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DOES IT PAY TO BE *REALLY* GOOD? ADDRESSING THE SHAPE OF THE RELATIONSHIP BETWEEN SOCIAL AND FINANCIAL PERFORMANCE

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Building on the theoretical argument that a firm's ability to profit from social responsibility depends upon its stakeholder influence capacity (SIC), we bring together contrasting literatures on the relationship between corporate social performance (CSP) and corporate financial performance (CFP) to hypothesize that the CSP-CFP relationship is U-shaped. Our results support this hypothesis. We find that firms with low CSP have higher CFP than firms with moderate CSP, but firms with high CSP have the highest CFP. This supports the theoretical argument that SIC underlies the ability to transform social responsibility into profit. Copyright © 2012 John Wiley & Sons, Ltd.

INTRODUCTION

Does it pay to be good? Or does the pursuit of societal betterment entail financial detriment? For decades, scholars have sought to determine whether corporate social performance (CSP) and corporate financial performance (CFP) are positively or negatively associated. According to Friedman's (1970) classic argument, the relationship ought to be negative. As firms voluntarily engage in more socially responsible activities, they incur more costs and thus have lower net financial performance. Freeman's (1984) stakeholder view, by contrast, underlies arguments that the relationship is positive. With increased social spending comes improved stakeholder relationships that reduce firms' transaction costs (Jones, 1995) and increase market opportunities and pricing premiums (Fombrun, Gardberg, and Barnett, 2000), resulting in higher net financial performance. Dozens of studies have supported both opposing positions (for reviews, see Margolis and Walsh, 2003; Orlitzky, Schmidt, and Rynes, 2003) and so have thus far failed to resolve this debate.

In this paper, we do not aim to declare a victor in this long-standing debate. Rather, we demonstrate that despite their opposition, both positions might be correct over some range. That is, for some firms CSP and CFP are negatively associated, but for others they are positively associated. We argue that whether it pays to be good depends upon how well firms are able to capitalize on their social responsibility efforts. Barnett (2007) theorized that as firms engage in socially responsible practices, they accrue stakeholder influence capacity (SIC). Akin to the way in which absorptive capacity (Cohen and Levinthal, 1990), once adequately accrued, enables a firm to assimilate and exploit knowledge and thereby profit from its research investments, an adequate stock of SIC enables a firm to assimilate and exploit stakeholder favor and thereby profit

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from its social investments. In contrast, firms with inadequate SIC are unable to generate favorable returns on the investments they make in social responsibility and so the relationship is negative.

Based on the theoretical conceptualization of SIC, we therefore hypothesize that the relationship between CSP and CFP is not linearly positive or negative, but curvilinear. We test our hypothesized relationship on an unbalanced panel of 1,214 firms and 4,730 firm-year observations over the period of 1998 to 2006. Controlling for a variety of firm, industry, and year effects, we find support for a U-shaped relationship. In particular, we find that as a firm's overall net score across the 13 social performance criteria in the Kinder, Lydenberg, and Domini (KLD) ratings database increases, its return on assets and net income decline at first, reaching a low point at moderate levels of social performance, and increase thereafter. The U-shaped relationship is not symmetrical, however. Those firms with the highest net KLD scores had significantly higher return on assets and net income than did those firms with the lowest net KLD scores.

Overall, our results suggest that both critics and proponents of the business case for corporate social responsibility are right, to a degree. For some firms, it pays to be good, but for others, it does not. We conclude that future academic work would be well served to account for this curvilinear relationship, both theoretically and empirically. Moreover, future research could fruitfully explore additional contingencies in the relationship between CSP and CFP. For practitioners, our findings imply that firms should view CSP as a long-term investment in creating the capacity to influence stakeholders; though it may not pay to be good now, it may pay to be good later once adequate capacity is built. If a firm has little ability, or desire, to build such a capacity, then social responsibility appears to be a poor financial investment. However, if a firm is able to build such capacity, it may find that it really pays to be really good.

THEORETICAL BACKGROUND AND HYPOTHESIS

We are not the first to investigate whether it pays to be good. Over the last several decades, scholars have published hundreds of studies that have theorized and measured the financial returns associated with corporate social performance. This body of work is so vast that it has produced more than a dozen published reviews (Margolis and Walsh, 2003). Rather than retread well-worn ground, herein we provide only a brief orientation to the literature. Thereafter, we develop our hypothesis that the relationship between CSP and CFP is U-shaped.

