dedicating ever-increasing amounts to cash donations, in-kind contributions, cause marketing, and employee volunteerism programs, companies are acting on the premise that CSR is not merely the “right thing to do,” but also “the smart thing to do” (Smith 2003).

Importantly, along with increasing media coverage of CSR issues, companies themselves are also taking direct and visible steps to communicate their CSR initiatives to various stakeholders including consumers. A decade ago, Drumwright (1996) observed that advertising with a social dimension was on the rise. The trend seems to continue. Many companies, including the likes of Target and Walmart, have funded large national ad campaigns promoting their good works. The October 2005 issue of *In Style* magazine alone carried more than 25 “cause” ads. Indeed, consumers seem to be taking notice: whereas in 1993 only 26% of individuals surveyed by Cone Communications could name a company as a strong corporate citizen, by 2004, the percentage surged to as high as 80% (*BusinessWeek* 2005a).

Motivated, in part, by this mounting importance of CSR in practice, several marketing studies have found that social responsibility programs have a significant influence on a number of customer-related outcomes (Bhattacharya and Sen 2004). More specifically, based on lab experiments, CSR is reported to directly or indirectly impact consumer product responses.
(Brown 1998; Brown and Dacin 1997), customer-company identification (Sen and Bhattacharya 2001), customer donations to nonprofit organizations (Lichtenstein et al. 2004), and more recently customers’ product attitude (Berens, van Riel, and van Bruggen 2005).

Although this stream of research has contributed a great deal of insight, we continue to have limited understanding of whether and how CSR affects financial outcomes of the firm such as its market value. Yet, it is important to evaluate CSR’s impact on market value (i.e., stock-based firm performance) because clearly, a firm’s financial health is the ultimate test for the success/failure of any strategic initiative. Moreover, prior laboratory studies and anecdotal examples are yet to be complemented with a large-scale analysis using secondary data. Indeed, Brown and Dacin (1997, p.80) urgently call for research on “how societally oriented activities might bring about positive outcomes for the firm.” Echoing this, Berens et al. (2005) energetically woo for research efforts that directly link CSR to stock market performance.

Our research responds to this call by investigating the linkage between CSR and firm market value with a longitudinal, archival dataset. In keeping with contingent linkages between CSR and consumer responses articulated by prior researchers (see, e.g., Bhattacharya and Sen 2004), we do not predict a simple, unconditional relationship between CSR and market value. This is because firms are not the same in executing, supporting, and exploiting CSR initiatives in the marketplace (Brown 1998; Sen and Bhattacharya 2001). Specifically, companies may generate different (i.e., positive, non-significant, and negative) market returns from CSR under different conditions. For example, Starbucks’ superior brand equity and its successful CSR initiatives with charity agency CARE are due, at least in part, to its superior product quality, innovative skills, and its ability to obtain and sustain customer satisfaction over time. In contrast, many companies find CSR results in negative financial returns due to the added costs of making extensive
charitable contributions and diverted attention from improving product quality that would have allowed them to better satisfy customer needs and wants (McGuire et al. 1988; Sen and Bhattacharya 2001). Thus, the research questions in this study are: (1) Under what conditions do CSR initiatives result in positive financial performance? And (2) does customer satisfaction matter in the relationship between CSR and firm performance?

To address these questions, we develop and test a conceptual model proposing that CSR initiatives enable firms to build a base of satisfied customers, which, in turn, contributes positively to market value. Specifically, we predict that customer satisfaction partially mediates the relationship between CSR and market value. Although extant marketing literature has addressed the direct impact of customer satisfaction on firm shareholder value (e.g., Anderson, Fornell and Mazvancheryl 2004; Fornell et al. 2006), the mediating role of customer satisfaction in the financial contribution of CSR has been ignored. In this study, we explicitly theorize this role and argue that building customer satisfaction represents part of the underlying mechanism through which the financial promises of CSR are capitalized.

Furthermore, we explore the boundary conditions under which firms may derive positive or negative market value from CSR. Drawing on a variety of theory bases, we argue that firms that have better inside-out corporate abilities (i.e., product quality and innovativeness) to begin with tend to generate more market value from outside-in strategic initiatives (i.e., CSR programs). On the other hand, firms that exhibit poorer corporate abilities may find that CSR actually harms customer satisfaction and, because of the lowered satisfaction, decrease their stock performance.

Based on multiple secondary datasets comprising ratings of large companies, the results show support for the CSR → customer satisfaction → firm market value causal linkages. In addition, we find that a proper combination of external CSR initiatives and internal corporate
abilities can lead to synergistic returns. However, the data also reveal a hitherto neglected “dark-side” of CSR. That is, CSR actually reduces customer satisfaction levels in firms with low innovativeness capability and, through this negative impact, harms firm market value. The uncovered mediated and asymmetrically moderated results suggest a more nuanced understanding of the financial returns to CSR for both practitioners and marketing researchers.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

Corporate Social Responsibility and Market Value

Corporate social responsibility (CSR) is broadly defined as a company’s activities and status related to its perceived societal or stakeholder obligations (Brown and Dacin 1997; Sen and Bhattacharya 2001; Varadarajan and Menon 1988). Although studies in strategy and finance have explored the relationship between CSR actions and firm performance, empirical evidence to date has been rather conflicting (for a review, see Orlitzky, Schmidt, and Rynes 2003 or Pava and Krausz 1996). For example, the returns to CSR are found to be positive in some studies (e.g., Fombrun and Shanley 1990; Soloman and Hansen 1985), but negative in other works (e.g., Aupperle et al. 1985; McGuire et al. 1988). Thus, Margolis and Walsh (2003, p. 277) conclude that the relationships between CSR and financial performance are decisively “mixed.”

There are at least two explanations for these conflicting findings. First, existing studies have largely related CSR to backward-looking firm profitability (i.e., accounting-based ROI), but not related to forward-looking firm market value (i.e., stock-based Tobin’s q). Theoretically, however, market value is different from (and perhaps more important than) ROI because “accounting measures are retrospective and examine historical performance. In contrast, the market value of firms hinges on growth prospects and sustainability of profits, or the expected performance in the future” (Rust and colleagues 2004, p. 79). Second, the equivocal link between
CSR and firm performance may, in part, be attributable to the fact that extant strategy and finance literatures have largely omitted the underlying processes or contingency conditions that may well explain the range of observed relationships (Sen and Bhattacharya 2001).

We precisely examine these research issues in this study. In particular, as shown in Figure 1, our framework proposes that the relationship between CSR and firm market value is better understood by the mediating link of customer satisfaction. In recent times, scholars (e.g., Anderson, Fornell and Mazvancheryl 2004; Fornell et al. 2006) have demonstrated the positive relationship between customer satisfaction and market value. We build on this literature and institutional theory to propose that CSR is a driver of customer satisfaction and that the CSR—firm market value linkage exists (at least partially) because of the underlying process through customer satisfaction. Second, drawing on work in the area of corporate identity and associations (e.g., Brown and Dacin 1997), we posit that a firm’s corporate abilities (i.e., product quality and innovativeness capability) moderate the relationship between CSR and market value. Finally, we expect these moderated relationships to be mediated, at least partially, by customer satisfaction. Next, we develop a set of hypotheses pertaining to these relationships.

**CSR and Customer Satisfaction**

Customer satisfaction is defined as an overall evaluation based on the customer’s total purchase and consumption experience with a good or service over time (Anderson, Fornell and Mazvancheryl 2004; Fornell 1992). In the marketing literature, customer satisfaction has been recognized as an important part of corporate strategy (Fornell et al. 2006) and a key driver of firm long–term profitability and market value (Gruca and Rego 2005).

Why should a firm’s CSR initiatives lead to higher customer satisfaction? At least three research streams point to such a link. First, both institutional theory (Scott 1987) and stakeholder
theory (Maignan, Ferrell and Ferrell 2005) suggest that a company’s actions appeal to the multidimensionality of the consumer as not only an economic being, but also a member of a family, community, and nation (Handelman and Arnold 1999). Building on this, Daub and Ergenzinger (2005) propose the term of “generalized customer” to denote individuals who are not only customers that care about the consumption experience but also actual or potential members of various stakeholder groups that companies need to consider. Viewed in this way, such generalized customers are likely to be more satisfied by products and services offered by socially responsible firms (versus socially irresponsible counterparts).

