Is corporate social responsibility linked with firm performance? An alternative test

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ABSTRACT: Direct tests between corporate social responsibility (CSR) and firm performance (FP) have been argued to be a futile pursuit. Following this line of thinking, the present study sought to test an alternative model in understanding the CSR-FP relationship. Specifically, reputation and customer satisfaction are posited to be the mediational pathway by which CSR positively affects firm performance. Studying a sample of Australian business firms the findings suggest that CSR is positively linked with firm performance. However, the effect is indirect: reputation and customer satisfaction fully mediate the CSR-FP relationship. The results are provocative, suggesting that to reduce ambiguity surrounding the CSR-FP relationship scholars need to turn their attention to moderating and mediating variables. Discussion is given to these findings along with paths for future research.

Keywords: corporate social responsibility, customer satisfaction, firm performance, mediation, reputation, structural equation modeling, stakeholders.

In studying associations between corporate social responsibility (CSR) and firm performance (FP), much research assumes, and tests, direct linear relationships. This is a considerable assumption. According to Rowley and Berman (2000: 406), assuming direct linear relationships is “naïve” as many potential factors are likely to moderate or mediate the link. Similarly, McWilliams and Siegel (2000) suggest that the CSR-FP link has been misspecified in many existing studies because important contingent variables have been omitted from econometric models. We build upon the viewpoints of Rowley and Berman (2000) and McWilliams and Siegel (2000) to conduct an alternative CSR-FP test.

CSR has been theoretically argued to offer a number of business benefits, including maintaining the license to operate, risk reduction, efficiency gains, and tax advantages (Weber 2008). However, two of the most important expected business benefits of CSR are reputation enhancement and improved relations with customers, for example, through higher satisfaction (Schaltegger & Wagner 2006; Weber, 2008). At the same time, both a good reputation and high levels of customer satisfaction have been demonstrated to positively impact firm performance (Andersen et al 1994 & 1997; Kotha et al 2001; Roberts & Dowling 2002). Thus, the premise of our study is that CSR is important, but that the construct is important not from the perspective of influencing firm performance directly, but through an indirect relationship mediated by reputation and customer satisfaction. To explore our premise, the research questions in this study are as follows: 1) Are there conditions under which a firm’s socially responsible practices positively impact firm performance? and 2) Do reputation and customer satisfaction mediate the relationship between CSR and firm performance?
THEORETICAL DEVELOPMENT AND HYPOTHESES

CSR and firm performance

CSR is best described as activities and outcomes that respond to economic, legal, ethical, and discretionary responsibilities (Carroll 1979). An assumption is made that all firms have responsibilities as defined by Carroll (1979) and that they can address these responsibilities by doing nothing to doing much (cf. Wartick & Cochran 1985). Thus, when a firm demonstrates that it responds to Carroll’s (1979) four dimensions to a high degree, we assume the more proactive their CSR.

With respect to our theoretical premise, as demonstrated in the conceptual model (Figure 1), we posit that the link between CSR and firm performance is better understood by the mediating links of reputation and customer satisfaction. Studies have demonstrated the positive relationship between reputation and firm performance and between customer satisfaction and firm performance (e.g., Andersen et al 1994 & 1997; Kotha et al 2001; Roberts & Dowling 2002). This study builds upon this literature to propose that CSR is linked to both reputation and customer satisfaction and that the CSR-FP link exists because of the underlying process through reputation and customer satisfaction.

CSR and reputation

According to Brown and Logsdon (1999: 169), reputation is defined as “outsiders’ assessments about what the organization is, how well it meets its commitments and conforms to stakeholders’ expectations, and how effectively its overall performance fits with its socio-political environment.” Largely, reputation is a general attribute of firms and reflects the extent to which “stakeholders see firms as ‘good’ or not ‘bad’” (Roberts & Dowling 2002: 1078). Thus, a positive reputation indicates that a firm is highly esteemed or well regarded (Weiss et al 1999).

Underlying theory suggests that reputation formation can be broadly understood as a signaling process in which firms’ strategic choices and activities send signals to stakeholders (Heil & Robertson 1991; Robertson et al 1995; Weigelt & Camerer 1988); stakeholders in turn use these signals to form impressions or associations of these firms. CSR is increasingly relevant to strategic choices and strategic activities (Porter & Kramer 2006) and we argue is part of firms’ signaling processes. There are two principle means by which CSR is expected to positively shape
stakeholders’ assessment of firms, and therefore, a perceived ‘good’ reputation: substantive signaling actions and symbolic signaling actions.