A brief orientation to the vast CSP-CFP literature

Milton Friedman is the traditional straw man in the CSP-CFP literature. Friedman (1970) saw CSP as an agency problem whereby managers were misallocating shareholder wealth to pursue a social mission of their choosing. He argued that firms ought to do no more than abide by the letter of the law, lest the additional costs associated with social spending place firms at a competitive disadvantage. Since managers' pursuits of their desired social missions degrade firms' ability to maximize shareholder wealth, CSP and CFP should thus be negatively related.

Despite his terse dismissal of CSP as 'hypocritical window-dressing,' 'fraud,' and worse, Friedman (1970) did nonetheless acknowledge that a firm's investment in social responsibility could 'make it easier to attract desirable employees, it may reduce the wage bill or lessen losses from pilferage and sabotage or have other worthwhile effects.' In noting that social responsibility can generate valuable goodwill for firms, he thus provided a basis for the counter-argument of stakeholder theorists that CSP and CFP are positively related.

Stakeholder theory, the origins of which are commonly credited to Freeman (1984), argues that the better a firm manages its relationships with the myriad groups that have some interest, or 'stake,' in the firm, the more successful it will be over time. In particular, instrumental stakeholder theory (Jones, 1995) views the firm as a nexus of contracts (Jensen and Meckling, 1976) and addresses the ability of a firm to increase its competitive advantage by minimizing the costs of contracting. A firm minimizes these costs by developing trusting relations with its various stakeholders (Wicks, Berman, and Jones, 1999). Engaging in socially responsible behaviors is one of the primary mechanisms through which a firm may foster and maintain trusting stakeholder relationships. As Jones

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(1995: 430) notes: '[c]ertain types of corporate social performance are manifestations of attempts to establish trusting, cooperative firm/stakeholder relationships and should be positively linked to a company's financial performance.' For example, firms with strong social performance have an easier time attracting desirable employees (Greening and Turban, 2000).

Hundreds of published empirical studies have tested the relationship between various types of CSP and CFP. Some have found a negative relationship (Vance, 1975; Wright and Ferris, 1997). Some have found a mixed relationship (Cochran and Wood, 1984; Hillman and Keim, 2001). Some have found no relationship of significance (McWilliams and Siegel, 2000; Patten, 1991). Many have found a positive relationship (Orlitzky *et al*., 2003). Nonetheless, limitations in these myriad studies leave room for skepticism and confusion (Margolis and Walsh, 2003). This led Barnett (2007: 794) to surmise 'that after more than thirty years of research, we cannot clearly conclude whether a one-dollar investment in social initiatives returns more or less than one dollar in benefit to the shareholder.'

Stakeholder influence capacity: the case for a curve

Scholars have increasingly acknowledged that, despite all the effort devoted to doing so, trying to produce a universal answer to the question of whether or not it pays to be good might be futile. As Rowley and Berman (2000: 406) note, 'Only the most naïve (or blindly hopeful) among us will assume that poor (good) social behavior will always have negative (positive) financial implications.' But if a universal answer is 'untenable' (Rowley and Berman, 2000: 406), on what basis might we proffer a contingent answer to when social responsibility does and does not pay?

Barnett (2007) theorized that variance in financial returns to social responsibility is attributable to variance in firm capabilities. Building on the premise of instrumental stakeholder theory that the benefits to firms from social responsibility come through improved stakeholder relationships (Jones, 1995), Barnett (2007: 803) developed the concept of SIC, which he defined as 'the ability of a firm to identify, act on, and profit from opportunities to improve stakeholder relationships through CSR [corporate social responsibility].' Simply, SIC is a formalization of the basic logic that stakeholders view some firms as more credible than others and reward firms for their acts of social responsibility accordingly.