Second, a strong record of CSR creates a favorable context that positively boosts consumers’ evaluations of and attitude toward the firm (Brown and Dacin 1997; Gürhan-Canli and Batra 2004; Sen and Bhattacharya 2001). Specifically, recent works on customer-company identification (Bhattacharya and Sen 2003; 2004) suggest that CSR initiatives comprise a key element of corporate identity that may induce customers to identify (i.e., develop a sense of connection) with the company. Indeed, Lichtenstein et al. (2004, p. 17) note that “a way that CSR initiatives create benefits for companies appears to be by increasing consumer’s identification with the corporation…[and] support for the company.” Not surprisingly, identified customers are more likely to be satisfied with a firm’s offerings (e.g., Bhattacharya and Sen 2003; Bhattacharya, Rao and Glynn 1995).

The third literature stream that enables us to relate CSR to customer satisfaction deals with the antecedents of customer satisfaction. For example, perceived value is a key antecedent that has been empirically shown to promote customer satisfaction (Fornell et al 1996; Mithas, Krishnan Fornell 2005b). In our context, all else equal, customers likely derive better perceived value and consequently higher satisfaction from a product that is made by a socially responsible
company (i.e., added value via good social causes). Furthermore, engaging in CSR may allow firms to better understand their generalized customers and thus to improve their customer-specific knowledge (Sen and Bhattacharya 2001). Because improving customer knowledge represents another antecedent that has been found to enhance customer satisfaction (Jayachandran et al 2005; Mithas, Krishnan and Fornell 2005a), we believe that all else equal, CSR initiatives may help promote customer satisfaction. Overall,

H1: All else equal, firms that are viewed more favorably for their CSR initiatives enjoy greater customer satisfaction.

The Mediating Role of Customer Satisfaction

The existing marketing literature shows accumulating evidence for the influence of customer satisfaction on firm market value. For example, firms with satisfied customers tend to enjoy greater customer loyalty (e.g., Bolton and Drew 1991; Oliver 1980), positive word-of-mouth (Szymanski and Henard 2001), and customer’s willingness to pay premium prices (Homburg, Koschate, and Hoyer 2005), all of which can increase a firm’s market value. Indeed, several studies found that firms with higher levels of customer satisfaction are able to achieve higher levels of cash flows (e.g., Gruca and Rego 2005; Fornell 1992; Mittal et al. 2005) and less volatility of future cash flows, thus leading to superior market value (e.g., Anderson, Fornell and Mazvancheryl 2004; Fornell et al. 2006; Srivastava et al. 1998).

In linking this evidence for the influence of customer satisfaction on firm market value with our first hypothesis on the influence of CSR on satisfaction, one would logically expect a mediating role of customer satisfaction in the CSR—performance linkage. That is, CSR affects customer satisfaction, which, in turn, affects market value. In other words, customer satisfaction represents the mediational pathway through which CSR actions affect firm market value.
However, there may be “non-customer routes” via which CSR may affect market value. For example, both textbooks (e.g., Kotler and Lee 2004; Pava and Krausz 1996) as well as academic articles (e.g., Godfrey 2005; Margolis and Walsh 2003) have pointed to the impact of CSR on multiple stakeholders like employees and investors in addition to consumers. Particularly, positive “moral capital” as a result of CSR (Godfrey 2005, p. 777) could directly impact market value by improving employee morale and productivity. In addition, CSR creates public goodwill (Houston and Johnson 2000; McGuire et al. 1988), which provides an “insurance-like” protection to shareholder wealth. As a consequence, putting the pieces together, we predict a partially mediating role of customer satisfaction in the impact of CSR on market value.

H2: All else equal, firms that are viewed more favorably for their CSR initiatives will enjoy higher market value. A firm’s customer satisfaction level at least partially mediates this influence of CSR on market value.

The Moderating Role of Corporate Abilities

In this section, we argue that the relationship between CSR and firm market value may not be universally positive, but rather contingent upon several boundary conditions. That is, one may observe a positive or negative relationship depending on the levels of corporate abilities. Corporate abilities generally refer to a variety of a firm’s expertise and competency such as the ability to improve the quality of existing products/services and the ability to innovatively generate new products/services (Gatignon and Xuereb 1997; Rust et al. 2002; Zeithaml 2000). According to Brown and Dacin (1997), a company’s CSR and corporate abilities both influence customers’ perceptions of the company’s products.

We expect that firms with low levels of corporate abilities (i.e., innovativeness capabilities and product quality) may generate negative market value from CSR for several reasons. First, based on institutional theory, Handelman and Arnold (1999) contend that companies should
engage in CSR with good causes (for the social aspect of legitimation) and, at the same time, provide a good product (for the pragmatic aspect of legitimation). Thus, it is likely that CSR initiatives may fail to generate a favorable impact if the firm is perceived to be less innovative and to be offering poor quality products (i.e., due to a lack of pragmatic legitimation) (DiMaggio and Powell 1983). Indeed, Sen and Bhattacharya (2001) have shown that CSR initiatives may even backfire with reduced purchase intent and negative perceptions, if consumers believe that CSR investments are at the expense of developing corporate abilities like product quality and innovativeness (i.e., represent “misguided priorities” on the part of the firm with low levels of corporate abilities). More importantly, consumers may make negative and detrimental attributions regarding a firm’s motives if a low innovativeness or low product quality firm engages in social responsibility. This would ultimately result in an unattractive corporate identity and hence negative market returns by virtue of negative word-of-mouth and detrimental customer complaints (Brown 1998; Varadarajan and Menon 1988).

On the other hand, we predict that firms with high levels of corporate abilities generate positive market value from CSR. Such firms tend to posses better corporate image and more attractive identities that consumers want to identify with (Bhattacharya and Sen 2003). When coupled with high corporate abilities, a firm’s CSR actions are more likely to generate favorable attributions and consumer identification. This would ultimately promote performance-enhancing behaviors such as customer loyalty (Bhattacharya and Sen 2004). Indeed, if a firm can accommodate customers and other stakeholders and meet different sets of norms (e.g. pragmatic and social norms) by not merely executing CSR initiatives but also developing strong corporate abilities to support and exploit these CSR actions, then it is in a better position to win the social contract, institutional allegiance, moral legitimacy, and consumers’ support for the organization.

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(c.f., Handelman and Arnold 1999, p. 34; Scott 1987). Taken together, these beneficial effects suggest a positive market return to CSR for firms with high levels of corporate abilities.

Therefore, overall we propose an asymmetric moderating effect of corporate abilities on the association between CSR and firm market value.

\[ H_3: \text{Corporate abilities (i.e., product quality, innovativeness capability) moderate the relationship between corporate social responsibility and market value. The relationship will be negative for firms with low corporate abilities but positive for firms with high corporate abilities.} \]

**The Mediating Role of Customer Satisfaction in the Moderated Relationships**

Finally, as we have argued, part of the mechanism via which CSR actions influence a firm’s market value is customer satisfaction. Thus, it is conceivable that the positive impact of CSR in firms with high levels of corporate abilities, in part, enhances the level of customer satisfaction, which then leads to enhanced market value (Anderson, Fornell and Mazvancheryl 2004; Brown and Dacin 1997; Sen and Bhattacharya 2001).

On the contrary, at firms that are low on the corporate ability front (i.e., neither innovative nor competent in product quality), CSR actions may not be able to generate much institutional legitimacy, customer-company identification, or customer satisfaction (Scott 1987). As a result, CSR initiatives may relate little to financial results and market value (e.g., Margolis and Walsh 2003; Mithas, Krishnan, and Fornell 2005b) in firms with low levels of corporate abilities.

Therefore, this discussion suggests that customer satisfaction at least partially mediates the moderated relationships between CSR, corporate abilities, and firm market value.

\[ H_4: \text{A firm’s customer satisfaction at least partially mediates the moderated relationship between corporate social responsibility, corporate abilities (i.e., product quality, innovativeness capability), and market value.} \]
DATA AND VARIABLE CONSTRUCTION

In this section, we describe the secondary data that were collected to test the hypotheses. We also present the construction of the variables such as CSR, corporate abilities, customer satisfaction, and market value. Table 1 reports the variables, their definitions, and data sources. We collected data for the publicly traded Fortune 500 companies from multiple archival sources: COMPUSTAT, Fortune America’s Most Admired Corporations (FAMA), the American Customer Satisfaction Index (ACSI), Competitive Media Reporting (CMR), and Center for Research in Security Prices (CRSP).