Substantive signaling actions with respect to CSR are actions that are tangible, measurable and/or reflect visible expenditure of resources (Mahon 2002). For example, firms in Australia, the US, and other industrialized countries seek to differentiate themselves from competitors through expending resources in support of social causes or in capital projects that advance the goals of communities within which they operate (Birch 2002; Cone et al 2003). Firms taking this approach are using the discretionary dimension of CSR (Carroll 1979) to send signals to stakeholders that they are socially responsible; in turn, reputation is expected to be bolstered. Firms also seek to differentiate themselves by developing products that appeal to consumers in particular markets. They can do this by targeting highly visible social issues, for example, using hybrid vehicles to appeal to educated, environmentally aware people in the automobile market (McWilliams et al 2006). Here, firms signal to the market their sensitivity to stakeholder concerns over an issue such as climate change, by focusing on their economic responsibility (Carroll 1979). In doing so, a firm that exercises its economic responsibility, to respond to a social issue such as climate change, is engaging in reputation building activities.

Symbolic signaling actions with respect to CSR are perhaps less obvious and easy to identify. Symbolic signaling actions are actions where little to no resource commitments are made by firms. For example, at one point in the history of Gerber baby foods, allegations were made that glass was found in its products, which posed a serious danger to infants (Nash 1993). Gerber immediately recalled the product and investigated the problem. The findings suggested that extremely small traces of glass were found in the product but was a result of handling in transit and posed no danger whatsoever. Some time later, similar allegations were made. However, this time Gerber did not recall the product and cited the extensive research and findings of the first study. Customers, the media, and other stakeholders found Gerber’s argument acceptable, in part, due to the findings in the previous recall (Nash 1993), which follows Peloza’s (2006) concept of “reputation insurance” that can protect a firm’s image in times of crisis or threat. Here, Gerber did not expend resources but rather acted in a symbolic fashion, signaling to the market their moral credibility as a socially responsible company. They achieved this by highlighting past actions in a crisis situation while
demonstrating their ethical commitment. Following Carroll (1979), ethical responsibility is a key dimension of CSR and signals to stakeholders that a firm is seeking to avoid harm or social injury, respects peoples’ moral rights, and is serious about doing what is right and just.

To summarize, CSR activities provide visible signals from which stakeholders infer various positive characteristics of firms. CSR is, therefore, predicted to be a key mechanism by which a firm can build its reputation. Hence:

**Hypothesis 1:** CSR is positively associated with reputation.

**CSR and customer satisfaction**

Customer satisfaction is a cumulative, global evaluation based on experiences with firms over time and is a fundamental indicator of past, current, and future performance (Anderson et al 1994). As such, achieving high levels of customer satisfaction has become one of the most essential goals of firms and is an important focus of corporate strategy (Homburg et al 2005). To explore the CSR-customer satisfaction link, equity theory is used (Oliver 1997; Oliver & Swan 1989a & 1989b).

Stemming from social exchange theory (Adams 1965; Homans 1961), equity theory focuses on fairness, rightness or deservedness judgments individuals make in reference to what one party or another receives (Oliver 1997). The theory posits that in exchanges, if customers feel equitably treated – namely their input to the exchange is in balance with the output of the exchange – satisfaction is the result (Goodwin & Ross 1992; Oliver 1997). Hence, customers incur certain costs (inputs) in exchanges for a certain level of output from firms. According to Oliver and Swan (1989a & 1989b) and Bolton and Lemon (1999), equity is the customer’s reaction to these ratios of inputs to outputs – or fairness. Equity, in turn, affects a customers overall evaluation of the firm. With respect to this study, there are several ways CSR is expected to demonstrate equity towards customers and lift their satisfaction levels.

First, firms attempt to increase customer satisfaction by focusing on internal processes (Kaplan & Norton 2007). In a classic example, the retail giant Sears, Roebuck and Company, in an effort to turnaround their fortunes after several tumultuous years and declining customer satisfaction, developed and implemented the employee-customer-profit chain model (Rucci et al 1997). At the core of the model was improving employee learning and competencies through heavy investments in training and other actions (Rucci et al 1997; Westbrook 2000). Sears was eventually
able to improve the quality of exchanges between employees and customers, thereby lifting their perceived treatment, and ultimately its customer satisfaction and financial success. Maignan et al (1999) point out that firms are not legally required to offer training or make investments in employees such as Sears did; rather, training and investments in employees suggests a firm is demonstrating social responsibility (Cruz Déniz-Déniz & De Saá-Pérez 2003), particularly by fulfilling the discretionary dimension of CSR (Carroll 1979; Maignan et al 1999).