Firms accrue SIC by consistently engaging in acts of social responsibility (Barnett, 2007). Firms with a weak history of social responsibility have little or no SIC and are not credible with stakeholders, as exemplified by the following stakeholder quote:

> *I guess it depends if it's [the firm's participation in (CSR)] part of the total picture and [if] they really go out of their way. Like with Kroger, it isn't a one-time shot, they're always doing stuff for Egleston [Children's Hospital], or they've got the big barrels out there for the people to bring cans for the homeless or something at Thanksgiving and Christmas. It just seems more a way of business for them, continuously, so in that case, that's fine… But if somebody's doing it just for the publicity, then that would not make me think better of them (survey respondent quoted in Webb and Mohr, 1998: 235).*

Because stakeholder response to their actions varies with SIC, firms with differing levels of SIC will receive different returns to social responsibility. For firms with high SIC, social responsibility can be a wise investment. The trusting stakeholder relationships these firms foster significantly decrease transaction costs and ease the firms' ability to contract with key stakeholders. Such actions are in consonance with the firm's character, so stakeholders are more likely to perceive them as credible. Stakeholders reward such firms accordingly, and so it pays to be good.

In contrast, firms with low SIC are less able to transform socially responsible activities into tangible returns because stakeholders are less likely to view their social pursuits as credible. Stakeholders perceive socially responsible actions on the part of such firms as self-serving or simply dismiss them as 'greenwashing,' as exemplified by this stakeholder quote:

> *John Hyde, a retiree in Placerville, Calif., says it's hard to believe Philip Morris is 'a good guy just because it donates water to flood victims, or helps the hungry' (Alsop, 2002: 1).*

Thus, for such firms, investment in social responsibility might not pay.

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Augmenting the variable returns explained by SIC with consideration of the costs of investing in social responsibility leads one to view the expected relationship between CSP and CFP as U-shaped. A negative CSP-CFP relationship, which forms the initial downward slope of the U, is explained by the inherent costs of CSP. A firm with weak CSP does not suffer the financial outlays of a firm that invests in additional employee benefits, pollution reduction, charity, community involvement, and other forms of social responsibility. Recognizing the costs inherent in social responsibility, Friedman (1970) decried such allocations as examples of agency loss. Of course, the costs of various social programs a firm might adopt vary, but regardless, taking on additional social programs is more costly than not. As a result, if all else is held equal, the higher a firm's social performance, the higher its costs, and thus, the lower its financial performance.

SIC, however, helps explain why the downward sloping line eventually switches direction. Despite the fact that spending on social performance is costly,[1] firms that have accrued adequate SIC through significant social performance may earn financial returns that offset and come to exceed the costs. Those firms with the highest SIC will get the most out of their social investments and so will have the highest financial performance. That is, firms with increasingly favorable SIC earn increasingly favorable returns on their social investments, much as firms replete with absorptive capacity earn more from their investments in knowledge (Cohen and Levinthal, 1990).

To better visualize the resulting U-shaped relationship, consider a universe of firms with a wide range of CSP. Because it is costly to be socially responsible, those firms with higher CSP have higher costs than do those firms with lower CSP. However, those firms that invest more of their resources into social performance accrue more SIC. For firms on the left side of the range (with low to moderate CSP), this SIC is likely inadequate to create gains that will offset the costs, and so the CSP-CFP relationship is negative over this range. Firms on the right side of the range (with moderate to high CSP), however, possess adequate SIC and so have the capacity to transform social investment into financial returns. Though firms with higher CSP have higher costs, the additional social investments earn positive returns that more than offset the increased costs. In contrast, lacking adequate SIC to transform their social investment into financial returns, firms with low CSP earn negative returns on their CSP spending. Thus, as they spend more on CSP, they lose more, until the relationship neutralizes and turns positive as SIC accrues from the increased CSP spending. Overall, this means that prior to accruing adequate SIC, the curve slopes downward; CSP is an investment that offers negative returns. Thereafter, the curve evens out, and for those firms that accrue adequate SIC, the curve turns upward and CSP becomes an investment that offers positive returns.

Recent empirical studies provide some support for the existence of a U-shaped relationship between some types of CSP and CFP. Barnett and Salomon (2006) found that the financial returns of mutual funds that used socially responsible investment practices varied with the stringency of the social screening criteria. Those funds that screened the most intensely and so yielded portfolios with the highest overall social performance, and those that screened the least intensely and so yielded portfolios with the lowest overall social performance, did the best financially. Those funds with moderate screening intensity did the worst financially. However, both the theory and data used in Barnett and Salomon's (2006) study did not address the firm-level relationship between CSP and CFP.