Measuring Corporate Social Responsibility

One approach to measuring market perceptions of firms’ CSR initiatives is to rely on the amount of CSR investments disclosed in firms’ annual reports to shareholders. However, there are many important doubts about the validity of the announced CSR investments, despite the seeming attractiveness of this approach. For example, there is a lack of consensus on what should be included (or excluded) in CSR investments (Margolis and Walsh 2003; Orlitzky, Schmidt, and Rynes 2003; Tsoutsoura 2004). Few companies have their announced CSR investments audited or validated externally by third-parties. Thus, some firms may over-report CSR investments for impression management (i.e., exaggerating their giving). Other firms may under-report CSR investments since they may regard CSR investments only as donated cash or in-kind products and services (excluding those investments in benefiting the environment as well as their employees). Furthermore, although some external sources (e.g., 100 best corporate citizens by Business Ethics; csrwire.com; SRI reports) may track companies’ CSR investments objectively, the nature and amount of CSR investments for the same firm can change
dramatically from one source to another (BusinessWeek 2005a; Fombrum and Shanley 1990; Margolis and Walsh 2003).

Therefore, we turn to subjective measures of CSR. While some studies have used small-scale survey data with a limited set of firms (e.g., Christmann 2000), prior research points to the use of a more comprehensive, large-scale survey dataset of FAMA by Fortune magazine to measure CSR (McGuire, Sundgren, and Schneeweis 1988). More specifically, in ranking the America’s Most Admired Corporations each year, FAMA polls more than 10,000 financial analysts, senior executives, and Wall Street investors from over 580 large companies (see Fortune 2005, p.68).

For each firm-year observation, CSR is rated using an interval scale ranging from 0 to 10, with 10 as the highest, when a firm is compared to its major competing companies in the industry. Studies in both marketing and strategy (e.g., Fombrum and Shanley 1990; Houston and Johnson 2000; McGuire et al. 1988) have reported evidence of reliability and validity of this data source. In particular, McGuire, et al. (1990, p. 170) note that “Fortune reputation is one of the most comprehensive and widely circulated surveys of attributes available. Both the quality and number of respondents are comparable or superior to the ‘expert panels’ usually gathered for such purposes.” Houston and Johnson (2000, p. 12) also acknowledge it as the “best secondary” data source.

Prior research has shown that there is a reverse causality concern between CSR and financial performance (e.g., McGuire et al. 1988). That is, a firm’s CSR affects its future performance, and a firm’s history of financial performance contributes to its current CSR involvement. We accommodate this concern by using the approach recommended by Roberts and Dowling (2002). Particularly, we regress CSR scores against firm financial performance (ROA) in the prior four
years and save the residual of this regression as the final measure of CSR. Because this residual is independent from financial performance, the reverse causality bias is no longer a concern.

Following Cho and Pucik (2005), we used the ratings of CSR for each firm in 2001, 2002, 2003 (but published in 2002, 2003, and 2004 due to one year lag in print) as three separate indicators of the latent construct of CSR. This approach of using measurement items with different time frames is also widely applied in the strategy (e.g., Li and Atuahene-Gima 2001) and personal selling and psychology literatures (Bluedorn 1982; Boles, Johnston, and Hair 1997; Johnston and colleagues 1990; Netemeyer, Maxham, and Pullig 2005).

**Measuring Corporate Abilities**

We do not regard corporate abilities simply as a uni-dimensional construct. Instead, we consider two specific corporate abilities—product quality and innovativeness capability (Gatignon and Xuereb 1997; Rust et al. 2002; Zeithaml 2000). In our view, both innovativeness and product quality can represent the dimensions of “corporate ability” proposed by Brown and Dacin (1997). While product quality refers to its ability to “exploit” the capabilities of products already in the marketplace (Cho and Pucik 2005; March 1991), innovativeness represents a firm’s ability to “explore” new market possibilities in terms of developing new products (Kim and Mauborgne 1997; Kleinschmidt and Cooper 1991). In addition, commitment to the quality of existing products is essential for keeping a firm’s current customers happy, whereas innovation is essential for reaching new customer bases and catering to ever-changing customer needs.

Formally, product quality can be defined as the minimum condition or the threshold of product attributes that a firm has to meet when offering its products/service in competitive markets (Rust et al. 2002; Vargo and Lusch 2004; Zeithaml, Parasuraman, and Berry 1990). Prior studies have established that a firm’s ability to provide superior product/service quality is
critical for its long term survival and success (e.g., Buzzell, Gale, and Sultan 1975; Mittal et al. 2005; Rust et al. 2002).

In a similar fashion to CSR, product quality was measured by FAMA ratings in 2001, 2002, 2003 (but published in 2002, 2003, and 2004) as the underlying indicators. Again, because of the reverse causality concern between financial performance and FAMA ratings, we control for this bias and obtain clean measures for product quality and innovativeness capability by employing the same residual approach as in the case of CSR (e.g., Roberts and Dowling 2002).

Innovativeness capability is defined as a firm’s ability to apply its internal knowledge stock to produce new technology, new products/services, and other new fronts (Drucker 1993; Griffin and Hauser 1996). According to exploration learning theory (March 1991), innovation is also critical for the survival and success of organizations because dynamic markets constantly shake out those players who lack capabilities to explore new market opportunities (Gatignon and Xuereb 1997; Schumpeter 1934). Similar to product quality, we measured the latent variable of a firm’s innovativeness capability by using its Fortune ratings in 2001, 2002, 2003 years from FAMA (but published in 2002, 2003, and 2004) as three separate indicators underlying this construct. Prior research has employed this data source to measure companies’ innovativeness capability (Cho and Pucik 2005).

**Measuring Customer Satisfaction**

We used the American Customer Satisfaction Index (ACSI) database to measure customer satisfaction. In the marketing literature, ACSI has been shown as a reliable source of measuring customer satisfaction. Several studies employed this database to assess overall customer satisfaction of total purchase and consumption experience at the firm level (e.g., Anderson, Fornell and Mazvancheryl 2004; Fornell et al. 2006; Gruca and Rego 2005; Mithas, Krishnan,
and Fornell 2005b; Mittal et al. 2005). This ACSI dataset is developed and maintained by the National Quality Research Center at the University of Michigan. It has data for nearly 200 Fortune large companies that span all major economic sectors and comprise about 43% of the US economy. To obtain ACSI data, more than 50,000 household consumers (actual product users) of these large firms are polled on a quarterly basis. Each valid respondent has passed screening questions related to predefined purchase and consumption time periods. ACSI uses an interval scale ranging from 0 to 100, with 100 as the highest level of customer satisfaction.

Based on the multiple-items multiple-constructs criteria, ACSI is a reliable data source because it employs the same survey questionnaire, random sampling, and estimation modeling across firms and years (Fornell and colleagues 1996; Fornell et al. 2006; Mithas, Krishnan, and Fornell 2005b). A comprehensive test of the validity and reliability of this satisfaction measure can be found in Fornell and colleagues (1996). In parallel to CSR, innovativeness capability, and product quality, we treat customer satisfaction as a latent variable and measure it by using its ACSI ratings in 2002, 2003, and 2004 as three separate indicators.

Measuring Market Value

We have two separate measures of market value at the firm level across years: Tobin’s q and stock return. We followed prior marketing studies (Lee and Grewal 2004; Rao, Agarwal, and Dahlhoff 2004) to calculate Tobin’s q for each firm–year observation.³ In addition, following Jacobson and colleagues (Aaker and Jacobson 1994, 2001; Mizik and Jacobson 2003), we derive the measure of stock return using the COMPUSTAT and CRSP databases.⁴ Rather than using a simple year-end stock price, we utilized a more conservative measure of stock price—the average of the end of the four quarters of stock prices—when calculating Tobin’s q and stock return (Lee and Grewal 2004). We then utilized the derived three-year average (2002, 2003, and
2004) of Tobin’s q and stock return as observed measures for market value. Compared to market value, the predicting variables of CSR, innovativeness capability, and product quality were all lagged by one year to be more precise on the specific direction of causality and to reduce the possibility of endogeneity bias (Murthi et al. 1996; Rust, Moorman, an Dickson 2002).