Second, customers seek value in the purchases they make (Zeithaml 1988). Following equity theory, perceived value is one way in which customers assess the fairness or equitable treatment given by a firm in exchanges. In the case of Volvo Cars, in the mid-1990s, the company embarked on a strategy to improve its customer satisfaction. Rather than focus on customer service like Sears, Volvo’s main emphasis was on improving product quality (Dahlsten 2003). After a series of quality initiatives leading to new model development and enhanced features across a number of existing models, Volvo was able to consistently lift its customer satisfaction results by demonstrating value for money (Dahlsten 2003). According to Carroll (1979) and Maignan et al (1999), delivering quality products that meet customer needs is consistent with CSR, particularly with respect to their economic responsibility.

Lastly, evidence suggests that ethical status impacts on customer perceptions of equity demonstrated by firms (Maignan 2001). By example, when founded, a core value of Enterprise Rent-A-Car was to deliver high levels of customer satisfaction by being honest, fair, and going the extra mile (Taylor 2003), characteristics that define an ethical commitment. Although the firm consistently delivered positive financial results, by the early 1990s, customer satisfaction levels had slipped. After taking action to address the problem through initiatives such as reengineering processes, Enterprise Rent-A-Car was able to consistently improve customer satisfaction ratings. However, a key factor to the firm’s success was re-orientating itself to the core values of honesty, fairness, and integrity in dealing with customers (Taylor 2003). When honesty and fairness are demonstrated, customers feel equitably treated (Goodwin & Ross 1992; Oliver 1997). The issue of honesty, fairness, and integrity is intrinsically tied to the ethical dimension of a firm’s social responsibilities and as such, reflects CSR activity (Carroll 1979).
Firms continue to search for ways to improve customer satisfaction. Given that CSR is posited to demonstrate equity towards customers, the expectation is that:

*Hypothesis 2: CSR is positively associated with customer satisfaction.*

The mediating role of reputation and customer satisfaction

There is ample evidence in the literature demonstrating that both reputation and customer satisfaction directly influence firm performance. For example, Kotha and colleagues (2001) found that Internet firms who invested in a number of reputation building activities enjoyed higher market value and sales growth. Roberts and Dowling (2002) found that firms with higher reputations enjoyed higher return on assets, and that these results were persistent over time. Similarly, customer satisfaction has also been found to positively influence firm performance. For example, studies have found that higher customer satisfaction levels lead to higher cash-flow levels (Gruca & Rego 2005; Mittal et al 2005). In other studies, scholars have found a positive link between customer satisfaction and market value (Anderson et al 2004; Fornell et al 2006; Srivastava et al 1998).

Given the substantial evidence of the influence of both reputation and customer satisfaction on firm performance, when linking to our posited hypotheses, a mediating role of reputation and customer satisfaction might logically be expected. Specifically, CSR affects both reputation and customer satisfaction, which in turn affects firm performance. Thus, reputation and customer satisfaction represents the mediational pathway through which CSR positively affects firm performance.

However, we cannot ignore the fact that some research has found a positive link between CSR and firm performance. One explanation might be that CSR creates positive “moral capital” with employees (Aguilera et al 2007), improving their morale, productivity, and retention, which could lead to improved firm performance. Other scholars argue that CSR creates public goodwill, which might provide a form of “protection” to shareholder wealth (Houston & Johnson 2000; McGuire et al 1988). CSR activities might also represent the development of inimitable resources, resources that can protect the erosion of corporate profits (Hillman & Keim 2001). Lastly, Ruf and colleagues (2001) argue that firms who demonstrate socially responsive actions will lower transaction costs by increasing their trustworthiness as a transaction partner, which leads to
improved firm performance. Thus, factoring in the evidence, we posit a mediated role of reputation and customer satisfaction on the impact of CSR on firm performance.

Hypothesis 3: A positive CSR-FP relationship exists through the mediational effects of reputation and customer satisfaction.

METHODS

Sample and data collection

Dunn and Bradstreet Australia was contacted to draw a sample of firms operating in a wide variety of industries in Australia. To obtain a heterogeneous mix, three thousand firms with 2-digit manufacturing and services ANZSIC codes were randomly selected, based on the above parameters. The sample was evenly divided between manufacturing (n = 1,500) and services (n = 1,500) firms. The CEO was the targeted informant for the survey as they are the prime strategist and have breadth of knowledge of firm operations and performance (Andrews 1971), and probably the best insight about the issues in this study.