In contrast, Brammer and Millington (2008) focused on the firm-level relationship between CSP and CFP and likewise found that the highest and lowest levels of CSP were associated with the highest levels of CFP. However, Brammer and Millington (2008) neither specifically hypothesized a U-shaped relationship nor explicitly tested for one. Instead, they inferred a curve from three performance groupings. Moreover, Brammer and Millington (2008) measured CSP on only a single dimension—corporate charitable giving. CSP is a comprehensive concept, consisting of a variety of socially responsible behaviors (Carroll, 1979). Thus, this narrow measure of CSP, while supportive of a curvilinear relationship, provides limited

[1] These costs need not be direct cash outlays, though often they are. The costs can be opportunity costs, such as use of managerial or employee time. Greenwashing or other symbolic acts of social responsibility are also costly to a firm, in terms of additional risk borne. Firms that engage in symbolic or fraudulent acts of social responsibility 'increase their risk and so effectively decrease their risk-adjusted returns' (Barnett, 2007: 806).

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insights about the broader relationship between CSP and CFP.

Taken together, recent theoretical and empirical advances strongly suggest an underlying U-shaped relationship between CSP and CFP. Nonetheless, to our knowledge, no study has yet to comprehensively test this relationship at the firm level. We therefore hypothesize:

Hypothesis: The relationship between corporate social performance and corporate financial performance is U-shaped.

METHODOLOGY

The data we employ come from several sources. Our initial sample consisted of publicly traded firms tracked by Kinder, Lydenberg, and Domini (KLD). KLD is an independent agency with a long history of tracking, and rating, firms based on a number of corporate social responsibility dimensions. In fact, according to Deckop, Merriman, and Gupta (2006: p. 334), 'The KLD database is the largest multidimensional CSP database available to the public.' It is no surprise therefore that KLD ratings have been used extensively in academic research (e.g., Chatterji, Levine, and Toffel, 2009; Deckop, *et al*., 2006; Harrison and Freeman, 1999; Waddock and Graves, 1997; Graves and Waddock, 1994).

KLD rates firms based on their environmental, social, and corporate governance performance. It began rating firms in 1991 with an initial sample of 650 firms, comprising largely S&P 500 firms. By 2001, the total number of firms tracked by KLD reached 1,100 as it expanded the sample to Russell 1000 firms. Beginning in 2003, the sample expanded to 3,100 firms by including firms from the Russell 3000 index. Our starting sample therefore represents an unbalanced panel of 3,100 firms from 1991–2006.

Given that the KLD sample included information on anywhere from 650 to 3,100 firms per year, the total usable sample could have reached a maximum of 21,100 firm-year observations ((650 firms × 10 years) + (1,100 firms × 2 years) + (3,100 firms × 4 years)). However, we were forced to drop observations prior to 1998 due to changes in reporting by KLD. Prior to 1998, KLD rated companies on only eight dimensions of social responsibility. Thereafter, the number was increased to 13. This change in reporting resulted in the loss of 650 firms and 4,550 firm-year observations.[2]

We supplemented the KLD data with firm-level operational and performance data from COMPUSTAT. COMPUSTAT is a widely used database of fundamental and market data on over 30,000 publicly traded companies. It provides firm-specific balance sheet and cash flow data, and also supplemental firm and industry information. When we matched the COMPUSTAT data with the KLD data, we lost 1,236 firms due to missing data. This left a usable sample of 1,214 firms and 5,944 firm-year observations.

Finally, to control for within-firm dynamics, we incorporate a one-year lag of the dependent variable into our empirical specification (the specific method is described in detail below). The dynamics require at least two years of data for each firm. This restriction sacrifices 1,214 firm-year observations (one year's worth of observations for each firm). The final sample upon which we test our hypothesis is therefore an unbalanced panel of 1,214 firms and 4,730 firm-year observations from 1998–2006.