**Measuring Control Variables**

The data for control variables such as R&D intensity, firm size, competition intensity, ROA are obtained from COMPUSTAT, and advertising intensity is from CMR. More specifically, R&D intensity is the ratio of R&D spending to total assets. We control for the influence of R&D expenditures on performance because a firm’s R&D intensity enhances innovation activities and investors’ evaluations of the firm (Chauvin and Hirschey 1993; McGuire, Sundgren, and Schneeweis 1988; Gruca and Rego 2005).

Advertising intensity is the ratio of reported advertising spending to total assets. Because COMPUSTAT has many missing data points for firm advertising expenditure, we employ the CMR database for advertising spending (Rao, Agarwal, and Dahlhoff 2004). We control for the influence of advertising expenditures on performance because intense advertising promotes customer awareness, brand equity, as well as sales revenues (e.g., Joseph and Richardson 2002; Morgan and Rego 2006).

Firm size is the log of number of employees. We control for the influence of firm size because large firms may have more resources and thus enjoy economies of scale. But small firms may have higher strategic flexibility when seeking entrepreneurial rents (Dutta et al. 1999; Rao, Agarwal, and Dahlhoff 2004).

Strategic focus is the number of business segments in which the firm operates (Rao, Agarwal, and Dahlhoff 2004). This variable is directly available from the menu choice at the Compact
Disclosure (CD-ROM), which defines it as “the number of unique business segments of an individual company.” We control for this influence due to possible diversification effects. That is, more diversified firms may have a faster asset turnover rate and exhibit economies of scope. However, highly diversified firms may lack focus in the highly segmented, competitive marketplace and thus experience negative returns (Fombrum and Shanley 1990; Gruca and Rego 2005).

Competition intensity is measured by using the Herfindahl concentration index derived from COMPUSTAT. Following prior work (Grace and Ergo 2005; Mithas, Krishnan, and Fornell 2005a), we calculated this concentration index at the primary four digit industry level of Standard Industrial Classification codes (which has been replaced by the North American Industry Classification System) for each firm–year observation. We used this covariate to control for impact of industry competition level (Rao, Agarwal, and Dahlhoff 2004).

Finally, we controlled for the influence of ROA in predicting stock return and Tobin’s q (Chauvin and Hirschey 1993). Particularly, ROA is measured as the ratio of net income after extraordinary items to book value of total assets derived from COMPUSTAT. We used the average of the 2002, 2003, and 2004 data points as the measure of ROA. We included ROA as a covariate variable because of the impact of financial information on the stock market (Chauvin and Hirschey 1993; Erickson and Jacobson 1992). Table 2 presents the summary statistics for all variables considered in this study.

Despite having these stringent controls, in light of our moderation hypotheses, a lingering issue is whether there are systematic industry differences between firms that are rated high on product quality (and/or innovativeness) and those that are rated low. A close examination of the top and bottom firms on the dimensions of product quality and innovativeness allays this
concern. We find that both the top and bottom firms in terms of their innovativeness/product quality ratings cover a variety of industries such as retail, services and manufacturing. More specifically, top innovativeness firms include Apple, Google, P&G, FedEx, Nike, and Target, etc., while bottom innovativeness firms include United Airlines, Dillard’s, Kmart, and Qwest communications, etc., according to Fortune’s large-scale survey data in 2005. In other words, neither the low innovativeness nor the high innovativeness firms are dominated by particular industry types.

Merged Final Dataset

We merged data from these different archival sources and obtained an unbalanced panel time-series, cross-sectional data consisting of 452 firm-year observations across 113 firms for the 2001-2004 time periods. However, one year’s data is lost, because we employed the lagging process (2001-2003 for CSR, product quality, and innovativeness; 2002-2004 for customer satisfaction, Tobin’s q, and stock return) to reduce the endogeneity bias and reverse causality concerns as described earlier. Thus, we were able to use 339 data points for hypotheses testing. This merged dataset includes individual firms in various industries ranging from durables (e.g., automobiles, household appliances, and personal computers), nondurables (e.g., cigarettes and athletic shoes, services like airlines, hotels, and utilities), to retail (e.g., department and discount stores as well as supermarkets), and others. Although FAMA has ratings of CSR, innovativeness capability, and product quality for about 580 firms (Cho and Pucik 2005; Fortune 2005) and ACSI has data on around 190 firms/brands (Fornell et al. 1996, 2006; Gruca and Rego 2005; Morgan and Rego 2006), we were not able to obtain a larger sample of firms in the merged final dataset. This is because many firms included in Fortune’s source are not represented in the ACSI source, and because the same firm may have several brands in ACSI (Anderson, Fornell and
Mazvancheryl 2004). We also tried to search other relevant secondary sources (Standard & Poor’s industry reports, company annual reports, Compact Disclosure, and Moody’s report) to cross validate our final dataset spanning the period from 2001 to 2004.

It should be noted that COMPUSTAT does not have complete data points for all variables. For example, because COMPUSTAT does not require companies to report their R&D investments (volunteered responses only; see Joseph and Richardson 2002), we found that over 40% observations for the control variable of R&D are missing across the years. Before testing the hypotheses, we control for the covariates using the same approach applied in prior studies (e.g., Ahearne, Bhattacharya, and Gruen 2005; Pan, Ratchford, and Shankar 2002). Particularly, a linear regression was run with all control variables (firm-level and industry-level) as independent variables and Tobin’s q as the dependent variable. The unstandardized residuals from this regression are saved and then used as the surrogate for Tobin’s q in all SEM models. Similarly, this approach was also applied in order to obtain the surrogates for stock return. Next, we present the measurement model and data analysis results.

ANALYSES AND RESULTS

Measurement Model Results

Following Anderson and Gerbing (1988), we employ confirmatory factor analysis (CFA) to test the validity of the measures. Overall model statistics show that the $\chi^2$ for the model is 90.73 (d.f.=48, p>.05), and the comparative fit index (CFI), goodness-of-fit index (GFI), and root-mean-square error of approximation (RMSEA) are satisfactory (.94, .92, and .06, respectively).

As reported in Table 3, the CFA results lend some support for the convergent validity for all the measures, because all estimated loadings of indicators for the underlying constructs are significant (i.e., smallest t-value =6.53, p<.05). The Cronbach alpha of the constructs exceeded
the 0.7 threshold (Nunnally 1978). The minimum reliability of these measures is .85, as reported. In addition, the average variance extracted (AVE) across the constructs exceeds the 0.5 benchmark (see Fornell and Larcker 1981). As shown in Table 3, the smallest AVE of the constructs is .72. The data also supported discriminant validity of the measures. We examined pairs of measures using the constrained model and unconstrained model in a series of chi-square difference tests (Anderson and Gerbing 1988). The test results consistently indicated that for each pair of constructs, the unconstrained models fit the data better than their constrained counterparts, suggesting discriminant validity. In addition, we compared the estimated AVE of each measure to the squared correlation between measure pairs (Fornell and Larcker 1981). In all cases, we find that the AVEs exceed the squared correlations, further confirming the discriminant validity of the constructs.

**Results for the Mediating Role of Customer Satisfaction**

In testing the mediating role of customer satisfaction we used structural equation modeling (SEM) to explicitly consider the possible bias of measurement error on path estimates. Consistent with the procedures in psychology (e.g., Holmbeck 1997) and marketing (Andrews et al. 2004; Handelman and Arnold 1999; Selnes and Sallis 2003), our SEM modeling not only accounts for measurement error, but also allows for a comprehensive test of hypotheses related to mediation, moderation, and mediated moderation.

**H1-H2: The direct and mediation effects in the CSR—satisfaction—market value linkage.**

Table 4 reports the results of SEM models. H1 predicts that CSR positively affects customer satisfaction. Model 1 examines this prediction and its result is statistically significant, supporting H1. The significance of the reported SEM path estimates is assessed through a bootstrapping
approach with 1000 resamples. As indicated by the overall indexes of CFI, GFI, and RMSEA, model 1 fits the data well.