After an initial mailing and two follow up letters, the overall response rate was 10 percent. Although the response rate yielded may prima facie appear low, the rate is similar to other studies on CSR and various studies surveying top managers, which demonstrate response rates as low as six percent (e.g., Agle et al 1999; Devenish & Fisher 2000; Hall, 1992; Maignan & Ferrell, 2001; Sheridan & Milgate, 2005; Simons et al 1999; West & Schwenk 1996). Further, direct mail surveys and surveys of top executives have a typical response rate of 5-10 percent (Alreck & Settle 1995; Hambrick et al 1993; Steeh 1981), suggesting our response rate was adequate. After eliminating unusable surveys, 280 firms were included in the analysis.

To test for nonresponse bias, early versus late respondents were compared on all variables used in the study. The rationale behind such an analysis is that late respondents (i.e., sample firms who respond late) are more similar to the general population than the early respondents (Armstrong & Overton 1977). Independent samples t-tests revealed no significant differences between any of the variables. Thus, nonresponse bias does not appear to be a problem.

Measures

Following accepted practice (Cronbach 1990; Rogers 1995), tested measurement items were used wherever possible and new items were developed from theoretical insights in the literature when
necessary. CSR, customer satisfaction, reputation and firm performance were measured using multi-item scales. The control variables were measured using single item and categorical indicators.

CSR. Maignan and colleagues (Maignan & Ferrell 2000 & 2001; Maignan et al 1999) have rigorously developed and extensively tested a measure of CSR, based on Carroll’s (1979) conceptualization, the one adopted for this study. Following those studies, the construct consisted of four distinct yet equally important dimensions: 1) economic; 2) legal; 3) ethical; and 4) discretionary. Hence, equal weights were applied to each dimension and a firm’s CSR level was computed as the simple averages of the sums of the scores of the responses across the four dimensions. The Appendix displays items for CSR.

Customer satisfaction. Following Ping’s (1993) proposal that the relationship between customer and firm reflects overall satisfaction, four items were developed relating to customers’ expectations and the relationship between customers and the firm. In addition, three items were adopted that are commonly used in customer satisfaction research as indicators of the construct (e.g., Oliver & Swan 1989a). Thus, the scale contained seven items designed to gauge firms’ perceptions of the satisfaction of their customers (Appendix).

Reputation. This study relied on the reputation scale developed by Weiss et al (1999). Weiss and colleagues, following the unidimensional perspective (Yoon et al 1993), developed a scale that assesses a firm’s general perception of their reputation. The scale does not assess reputation for anything specific (e.g., product innovation); rather, the scale measures a firm’s assessment of how customers perceive their overall reputation. This is consistent with theoretical treatments of reputation (Brown & Logsdon 1999; Roberts & Dowling 2002). The scale contained five items (Appendix).

Firm performance. Firm performance was gauged with four perceptual items including return on investment, return on assets, sales growth and profit growth (Appendix). Items were drawn from Spanos and Lioukas (2001).

Control variables. Control variables included firm size, firm age, industry type, and sales revenue. Firm size was measured with a single item, number of full-time employees. Firm age was measured with a single item, number of years in business. Categorical variables were used to measure eight different industries. Lastly, for sales revenue, categorical variables measuring six
categories, from less than $1,000,000 to a category of $200,000,000 or over, were used. However, for industry type and sales revenue controls, we note that given the final sample size, including this many dummy variables would have used up too many degrees of freedom. Accordingly, following Hassel and colleagues (2005), industries were collapsed into two different segments, either manufacturing (coded ‘1’) or services (coded ‘0’). Similarly, sales revenue was collapsed into two different categories, either less than $200,000,000 (coded ‘1’), or $200,000,000 or over (coded ‘0’).

RESULTS

Means, standard deviations, and correlations are presented in Table 1. Following the suggestion of Anderson and Gerbing (1988), this study conducts confirmatory factor analysis (CFA) to assess the psychometric properties of the constructs. After scale purification (see Appendix), CSR, reputation and customer satisfaction met thresholds for goodness-of-fit indicators in CFA (Bentler, 1990) (Table 2). Moreover, since the standardized factor loadings of all the measurement items on their respective constructs were significant ($p < .05$) and none of the confidence intervals of the phi values contained a value of one, the conclusion was made that the constructs exhibited convergent and discriminant validity (Montoy-Weiss et al 2001). Finally, all constructs demonstrated sufficient reliability, exceeding the common benchmark of .70.