Dependent variable

We test for the effects of CSP on CFP. Thus, following Waddock and Graves (1997), our dependent variable is the *return on assets* (ROA) for a given firm in a given year.[3] ROA is defined as net income divided by total assets. We complement ROA with an unscaled measure of firm performance, *net income*. Net income is defined as the earnings (after interest, taxes, depreciation, and amortization) of a firm in a given year, expressed in millions of U.S. dollars. We include net income as a complement to ROA because

[2] In specifications not reported, we tested variants of the models using only those eight issues upon which firms had been rated throughout the entire 1991–2006 period. The results were qualitatively similar and stronger in economic magnitude to those presented herein.

[3] In this study, we employ ROA as a dependent variable not only because it is the standard in the corporate social responsibility literature, but also because it is a widely adopted measure of firm performance in the broader field of strategy (e.g., King and Zeithaml, 2001; McNamara, Luce, and Tompson, 2002; Wan and Hoskisson, 2003; Lavie, 2007; Derfus *et al*., 2008; McNamara, Haleblian, and Dykes, 2008). However, as described later in the Sensitivity and Robustness section, we also tested models with market-based performance alternatives and found consistent results.

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scholars suggest that the use of ratio measures (such as ROA) as dependent variables in multivariate regression analysis may exaggerate relations of interest and confound the interpretation of results (see Wiseman, 2009). This is because the independent variables can influence the numerator, the denominator, or both, thereby complicating inference.

Using two distinct yet conceptually related performance measures provides several benefits. Assessing both measures mitigates some of the deficiencies inherent in selecting one measure to the exclusion of the other. Moreover, because each variable might reveal different aspects of performance, we can use variation in outcomes to inform our interpretation of the results. Although we expect the results to be consistent across measures, corroborating results further validate our findings.

Independent variables

KLD rates firms based on 13 individual social performance criteria. Seven of those are key stakeholder attributes (community, corporate governance, diversity, employee relations, environment, human rights, and product) for which firms receive scores based on both their strengths and weaknesses. The scores are based on an integer scale that ranges from +1 to −1, where −1 represents an area of weakness, +1 represents an area of strength, and 0 represents a neutral score. The remaining six relate to whether or not the firm participates in socially 'controversial' business activities (the production, sale, or service of alcohol, gambling, firearms, military, nuclear power, and/or tobacco). On these attributes, firms receive scores that reflect only whether the area represents one of weakness (i.e., where −1 represents an area of weakness and 0 represents a neutral score). Although the latter six attributes only capture areas of weakness, the scales used are comparable to those for the seven stakeholder attributes.

Following prior research, we aggregate the strengths and weaknesses ratings from KLD to create a net social performance score for each firm (e.g., Chatterji *et al*., 2009; Johnson and Greening, 1999; Ruf *et al*., 2001; Ruf, Muralidhar, and Paul, 1998; Waddock and Graves, 1997; Griffin and Mahon, 1997; Graves and Waddock, 1994). We label this measure the *net KLD score.* The net KLD score is an assessment of a firm's overall level of social responsibility and so proxies for stakeholder influence capacity (Barnett, 2007). To achieve high net KLD scores, firms must have engaged in significant acts of social responsibility; the higher the score, the broader the scope of such behaviors—and these acts of social responsibility are the flows that accrue into a firm's stock of SIC. That is,

> *. . . measures of CSP, as snapshots of the state of a firm's stakeholder relations at a point in time, are proxies for the overall state of a firm's relationships with those stakeholders it wishes to influence (Barnett, 2007: 811). . . As firms engage in CSR acts to improve stakeholder relations, a record of social performance. . . accrues, forging a firm's SIC stock. . . [Therefore], A firm's current stock of SIC is positively related to its prior CSR activity (Barnett, 2007: 805).*

The initial net KLD score measure varied from −12 to 15, with a mean of −0.43. However, because we have hypothesized a curvilinear relationship between social performance and financial performance, we need to compute a squared net KLD score. Unfortunately, testing for quadratics with a measure that can take negative as well as positive values distorts inference in multiple regression formats (Cohen *et al*., 2002). We therefore follow the recommendation of Cohen *et al*. (2002) and perform a simple linear transformation of the net KLD score measure by adding 12 to each observation. Performing such a linear transformation meets the goal of creating a conceptually meaningful measure via a simple transformation that does not change the underlying functional form. Moreover, this linear transformation preserves within-measure ordinal relationships. That is, increasing values on the net KLD score index correspond to better social responsibility performance, where 0 now reflects the least socially responsible firm and 27 the most socially responsible firm (with a mean of 11.64).