H₂ predicts that CSR positively influences a firm’s market value and that customer satisfaction mediates this influence. To establish the existence of this mediation effect, four conditions should hold (Andrews et al. 2004): (1) the predictor variable (CSR) should significantly influence the mediator variable (customer satisfaction), (2) the mediator should significantly influence the dependent variable (market value), (3) the predictor (CSR) variable should significantly influence the dependent variable (market value), and (4) after controlling the mediator variable (customer satisfaction), the impact of the predictor (CSR) on the dependent variable (market value) should be no longer significant (for full mediation) or be reduced in strength (for partial mediation) (Baron and Kenny 1986, p.1177).

As presented in Table 4, the first two conditions are met by Model 1. That is, CSR affects customer satisfaction. Also satisfaction significantly affects both Tobin’s q and stock return, which is consistent with existing studies (Anderson, Fornell and Mazvancheryl 2004; Bolton and Drew 1991; Fornell et al. 2006). The third condition is qualified by Model 2, where the predictor variable of CSR affects market value in terms of Tobin’s q and stock return. As shown in Table 4, Model 2 does not include the mediator of customer satisfaction, and appears to fit the data reasonably well. The fourth condition holds if the effects of CSR on market value become insignificant or less significant after including the mediator of customer satisfaction. Results in Model 3 (no-mediation model in Table 4) show that the inclusion of customer satisfaction diminishes the strength of the effect of CSR on firm market value. In fact, the main effects of CSR on both Tobin’s q and stock return are no longer significant.⁵ Thus, customer satisfaction seems to fully mediate the direct impact of CSR on firm market value (though not fully mediate
the interaction effects between CSR and corporate abilities on market value as detailed next). As such, the data provide strong support for H2, that CSR increases a firm’s long-term financial performance via the mediator of customer satisfaction.6

Results for the Moderating Role of Corporate Abilities

H3: The moderating effects of corporate abilities. In H3 we predict that corporate abilities such as innovativeness capability and product quality moderate the impact of CSR on market value. Table 5 reports the hierarchical SEM results related to moderation effects. Following Aiken and West (1991) we mean-centered CSR, innovativeness capability, and product quality variables before generating the interaction terms, and then added the interaction terms hierarchically from Model 2 to Model 3.7 The results in Table 5 show that the interaction term of CSR x PQ significantly affects both Tobin’s q and stock return, although the interaction term of CSR x IN only affects Tobin’s q.

To facilitate the interpretation of the moderating effects, Figure 3a illustrates the relationship between CSR and Tobin’s q for firms with low or high innovativeness capability (see Aiken and West 1991, p.12-14). Clearly, Figure 3a suggests that firms with low innovativeness capabilities generate negative market value from CSR, while firms with high innovativeness generate positive market value from CSR. However, as shown in Figure 3b, although firms with high product quality generate positive market value from CSR (the upward sloping line), firms with low product quality seem not to be penalized in terms of generating market value from CSR (the rather flat line). As such, overall, H3 is supported when using innovativeness capability as the measure of corporate abilities, but only partially supported when using product quality as the measure of corporate abilities.

Results for the Mediating Role of Customer Satisfaction in the Moderated Relationships
**H₄: The mediated moderation effects.** In H₄ we predict that customer satisfaction mediates the moderated relationships in H₃. Although testing this combination of mediation and moderation is somewhat complicated, Baron and Kenny (1986, p. 1179) recommend a practical approach. In essence, it is similar to the four conditions of mediation described above, but requires entering the interactions items (CSR x innovativeness capability and CSR x product quality) rather than the main effect of CSR. More specifically, to establish mediated moderation, four specific conditions must be met: (1) the interaction variables (CSR x innovativeness capability and CSR x product quality) should significantly influence the mediator (customer satisfaction), (2) the mediator should significantly influence the dependent variable (market value), (3) the interaction variables (CSR x innovativeness capability and CSR x product quality) should significantly influence the dependent variable (market value), and (4) after controlling for the mediator variable (customer satisfaction), the impact of the interaction variables (CSR x innovativeness capability and CSR x product quality) on the dependent variable (market value) should be no longer significant (for full mediation) or reduced in strength (for partial mediation) (Baron and Kenny 1986, p.1179). Following this advice, prior studies in both strategy (Shin and Zhou 2003) and marketing (Andrews et al. 2004; Handelman and Arnold 1999) have tested hypotheses combining mediation and moderation.

Because conditions 2 and 3 are met as discussed previously when testing H₁-H₃, we only need to check for conditions 1 and 4. The significant paths from these interaction terms to satisfaction in Model 1 (Table 4) suggest that the first condition is also met. In addition, entering the mediator of customer satisfaction indeed decreases the impact of these interaction terms from model 2 to model 3 in Table 4. Particularly, the impact of CSR x IN on Tobin’s q is no longer significant, suggesting full mediation (but not for the case of stock return, where the coefficients
in both model 2 and 3 are insignificant). Also, the impact of CSR x PQ on both Tobin’s q and stock return is diminished (but still significant), indicating partial mediation. Thus, these results suggest that the moderation relationships in H3 are only partially mediated by customer satisfaction, thereby supporting H4.8

**Rival Models and Alternative Explanations**

We conducted additional analyses and ruled out several competing explanations. Because the results reported above suggest partial mediation, we fit a number of additional SEM models with different partial mediation effects (step-by-step adding/removing individual paths from the predictive variables of CSR, innovativeness, and product quality to the predicted variables of Tobin’s q and stock return). The path estimates of the best-fit partial mediation model are reported in Figure 2 and the last column (Model 4) in Table 4. An examination of this figure suggests three insights. (1) Although the main effect of CSR is fully mediated by customer satisfaction, CSR does have an interaction effect with product quality that is not fully but rather partially mediated by customer satisfaction (in other words, this interaction effect between CSR and product quality directly influences Tobin’s q and stock return). (2) A firm’s product quality and innovativeness both have direct impact and indirect (through customer satisfaction) influence on Tobin’s q performance, which is consistent with prior literature (Dutta, Narasimhan, and Rajiv 1999; Fornell et al. 1996; Rao, Agarwal, and Dahlhoff 2004). And (3) several alternative explanations are rejected, including the conjectures that the impact of product quality on market value is fully mediated by satisfaction and that innovativeness capability influences only firm performance but not intermediate outcomes such as customer satisfaction.

Furthermore, we ruled out several rival models. For example, as reported in Table 4, our SEM results suggest that the partial mediation SEM model 4 fits the data better than the full
mediation SEM model 1 ($\chi^2_{\text{diff}} = 29.48$, d.f.\_diff = 5, p<.05), and that the full mediation SEM model 1 fits the data better than the non-mediation SEM model 3 ($\chi^2_{\text{diff}} = 17.05$, d.f.\_diff = 4, p<.05). Another criterion for SEM model comparison is the number of significant parameters (Morgan and Hunt 1994; Selnes and Sallis 2003). We find that the rival models with full mediation and non-mediation have generated fewer significant path estimates. Thus, our hypothesized partial mediation model fits the data better than competing models in terms of both the relative predictive power of the overall model as well as the relative number of significant path estimates.

DISCUSSION

How is CSR related to firm market value and why do CSR initiatives result in financial gains for some firms but losses for others? Our study suggests that the answer to these questions is two-fold: (1) CSR affects market value partially via the mediator of customer satisfaction and (2) returns to CSR can be both positive and negative depending on the levels of a firm’s corporate abilities. Based on a comprehensive secondary dataset, our results show that customer satisfaction plays a significant role in the relationship between CSR and firm market value, and that a proper combination of both CSR initiatives and product-related abilities is important. These results have implications for both marketing theory and practice.

Before presenting the implications, we note that FAMA’s survey-based measure of CSR is an important limitation of this paper. As we detailed in the measures section, the FAMA ratings are one possible source of CSR information and obviously restrict our analysis and conclusion. To inspire greater confidence in our findings, future research should also attempt to replicate and extend our analysis with alternative measures of CSR. For example, measuring direct spending on CSR initiatives with a large-scale record of CSR monetary expenses across many firms (if
obtained reliably from third-party agencies or firms’ own reporting; see Margolis and Walsh
2003; Orlitzky, Schmidt, and Rynes 2003; Tsoutsoura 2004) would put CSR at par with
measures such as advertising and R&D investments. A clear advantage of this direct approach is
that marketing researchers would be able to compare and contrast the financial returns to these
different types of spending in an ideal way (i.e., by uncovering the relative, incremental, and
synergistic impact of CSR, advertising, and R&D on a firm’s market value).