Regarding firm performance, CFA suggests the construct is not a first-order model. To explore the psychometric properties further, Principle Components Analysis using SPSS was conducted. The results demonstrate that one component explains nearly 70 percent of the variance. Thus, in this study, we calculated a composite measurement of firm performance by taking the average score across the four indicators. Cronbach’s alpha for the measure is 0.83.

To test the hypotheses and to assess the presence of mediating variables, we followed the procedure outlined by Baron and Kenny (1986). Three conditions must be met to satisfy mediation requirements. First, independent variables must be significantly associated with the mediating elements (Step 1). The second condition is that independent variables must be significantly associated with dependent variables, in the absence of the mediating elements (Step 2). The final condition is that, when both the independent and mediating elements are included, the direct relationship between independent and dependent variables become significantly less (partial mediation) or non-significant (full mediation) (Step 3).
Step 1 tests the relationship between CSR and reputation and customer satisfaction. After including control variables, the results indicate that CSR is positive and significantly associated with both reputation ($\beta = .509; p = .000$) and customer satisfaction ($\beta = .481; p = .000$) (Table 3). Step 2 examines the relationship between CSR and firm performance (Table 4). The results of this second test indicate a significantly positive relationship between CSR and firm performance ($\beta = .217; p = .000$). Lastly, Step 3 includes tests between CSR, reputation, customer satisfaction and firm performance (Table 4). The results indicate that both reputation ($\beta = .203; p = .012$) and customer satisfaction ($\beta = .163; p = .035$) are significantly and positively associated with firm performance. However, the previously significant relationship between CSR and firm performance becomes non-significant ($\beta = .031; p = .651$). Thus, the findings suggest support for hypothesis one and hypothesis two: CSR is significantly associated with reputation and customer satisfaction. Following Barron and Kenny (1986), the mediation test suggests that CSR is positively associated with firm performance; however, the effect is indirect. Both reputation and customer satisfaction fully mediate the relationship. Thus, hypothesis three also finds support.

To expand the regression tests, we decided to conduct an assessment of the conceptual model with structural equation modeling (SEM). SEM using AMOS was employed, with the maximum likelihood estimation method as the analysis technique. Since SEM offers benefits such as all relevant paths are directly tested and complications of measurement error are incorporated directly into the model for testing mediation (Baron and Kenny, 1986), we decided that SEM was an appropriate supplemental test. All paths were freely estimated, and error variances were constrained to one.

The proposed structural equation model achieved only a modest fit ($\chi^2 = 126.45$, d.f. = 12; GFI = 0.875; CFI = 0.792; RMR = 0.033). Path analysis suggests that the CSR-FP relationship is mediated, but reputation appears to be the sole mediating factor (Table 5). To further explore SEM, we tested if customer satisfaction might act as a mediator, but through a link through reputation rather than directly with financial performance. The model achieved a much better fit to the data ($\chi^2 = 62.18$, d.f. = 11; GFI = 0.942; CFI = 0.907; RMR = 0.028). As can be seen from the path coefficients (Table 6), while the CSR-FP relationship is fully mediated by reputation and customer satisfaction, the alternative structural model suggests that customer satisfaction is not directly linked
to firm performance, but rather is linked to firm performance through the meditational effects of reputation. This relationship was not hypothesized.

**DISCUSSION**

The rationale for this study was articulated in response to ambiguity surrounding the CSR-FP relationship and recent calls to take a contingency approach in studying this relationship (Rowley & Berman 2000). To this end, we proposed that CSR is linked to reputation and customer satisfaction, and that these two variables mediate CSR’s affect on firm performance. All hypotheses were confirmed. The observed mediational effects of reputation and customer satisfaction is a particularly critical finding, and therefore the results of this study point to a few key theoretical implications.