Control variables

Because our dependent variable captures the financial performance of a firm, we control for factors that could systematically affect financial performance. We therefore include variables previously

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identified as likely to influence the financial performance of firms, while controlling for unobservables using a combination of fixed (industry, firm, and year) effects. We discuss the details of the econometric specification in the subsequent section.

A firm's size is a potential factor in its financial performance. In order to control for any potential size effect, we include a measure of the number of firm employees (measured in thousands). We label this variable *size*. In addition to size, we control for the debt burden of the firm. We define *debt ratio* as the firm's long-term debt divided by total assets. Scholars point out that debt impacts the behavior of managers. On the one hand, debt imposes discipline upon managers and incentivizes them to make decisions that are in the best interest of the firm. On the other hand, because debt decreases managerial latitude, it can limit opportunities to explore new businesses, thereby negatively impacting profit. Finally, empirical research has shown that distinctive technological and marketing capabilities can be value creating for firms (e.g., Mahoney and Pandian, 1992). We therefore include a measure of research and development (R&D) and advertising intangibles. Following prior research (e.g., McWilliams and Siegel, 2000), we define *R&D intensity* as R&D expenditures divided by sales (expressed as a percentage) and *advertising intensity* as advertising expenditures divided by sales (expressed as a percentage).[4]

Statistical methods

In selecting an appropriate multivariate statistical method, we begin with an ordinary least squares (OLS) specification. As shown in Equation (1), we first specify a firm's performance ($Perform_{it}$) as a linear function of the vector X of independent variables for firm i at time t that we wish to examine and can measure, in addition to an error term, which we label u_{it}.

$$Perform_{it} = \beta_0 + X_{it}\beta_1 + u_{it} \quad (1)$$

Given the panel structure of our data with several observations per firm, the possibility arises that the errors (u_{it}) will be correlated within firms across time. Such serial correlation of residuals across observations within firms may lead to spurious regression results. We therefore turn to a dynamic longitudinal model to deal with serial correlation. We incorporate linear autoregressive dynamics with lags of the dependent variable as regressors to account for within-firm persistence in performance (see Greene, 2000). Specifically, we incorporate a one-year lag of the dependent variable, a within-firm AR(1) process, into every specification as follows:

$$Perform_{it} = \beta_0 + X_{it}\beta_1 + Perform_{it-1}\beta_2 + e_{it} \quad (2)$$

Although AR(1) dynamics go a long way in addressing within-firm serial correlation, the possibility still exists that e_{it} in Equation (2) will not be independent across time (Greene, 2000). Any time-dependent effect on performance that is not included in X will be captured in the error term. Previous research has identified many macroeconomic factors associated with performance, including changes in government policy and systemic, macroeconomic shocks. Should we be unable to identify and measure all of these effects, there exists the potential for a systematic time component to be embedded in e_{it}. This systematic component will lead to correlated errors across observations over time, which violates OLS assumptions (Kmenta, 1997; Kennedy, 1998).

Conceptually, we can decompose e_{it} into a vector of systematic (fixed) time effects, which we label Z_t, where Z_t represents yearly dummy variables, and ν_{it}, an independent and identically distributed normal error term with zero mean. Equation (3) represents this decomposition of e_{it}.

$$Perform_{it} = \beta_0 + X_{it}\beta_1 + Perform_{it-1}\beta_2 + Z_t\beta_3 + \nu_{it} \quad (3)$$

Finally, the possibility still exists that ν_{it} in Equation (3) will not be independent within firms or industries. This would occur, for instance, if some firms, or industries, perform systematically

[4] Because many firms in our sample did not report advertising expenditure to COMPUSTAT, we followed prevailing literature in assuming that unreported advertising expenditures were immaterial (e.g., Fee, Hadlock, and Pierce, 2009; Masulis, Wang, and Xie, 2009). We therefore assign zero values to those firm-year advertising observations that were missing. As an alternative, we replaced missing firm advertising intensity with its industry-specific mean level of advertising intensity. Irrespective of the approach, the results on the main independent variables of interest remain unchanged.