Implications for Marketing Theory

Although CSR has been linked to customer responses (e.g., Bhattacharya and Sen 2004;
Brown 1998; Brown and Dacin 1997), this was the first marketing study to explore the
relationship between CSR and market value. Our work extends the research stream on the
outcomes of CSR from perceived customer responses based on hypothetical lab experiments
toward eventual financial returns based on large-scale secondary data. It provides a direct answer
to the calls for efforts that link CSR to a firm’s stock performance (Berens et al. 2005; Luo and
Donthu 2006; Rust et al. 2004). Indeed, Brown and Dacin (1997, p. 68) note that “we do all good
things … but we don’t know if we get anything out of it.” The findings surrounding the
significant influence of CSR on a firm’s Tobin’s q and stock return attest to the financial value of
CSR programs as strategic initiatives. Thus, future marketing research should examine a wider
spectrum of the benefits of CSR, ranging from perception-based outcomes to archive-based
financial returns.

A more important contribution of this research is that we identified a route through which
CSR is related to a firm’s market value. Our results of the significant CSR → customer
satisfaction → market value causal chain suggest that a firm’s CSR helps build a satisfied
customer base and that customer satisfaction partially mediates the financial returns to CSR. This
mediating role of customer satisfaction is important for two reasons. First, it extends the CSR literature by uncovering a hitherto ignored outcome (i.e., customer satisfaction) of CSR. Although prior works have noted that CSR should affect various kinds of consumer responses, customer satisfaction has not yet been explicitly examined as one of these outcomes. Second, it also extends the research stream on customer satisfaction (Anderson, Fornell and Mazvancheryl 2004; Fornell 1992) by uncovering the antecedents (i.e., CSR) of customer satisfaction. Even though an emerging research strand looked at the outcomes of customer satisfaction (Anderson, Fornell, and Rust 1997; Anderson, Fornell and Mazvancheryl 2004; Fornell et al. 2006; Mittal et al. 2005), efforts have rarely been undertaken to examine factors that increase or decrease customer satisfaction. Overall, this chained relationship from CSR to customer satisfaction to a firm’s market value suggests that achieving customer satisfaction represents one of the underlying pathways via which the financial potential of CSR is realized and capitalized. The notion that the extent to which CSR is beneficial to the firm is determined by how much CSR builds a satisfied customer base helps usher future research into a more precise direction, when evaluating the ultimate financial impact of CSR.

Furthermore, our findings suggest that the financial returns to CSR are not the same but rather different across firms with different internal situations. Particularly, our results that the positive financial returns to CSR are amplified in firms with higher product quality indicate that a proper mix or combination of external CSR initiatives and internal corporate abilities likely generates and sustains financial value for the firm. In this sense we provide empirical evidence for the resource-based view (RBV). That is, in support of the RBV (Barney 1986; Penrose 1959; Wernerfelt 1984) and marketing capability literatures (Day 1994; Vorhies and Morgan 2005), we find that a firm’s sustainable competitive advantages indeed result from a complementary bundle
of valuable internal (corporate abilities) and external assets (CSR initiatives). Thus, future research is encouraged to go beyond the simple, universal effects of CSR and explore contextual situations that moderate the associations between CSR and market value.

Finally, existing marketing research has been quite enthusiastic about the positive benefits of CSR, but, unfortunately, has ignored its potential negative outcomes (see Sen and Bhattacharya 2001 for an exception). Our research indicates that CSR can harbor a dark side. That is, in firms that are less innovative in nature, CSR may decrease customer satisfaction levels and ultimately reduce the firm’s financial returns. Indeed, this finding of the negative returns to CSR in the low innovativeness condition can be understood from the perspective of competitive signaling theory (Caves and Porter 1977; Stigler 1961).

Particularly, this theory holds that firms with low (high) innovativeness competency may serve as a cue of inferior (superior) competitiveness to corporate stakeholders, thus signaling weaker (stronger) future performance to financial investors in the marketplace. In light of this signaling theory, we conjecture that although CSR may help obtain institutional legitimacy (i.e., via being socially responsive and supportive), firms that are less innovative in meeting customer needs may send a negative signal of incorrect strategic choice and misguided firm priorities in the market that contaminates and degrades this legitimacy (DiMaggio and Powell 1983; Scott 1987). The resulting costs of signaled non-competitiveness in the market may outweigh the benefits of CSR, consequently leading to negative market value. Conceivably, CSR activities in firms with low asset-specificity may be viewed by consumers as opportunistic (i.e., manipulative and misleading with disguised selling purposes), which leads to CSR backfire and consumer boycotts (Sen and Bhattacharya 2001; Smith 2003). It is also possible that firms low in corporate abilities likely invest in less influential and pure cost-adding CSR activities such as cash
donations. In contrast, firms high on corporate abilities implement “smarter” CSR strategies that are relatively idiosyncratic and thus generate more long-term financial benefits. We call for further investigation of possible explanations of the observed asymmetric returns to CSR.

**Implications for Marketing Practice**

Marketers have been pondering the questions whether companies should take a more strategic tack on CSR, and what “doing good” can do in contributing to their bottom-line (Brown and Dacin 1997; Sen and Bhattacharya 2001). These are important inquiries that have strong managerial implications, because prudent practitioners are facing tough choices in allocating the limited resources and in prioritizing different strategic initiatives (see a quote below).

“Even evangelists such as Nardelli [CEO of Home Depot] stop short of saying that companies should divert money from other strategic priorities to support corporate social responsibility. But at corporations like Home Depot and GE, good works are being bred into Big Business. ‘It’s just the right thing to do,’ says Nardelli. Good PR? Sure. Money well spent? The goodwill refund could be in the mail.” [BusinessWeek 2005b, August 15]

Our finding that CSR contributes positively to market value suggests that managers can obtain competitive advantages and reap more financial benefits from investing in CSR. To be more specific, we calculated that for a typical company in our sample with an average market value of approximately $48 billion, one unit increase of CSR ratings would result in about $17 million more profits on average in subsequent years, a substantial increase of financial returns.

Indeed, companies ought to realize that CSR initiatives can represent a robust public relations strategy, particularly in the current market environment where stakeholders such as customers (and employees) may have strong social concerns. Creative executives at Home Depot, IBM, Wal-Mart, GE, and CISCO are engaging in “smarter corporate giving” than merely writing checks (BusinessWeek 2005a, p. 68). For example, Home Depot donated 2 million hours to various types of community services, while IBM gave away more than 100 specialized business applications (i.e., translation server changing English emails to Spanish messages) in heavily
Latino schools and community groups. Closer examination of the CSR portfolios of some of the top and bottom rated firms in terms of CSR sheds additional light on how managers may derive positive market returns from CSR and/or avoid negative returns. That is, many of the firms at the top of the CSR heap (e.g., UPS, Alcoa, Verizon Communications) seem to have integrated CSR quite tightly with their business strategies. For example, these firms invest in a host of employee-related initiatives such as education and safety that engender identification and instill pride among employees, all of which influence customer satisfaction and market value. Moreover, these firms also have employee volunteerism programs whereby employees are visible contributors to the local communities. This helps capture customers’ favorable attention.

On the other hand, firms at the bottom of the CSR heap such as Toys ‘R’ Us and Mitsubishi Motors seem to be perceived as “irresponsible” by dint of mistreating workers and/or concealing product defect information. Such negative actions tend to get media coverage in today’s scrutiny-intensive world. Viewed in conjunction with our results, these examples suggest that not only should managers get their house in order to avoid negative returns to CSR, but they also ought to adopt an integrated, strategic perspective and allocate resources to CSR programs for superior market performance. After all, “it is no longer an option [for companies] to sit on the sidelines” (Grow 2004, p.77; Smith 2003).