First, our findings demonstrate that reputation and customer satisfaction appear to mediate the relationship between CSR and firm performance, suggesting that CSR has a necessary, yet indirect effect. Thus, the findings help to clarify some of the ambiguity surrounding how CSR might be associated with firm performance and why the association might be positive. In our study, one plausible explanation of the findings could be related to the ideas of Dierickx and Cool (1989) which suggest that strategically valuable assets such as reputation and customer satisfaction cannot be bought on ‘strategic factor markets’ (Barney 1986) but must instead be built over time through a series of investments. The resultant outcomes of investments are the ‘flows’ that contribute to the attainment of a certain asset ‘stock’ at a particular point in time. Accordingly, our findings suggest that CSR flows are likely to forge reputation and customer satisfaction stocks. More specifically, CSR activities (‘flows’) act as both a signaling mechanisms to stakeholders, influencing positive perceptions of firms and therefore bolstering reputation, while at the same time facilitate fairness judgments in customer-firm interactions, influencing the degree to which customers perceive equitable treatment, thereby increasing customer satisfaction levels. Taken together, CSR flows appear to positively influence reputation and customer satisfaction, which in turn positively influences firm performance.

Second, our results produced an unexpected finding. Through a supplemental test using SEM, the analysis suggests that while customer satisfaction acts as a mediator
between CSR and firm performance, the mediational effect might be better understood through the pathway of reputation, rather than through a direct relationship. The results imply that the relationships between CSR, customer satisfaction, reputation, and firm performance might be more complex than a parametric test such as regression analysis reveals. One possible explanation for the finding in this study might be that as with CSR, as customers are treated equitably and receive a quality level of attention, such actions of firms not only demonstrate social responsibility, but also act as signals that communicate information about the firms’ intentions, characteristics, and resources (Weigelt and Camerer, 1988). These signals shape a firm’s reputation because they enable stakeholders such as customers to form positive impressions and opinions about its ability to create value for them. Such a finding offers support to those scholars who argue that reputation is one of the most valuable and inimitable assets of the firm, one that is crucial to competitive advantage (Dierickx and Cool 1989; Srivastava et al., 2001). The finding also supports previous studies that have identified a positive relationship between customer satisfaction and reputation (e.g., Walsh et al., 2008).

Lastly, this study offers evidence for the existence of intangible benefits of CSR. Traditional theories used in CSR-FP studies, such as the resource-based view of the firm (RBV) and transaction cost economics, are largely theories of superior firm performance and are used as theoretical foundations in direct CSR-FP tests (e.g., Hillman & Keim, 2001; Ruf et al 2001). By extending the use of theory to include signaling theory and equity theory, the findings of this study demonstrate the value of CSR beyond a direct, pure bottom line focus (cf. Aguilera et al 2007). The implication suggests that market actions (Basdeo et al 2006) of firms, in the form of CSR activities or flows, engage stakeholders in an impression process where they make inferences about them. In our case, CSR inferences appear to be positive and the subsequent benefit is a better reputation and improved customer satisfaction. The finding offers some support for previous studies which find that customers prefer to do business with the most socially responsible firms (e.g., Mohr et al 2001; Sen & Bhattacharya 2001).
LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

There are limitations to this study. First, although some procedural techniques were used to reduce the risk of common method bias, the use of a single informant is a limitation. Thus, to assess common method bias, a Harman’s *ex post* one-factor test was conducted (Podsakoff & Organ 1986). The factor analysis test revealed the absence of a single general factor accounting for most of the observed covariance in the variables. Hence, common method bias appeared to be low for the data.

Second, the sample was drawn from Australian business firms. The results might not generalize to other countries. However, the findings do extend empirical evidence beyond the US, where the majority of CSR-FP studies have been conducted. Finally, this study is cross-sectional. Clearly, the relationships proposed in this paper need to be studied over time. Addressing this limitation is an opportunity for future research.

Other opportunities exist as well. For example, additional variables can be considered as potential moderators and mediators in studying the CSR-FP relationship. Scholars such as Ittner and Larcker (2003), Kaplan and Norton (2007) and Maltz et al (2003) offer insight into variables that might be considered. Lastly, an important focus of recent theoretical treatments expresses interest in the antecedents of CSR (e.g., Aguilera et al 2007; Campbell 2007; Matten & Moon 2008). To advance the field, future research could explore internal and external drivers of CSR, such as employees’ relational needs or institutional drivers.

In summary, we believe that the associations tested in our model provide an original and robust explanation for how CSR might be linked with firm performance, and why the association might be positive. In so doing, our findings overcome some of the ambiguity in the CSR-FP relationship and provide important new insights for future research. From a more pragmatic perspective, this study further confirms that actively engaging in CSR can have positive benefits for firms. The present results show that firms proactively engaging in CSR can enhance reputation while improving customer satisfaction, with an overall benefit of improved financial performance.
REFERENCES


### TABLES

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<th>Variable</th>
<th>Mean</th>
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<td>2. Firm age</td>
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<td>-0.07</td>
<td>0.31</td>
<td>0.17</td>
<td>0.13</td>
<td>0.15</td>
<td>0.36</td>
<td>0.30</td>
<td>0.89</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Sales growth</td>
<td>3.50</td>
<td>0.96</td>
<td>0.12</td>
<td>-0.07</td>
<td>0.17</td>
<td>0.12</td>
<td>0.02</td>
<td>0.17</td>
<td>0.23</td>
<td>0.23</td>
<td>0.40</td>
<td>0.41</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>12. Profit growth</td>
<td>3.49</td>
<td>0.99</td>
<td>0.08</td>
<td>-0.01</td>
<td>0.32</td>
<td>0.17</td>
<td>0.10</td>
<td>0.16</td>
<td>0.26</td>
<td>0.23</td>
<td>0.54</td>
<td>0.58</td>
<td>0.57</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*a Correlation coefficients .12 and greater are significant at p \leq .05.*

Table 1. Descriptive statistics for continuous variables
<table>
<thead>
<tr>
<th>Model/Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>Internal Consistency</th>
<th>Cronbach's alpha</th>
<th>GFI</th>
<th>CFI</th>
<th>RMR</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic</td>
<td>3.99</td>
<td>0.58</td>
<td>0.73</td>
<td>0.71</td>
<td>0.94</td>
<td>0.92</td>
<td>0.04</td>
<td>0.06</td>
</tr>
<tr>
<td>Legal</td>
<td>4.39</td>
<td>0.55</td>
<td>0.82</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical</td>
<td>4.07</td>
<td>0.68</td>
<td>0.83</td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discretionary</td>
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<td>0.74</td>
<td>0.82</td>
<td>0.80</td>
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<tr>
<td>Reputation</td>
<td>4.39</td>
<td>0.54</td>
<td>0.89</td>
<td>0.89</td>
<td>0.98</td>
<td>0.99</td>
<td>0.01</td>
<td>0.02</td>
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<tr>
<td>Customer satisfaction</td>
<td>4.04</td>
<td>0.53</td>
<td>0.86</td>
<td>0.87</td>
<td>0.97</td>
<td>0.97</td>
<td>0.01</td>
<td>0.01</td>
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</table>

Table 2. Results of confirmatory factor analysis
### Mediating Variables

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Reputation</th>
<th>Customer Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm size (# of employees)</td>
<td>-.019</td>
<td>-.081</td>
</tr>
<tr>
<td>Firm age</td>
<td>-.047</td>
<td>-.050</td>
</tr>
<tr>
<td>Industry dummy</td>
<td>.042</td>
<td>.047</td>
</tr>
<tr>
<td>Sales revenue dummy</td>
<td>-.142**</td>
<td>-.052</td>
</tr>
<tr>
<td>CSR</td>
<td>.509***</td>
<td>.481***</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.276</td>
<td>.233</td>
</tr>
<tr>
<td>$F$</td>
<td>20.630***</td>
<td>16.368***</td>
</tr>
</tbody>
</table>

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

Table 3. Step 1 of mediation test
<table>
<thead>
<tr>
<th>Independent &amp; mediating variables</th>
<th>Firm Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 2</td>
</tr>
<tr>
<td>Firm size (# of employees)</td>
<td>.095</td>
</tr>
<tr>
<td>Firm age</td>
<td>-.085</td>
</tr>
<tr>
<td>Industry dummy</td>
<td>.031</td>
</tr>
<tr>
<td>Sales revenue dummy</td>
<td>-.179**</td>
</tr>
<tr>
<td>CSR</td>
<td>.217***</td>
</tr>
<tr>
<td>Reputation</td>
<td></td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.100</td>
</tr>
<tr>
<td>$F$</td>
<td>5.667***</td>
</tr>
</tbody>
</table>

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

Table 4. Step 2 and Step 3 of mediation test
<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation</td>
<td>CSR</td>
<td>0.786</td>
<td>0.104</td>
<td>7.581</td>
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<tr>
<td>Customer Satisfaction</td>
<td>CSR</td>
<td>0.697</td>
<td>0.098</td>
<td>7.124</td>
</tr>
<tr>
<td>Financial Performance</td>
<td>Reputation</td>
<td>0.367</td>
<td>0.109</td>
<td>3.356</td>
</tr>
<tr>
<td>Financial Performance</td>
<td>CSR</td>
<td>0.085</td>
<td>0.185</td>
<td>.459</td>
</tr>
<tr>
<td>Financial Performance</td>
<td>Customer Satisfaction</td>
<td>0.079</td>
<td>0.105</td>
<td>.752</td>
</tr>
</tbody>
</table>