Our findings that CSR increases customer satisfaction, which, in turn, leads to positive financial returns may improve managers’ understanding of why CSR matters. Particularly, marketers may have already known that CSR helps promote external social benefits such as public goodwill outside the firm (Houston and Johnson 2000; McGuire et al. 1988), which can polish a firm’s reputation in the presence of corporate scandals or regulatory scrutiny. In addition, CSR can boost internal employee morale and commitment within the firm (Godfrey
and attract more capable young talents who are trying to “marry their work and nonwork lives” (Grow 2004; see detailed benefits of CSR and cause-related marketing in Varadarajan and Menon 1988, p.60). Importantly, we suggest an additional insight to managers. That is, CSR initiatives also influence customers’ satisfaction levels, which lead to higher market returns ultimately. To managers, this means that building satisfaction is one of important intermediate steps in converting CSR into financial gains.

However, our findings of the boundary conditions of the returns to CSR suggest that managers should not ignore the inherent traps and pitfalls of CSR. For example, we show that firms are not always able to benefit from CSR actions. When companies are not innovative, our findings indicate that CSR actually decreases their market return. Thus, CSR seems to be a double-edged sword; without proper support of corporate abilities like innovativeness, it can be harmful to firm performance. Indeed, when “doing better at doing good” (Bhattacharya and Sen 2004), it is important for managers to consider CSR initiatives in light of firm’s corporate abilities. Particularly, less innovative companies may, in fact, be better off financially by avoiding CSR actions. Managers ought to understand that a misalignment of CSR with internal factors can be detrimental and lead to decreased market value. As a consequence, marketers need to carefully examine the organizational context in totality before implementing CSR initiatives.

In conclusion, this research suggests a more nuanced understanding of the market returns to CSR initiatives. Our findings seem to indicate that doing good has complicated implications and that customer satisfaction plays an important mediating role in the relationship between CSR and firm market value.
Endnotes:

1. Our focus here is on the moderating role of corporate ability (CA) in the CSR—performance link, rather than the direct relationship between CSR and CA. That is, we do not investigate whether CSR does or does not directly impact/relate to innovativeness and product quality (i.e., CA related constructs) given the conflicting literature. On the one hand, Brown and Dacin (1997, p.68) contend that “CSR associations are often unrelated to the company’s abilities in producing goods and services.” On the other hand, it is possible that a firm’s innovation is CSR-oriented (e.g., environmentally responsible packaging), and CSR initiatives may impact product quality perceptions.

2. Cho and Pucik (2004, 2005) found strong support (construct and criterion related validity) for using multi-year ratings from Fortune magazine as indicators of the underlying latent variable. McGuire et al. (1988) also employed single year CSR ratings from Fortune as the measure of CSR.

3. Rao, Agarwal, and Dahlhoff (2004, p. 130) provide a detailed function on how to derive Tobin’s q. That is, $q = \frac{(\text{share price} \times \text{number of common stock outstanding} + \text{liquidating value of the firm’s preferred stock} + \text{short-term liabilities} - \text{short-term assets} + \text{book value of long-term debt})}{\text{book value of total assets}}$.

4. Particularly, Aaker and Jacobson (2001, p. 489) and Mizik and Jacobson (2003, p. 71) suggest a detailed function on how to calculate stock return. That is, $\text{stock return} = \frac{(\text{current year’s share price} \times \text{number of common stock outstanding} + \text{dividends} - \text{previous year’s share price} \times \text{number of common stock outstanding})}{(\text{previous year’s share price} \times \text{number of common stock outstanding})}$.

5. We also employed OLS to test the mediation hypotheses. The results are consistent and suggest strong support for the mediation results of CSR. However, because SEM offers at least a weak test of causal pathways and easily compares different rival models but OLS does not account for measurement error, we report the results based on SEM modeling for all hypotheses in this study.

6. We also tested the hypotheses with single year items for the predicting and dependent variables (rather than the reported multiple years-based separate items). The results are similar in pattern and further support the hypotheses.

7. Multicollinearity bias was not a severe problem. The highest variance inflation factor was 3.06 and the largest condition index was 3.51. Note that in a mean-centered interaction effects model, the estimated coefficient of one independent variable is obtained under the assumption of the mean value of other variables. Moreover, the entry of the interactions terms for CSR, innovativeness capability, and product quality explained significantly more variance of market value beyond the main effects, adding 6% more variance for Tobin’s q and 5% more variance for stock return.

8. Note that Baron and Kenny (1986, p.1179) labeled the relationships we tested as “mediated moderation,” which means controlling the mediator makes the influences of CSR x IN and CSR x PQ no longer significant or less significant. This is different from “moderated mediation,” where the moderators should also moderate the mediator-performance linkage (Baron and Kenny 1986, p.1179). A pictorial illustration of the differences between “mediated moderation” and “moderated mediation” can be found in Handelman and Arnold 1999, p. 38).
Figure 1
Conceptual Framework

Note: Bolded paths are hypothesized relationships.
Unbolded paths have been studied previously (e.g., Anderson, Fornell, Rust 1997; Anderson, Fornell and Mazvancheryl 2004; Fornell et al. 2006; Griffin and Hauser 1996; Mithas, Krishnan Fornell 2005b).
Dashed paths indicate that the depicted relationships are partially mediated by customer satisfaction (CS).
Figure 2
SEM Results of Best Fit Partial Mediation Model

Note: Bolded paths are hypothesized relationships. Dashed paths are supported partial mediation results. All SEM path coefficients significance was assessed through a bootstrapping approach with 1000 resamples.
FIGURE 3
The Moderated Effect of CSR on Market Value

Figure 3a
Tobin’s q

Figure 3b
Tobin’s q
### Table 1
Variables and Data Sources

<table>
<thead>
<tr>
<th>Variables</th>
<th>Definitions; Measures</th>
<th>Secondary Data Sources</th>
<th>Data Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate social responsibility (CSR)</td>
<td>Broadly defined as a company’s activities and status related to its perceived societal or stakeholder obligations; latent variable indicated by CSR scores in 2001 (published in 2002), 2002 (published in 2003), and 2003 (published in 2004)</td>
<td>FAMA</td>
<td>Interval from 0 to 10</td>
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<tr>
<td>Customer satisfaction (CS)</td>
<td>Defined as an overall evaluation of the post-consumption experience of products or services in the minds of customers; latent variable indicated by customer satisfaction scores in 2002, 2003, and 2004</td>
<td>ACSI</td>
<td>Interval from 0 to 100</td>
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<td>Product Quality (PQ)</td>
<td>Defined as the minimum condition or the threshold of product attributes that a firm has to meet when offering its products or service in competitive markets; latent variable indicated by quality of products/services scores in 2001, 2002, and 2003</td>
<td>FAMA</td>
<td>Interval from 0 to 10</td>
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<td>Innovativeness Capability (IN)</td>
<td>Defined as a firm’s ability to apply its internal knowledge stock to produce new technology, new products/services, and other new fronts; latent variable indicated by quality of products/services scores in 2001, 2002, and 2003</td>
<td>FAMA</td>
<td>Interval from 0 to 10</td>
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<td>Tobin’s q (TQ)</td>
<td>Stock price based measure of firm market value; observed variable based on the average of Tobin’s q in 2002, 2003, and 2004</td>
<td>CRSP COMPUSTAT</td>
<td>Ratio</td>
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<tr>
<td>Stock Return (SR)</td>
<td>Stock price based measure of firm market value; observed variable based on the average of stock return in 2002, 2003, and 2004</td>
<td>CRSP COMPUSTAT</td>
<td>Ratio</td>
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<td>Variables</td>
<td>Mean</td>
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<tr>
<td>1. Corporate Social Responsibility (CSR)</td>
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<td>2. Customer Satisfaction (CS)</td>
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<td>3. Innovativeness Capability (IN)</td>
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<td>.72**</td>
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<td>4. Quality of products (PQ)</td>
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<td>6. Stock Return (SR)</td>
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<td>7. Advertising Intensity</td>
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<td>9. Firm Size (log of asset)</td>
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<td>11. Competition Intensity</td>
<td>0.07</td>
<td>0.13</td>
<td>-0.04</td>
</tr>
<tr>
<td>12. ROA</td>
<td>3.68</td>
<td>9.87</td>
<td>.19**</td>
</tr>
</tbody>
</table>