*** $p < .000$

Table 5. Path analysis of proposed SEM model
<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation &lt;--- CSR</td>
<td>0.374</td>
<td>0.082</td>
<td>4.569</td>
<td>***</td>
</tr>
<tr>
<td>Customer Satisfaction &lt;--- CSR</td>
<td>0.542</td>
<td>0.091</td>
<td>5.979</td>
<td>***</td>
</tr>
<tr>
<td>Reputation &lt;--- Customer Satisfaction</td>
<td>.496</td>
<td>.056</td>
<td>8.933</td>
<td>***</td>
</tr>
<tr>
<td>Financial Performance &lt;--- Reputation</td>
<td>0.389</td>
<td>0.108</td>
<td>3.586</td>
<td>***</td>
</tr>
<tr>
<td>Financial Performance &lt;--- CSR</td>
<td>0.022</td>
<td>0.136</td>
<td>.164</td>
<td>.870</td>
</tr>
<tr>
<td>Financial Performance &lt;--- Customer Satisfaction</td>
<td>0.096</td>
<td>0.106</td>
<td>.906</td>
<td>.365</td>
</tr>
</tbody>
</table>

*** p < .000

Table 6. Path analysis of alternative SEM model
FIGURES

![Conceptual Model Diagram]

Notes: Bolded paths are hypothesized relationships. Dashed paths indicate that the represented relationships are partially mediated.

Figure 1. Conceptual model
APPENDIX

Corporate Social Responsibility

Economic
1. Our business has a procedure in place to respond to every customer complaint.
2. We continually improve the quality of our products.
3. We use customer satisfaction as an indicator of our business performance.
4. We have been successful at maximizing our profits.
5. We strive to lower our operating costs.
6. We closely monitor employees’ productivity.
7. Top management establishes long-term strategies for our business.

Legal
1. Managers are informed about relevant environmental laws.
2. All our products meet legal standards.
3. Our contractual obligations are always honored.
4. The managers of this organization try to comply with the law.
5. Our company seeks to comply with all laws regarding hiring and employee benefits.
6. We have programs that encourage diversity of our workforce (in terms of age, gender, or race).
7. Internal policies prevent discrimination in employees’ compensation and promotion.

Ethical
1. Our business has a comprehensive code of conduct.
2. Members of our organization follow professional standards.
3. Top managers monitor the potential negative impacts of our activities on our community.
4. We are recognized as a trustworthy company.
5. Fairness toward coworkers and business partners is an integral part of our employee evaluation process.
6. A confidential procedure is in place for employees to report any misconduct at work (such as stealing or sexual harassment).
7. Our salespersons and employees are required to provide full and accurate information to all customers.

Discretionary
1. The salaries offered by our company are higher than industry averages.
2. Our business supports employees who acquire additional education.
3. Our business encourages employees to join civic organizations that support our community.
4. Flexible company policies enable employees to better coordinate work and personal life.
5. Our business gives adequate contributions to charities.
6. A program is in place to reduce the amount of energy and materials wasted in our business.
7. We encourage partnerships with local businesses and schools.
8. Our business supports local sports and cultural activities.
Customer Satisfaction\(^a\)
1. Compared to competitors, our customers find that our products/services are much better.
2. Our customers are very satisfied with the products/services we offer.
3. Our customers are very satisfied with the value for price of our products/services.\(^b\)
4. Our customers find that the products/services we offer exceed their expectations.\(^b\)
5. The likelihood that our customers will recommend our products/services to others is high.
6. Our customers are very satisfied with the quality of our products/services.
7. The ability to achieve high levels of customer satisfaction is a major strength of our firm.

Reputation\(^a\)
1. Our firm is viewed by customers as one that is successful.
2. We are seen by customers as being a very professional organization.
3. Customers view our firm as one that is stable.
4. Our firm’s reputation with customers is highly regarded.
5. Our firm is viewed as well-established by customers.

Firm Performance\(^c\)
1. Return on investment.
2. Return on assets.
4. Profit growth.

\(^a\) 5-point scale ranging from *strongly disagree* to *strongly agree*.
\(^b\) Item eliminated based on refinement procedure.
\(^c\) Relative to competitors over past three years, 5-point scale ranging from *much worse* to *much better*.