* p< .05
** p< .01
### Table 3

**Results of Confirmatory Factor Analysis**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Factor Loading</th>
<th>t-Value</th>
<th>AVE</th>
<th>CR</th>
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<tbody>
<tr>
<td>Corporate social responsibility (CSR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CSR → CSR01</td>
<td>0.69</td>
<td>13.43</td>
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<tr>
<td>CSR → CSR02</td>
<td>0.71</td>
<td>13.55</td>
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<tr>
<td>CSR → CSR03</td>
<td>0.75</td>
<td>13.54</td>
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<tr>
<td>Innovativeness Capability (IN)</td>
<td></td>
<td></td>
<td>0.74</td>
<td>0.87</td>
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</tr>
<tr>
<td>IN → IN01</td>
<td>0.67</td>
<td>11.10</td>
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<tr>
<td>IN → IN02</td>
<td>0.68</td>
<td>11.16</td>
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<tr>
<td>IN → IN03</td>
<td>0.62</td>
<td>9.98</td>
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<tr>
<td>Product Quality (PQ)</td>
<td></td>
<td></td>
<td>0.76</td>
<td>0.91</td>
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</tr>
<tr>
<td>PQ → PQ01</td>
<td>0.78</td>
<td>13.39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PQ → PQ02</td>
<td>0.83</td>
<td>13.92</td>
<td></td>
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</tr>
<tr>
<td>PQ → PQ03</td>
<td>0.80</td>
<td>13.51</td>
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<tr>
<td>Customer satisfaction (CS)</td>
<td></td>
<td></td>
<td></td>
<td>0.72</td>
<td>0.85</td>
</tr>
<tr>
<td>CS → CS02</td>
<td>0.50</td>
<td>7.21</td>
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</tr>
<tr>
<td>CS → CS03</td>
<td>0.48</td>
<td>6.92</td>
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<td></td>
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</tr>
<tr>
<td>CS → CS04</td>
<td>0.46</td>
<td>6.53</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Note: all t-values are significant (p<.05). $\chi^2 = 90.73$ (d.f.=48, p>.05), the comparative fit index (CFI)=.94, goodness-of-fit index (GFI)=.92, and root-mean-square error of approximation (RMSEA) =.06. AVE=average variance extracted, CR=construct reliability.
<table>
<thead>
<tr>
<th>Model specifications</th>
<th>SEM Estimates</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>χ²</td>
</tr>
<tr>
<td>Model 1</td>
<td>362.10</td>
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<tr>
<td>Model 2</td>
<td>112.82</td>
</tr>
<tr>
<td>Model 3</td>
<td>391.58</td>
</tr>
<tr>
<td>Model 4</td>
<td>345.05</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Full Mediation Model 1</th>
<th>PV→DV Model 2</th>
<th>Non-Mediation Model 3</th>
<th>Partial Mediation Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR→TQ</td>
<td>0.14*</td>
<td>0.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN→TQ</td>
<td>0.10</td>
<td>0.10</td>
<td>0.11*</td>
<td></td>
</tr>
<tr>
<td>PQ→TQ</td>
<td>0.17**</td>
<td>0.14*</td>
<td>0.12*</td>
<td></td>
</tr>
<tr>
<td>CSR x IN→TQ</td>
<td>0.14*</td>
<td>0.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR x PQ→TQ</td>
<td>0.20**</td>
<td>0.15*</td>
<td>0.13*</td>
<td></td>
</tr>
<tr>
<td>CSR→CS</td>
<td>0.23**</td>
<td>0.23**</td>
<td></td>
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</tr>
<tr>
<td>IN→CS</td>
<td>0.20**</td>
<td>0.19**</td>
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<tr>
<td>PQ→CS</td>
<td>0.28**</td>
<td>0.26**</td>
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</tr>
<tr>
<td>CSR x IN→CS</td>
<td>0.12*</td>
<td>0.14*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR x PQ→CS</td>
<td>0.18**</td>
<td>0.18**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR→SR</td>
<td>0.13*</td>
<td>0.08</td>
<td>0.08</td>
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</tr>
<tr>
<td>IN→SR</td>
<td>0.08</td>
<td>0.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PQ→SR</td>
<td>0.11*</td>
<td>0.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR x IN→SR</td>
<td>0.10</td>
<td>0.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR x PQ→SR</td>
<td>0.18**</td>
<td>0.12*</td>
<td>0.11*</td>
<td></td>
</tr>
<tr>
<td>CS→TQ</td>
<td>0.25**</td>
<td>0.23**</td>
<td>0.22**</td>
<td></td>
</tr>
<tr>
<td>CS→SR</td>
<td>0.22**</td>
<td>0.21**</td>
<td>0.19**</td>
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</tr>
<tr>
<td>R²</td>
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<td>0.34</td>
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<td>0.32</td>
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<tr>
<td>CS</td>
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<td>0.34</td>
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<td>0.37</td>
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<tr>
<td>TQ</td>
<td>0.46</td>
<td>0.41</td>
<td>0.45</td>
<td>0.48</td>
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<tr>
<td>SR</td>
<td>0.38</td>
<td>0.34</td>
<td>0.37</td>
<td>0.39</td>
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</tbody>
</table>

* p < .05, one tail test
** p < .01, one tail test

Notes: ^a^ = results of the difference between Model 1 and Model 3. ^b^ = results of the difference between Model 1 and Model 4. Corporate social responsibility = CSR, customer satisfaction = CS, innovativeness capability = IN; quality of products = PQ, Tobin’s q = TQ, stock return = SR. The model 2 of PV→DV does not include the mediator of customer satisfaction. The model 3 of non-mediation effects includes the mediator of customer satisfaction.
Table 5
Hierarchical SEM Results

<table>
<thead>
<tr>
<th>Rival Models</th>
<th>(\chi^2)</th>
<th>d.f.</th>
<th>(\chi^2_{diff} (d.f._diff))</th>
<th>CFI</th>
<th>GFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1 (M1)</td>
<td>15.83</td>
<td>5</td>
<td>96.99** (54)(^a)</td>
<td>0.90</td>
<td>0.86</td>
<td>0.08</td>
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<tr>
<td>Model 2 (M2)</td>
<td>177.09</td>
<td>40</td>
<td>64.27** (19)(^b)</td>
<td>0.91</td>
<td>0.89</td>
<td>0.07</td>
</tr>
<tr>
<td>Model 3 (M3)</td>
<td>112.82</td>
<td>59</td>
<td>Compared base</td>
<td>0.92</td>
<td>0.91</td>
<td>0.07</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Direct Effects</th>
<th>Model 1</th>
<th>Direct Effects</th>
<th>Model 2</th>
<th>Moderated Effects</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR (\rightarrow) TQ</td>
<td>0.14*</td>
<td>0.12*</td>
<td>0.14*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN (\rightarrow) TQ</td>
<td>0.11*</td>
<td>0.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PQ (\rightarrow) TQ</td>
<td>0.17**</td>
<td>0.17**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR x IN (\rightarrow) TQ</td>
<td></td>
<td>0.14*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR x PQ (\rightarrow) TQ</td>
<td></td>
<td>0.20**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR (\rightarrow) SR</td>
<td>0.12*</td>
<td>0.13*</td>
<td>0.13*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN (\rightarrow) SR</td>
<td>0.08</td>
<td>0.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PQ (\rightarrow) SR</td>
<td>0.10</td>
<td>0.11*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR x IN (\rightarrow) SR</td>
<td></td>
<td>0.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR x PQ (\rightarrow) SR</td>
<td></td>
<td>0.18**</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R(^2)</th>
<th>TQ</th>
<th>0.30</th>
<th>0.35</th>
<th>0.41</th>
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<tbody>
<tr>
<td></td>
<td>SR</td>
<td>0.28</td>
<td>0.29</td>
<td>0.34</td>
</tr>
</tbody>
</table>

\(^*\) \(p<.05\), one tail test  
\(^**\) \(p<.01\), one tail test  
Notes: \(^a\) = results of the difference between Model 1 and Model 3;  
\(^b\) = results of the difference between Model 2 and Model 3.  
corporate social responsibility=CSR, customer satisfaction=CS, innovativeness capability=IN;  
quality of products =PQ, Tobin’s q=TQ, stock return=SR.
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Kotler, Philip and Nancy Lee (2004), Corporate Social Responsibility: Doing the Most Good for Your Company and Your Cause, John Wiley & Sons Inc.