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Table 1. Descriptive statistics and correlations

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. ROA	1								
2. Lag ROA	0.55	1							
3. Net income	0.35	0.12	1						
4. Lag Net Income	0.27	0.36	0.74	1					
5. Net KLD score	0.08	0.08	0.01	0.02	1				
6. Size	0.05	0.05	0.37	0.38	−0.07	1			
7. Debt ratio	−0.01	0.02	−0.03	−0.01	−0.05	0.03	1		
8. R&D intensity	−0.08	−0.07	−0.01	−0.01	0.00	−0.01	−0.01	1	
9. Advertising intensity	0.05	0.05	0.06	0.06	0.13	0.03	0.02	−0.01	1
Mean	0.03	0.03	343.04	356.56	11.64	21.76	0.05	1.63	0.13
Standard deviation	0.19	0.20	1800.12	1792.30	2.32	71.97	0.10	56.18	0.03
Minimum	−4.58	−4.58	−56121.90	−56121.90	0.00	0.00	0.00	0.00	0
Maximum	0.70	0.70	39500.00	36130.00	27.00	1900.00	2.06	3755.00	3.26

differently than others due to long-term, nontransient factors (e.g., not simply related to persistence in performance from one year to the next). In order to correct for this sort of unobserved heterogeneity, we incorporate firm/industry fixed effects into our specification (Greene, 2000). We present one representation of our final econometric specification (with firm fixed effects) in Equation (4):

$$\text{Perform}_{it} = \beta_0 + X_{it}\beta_1 + \text{Perform}_{it-1}\beta_2 + Z_t\beta_3 + F_i\beta_4 + \varepsilon_{it} \quad (4)$$

In this case, F_i represents the individual firm-specific disturbance. With a slight modification to the notation in Equation (4), we can incorporate North American Industry Classification System (NAICS) industry effects in lieu of firm effects.[5] The specification in Equation (4) is consistent with recommended estimation techniques for individual-specific variant and time invariant unobserved effects in panel data (Greene, 2000).

In summary, we include within-firm AR(1) dynamics, fixed year effects, and fixed firm/industry effects to control for characteristics that are not directly measured by our other variables but that might correlate with firm performance. The advantage of this approach is it controls for unobserved heterogeneity without having to precisely specify the source of that heterogeneity. Therefore, the specifications provide robust estimates that eliminate bias in statistical results. The disadvantage, however, is that we cannot precisely isolate or identify each and every individual factor that influences the dependent variable. Because our goal is to control for and not investigate or test these effects, we accept this trade-off.

RESULTS

Table 1 presents descriptive statistics and product moment correlations for the variables we use to test the hypothesis. The average ROA for each of the firms in the sample is about three percent per annum. The average net income is about $343 million per year. Although the mean values for ROA and net income are consistent with expectations, the minimum value for ROA (−458 percent) and the minimum (−$56 billion) and maximum ($39.5 billion) values for net income seem exorbitant. Although at first glance the minimum/maximum performance values may appear out of line with the rest of the data, the other values that the firms in question report over time are very comparable to those values. Moreover, data checks revealed that they have been reported faithfully in COMPUSTAT. For example, the $56 billion net loss (and −458 percent ROA) was reported by JDS Uniphase in 2001. It was, up

[5] We note that we cannot include both firm and industry fixed effects in the same specification. This is because there is little variation in industry affiliation over time for firms in these data. Firms generally do not switch industries. Therefore, models with both firm and industry effects cannot be identified. However, because firm effects subsume industry effects (e.g., firm effects aggregated to the industry level capture industry effects), firm fixed effect specifications represent the most conservative test of the phenomenon.

to that point, the largest loss in corporate history.[6] Similarly, the $39.5 billion net income, which at the time represented the largest net income ever reported by any corporation, was recorded by Exxon Mobil in 2006. Nevertheless, to the extent that extreme values have the potential to bias our results, the within-firm dynamic and fixed effects approaches for panel data can aid in controlling for such effects.[7]

The descriptives demonstrate a substantial within-firm correlation between the prior year's ROA and the current year's ROA ($\rho = 0.55$) and the prior year's net income and the current year's net income ($\rho = 0.74$). This is indicative of a substantial persistence in firm performance over time. Not surprisingly, the correlations also indicate a substantial relationship between net income and ROA ($\rho = 0.35$). Firms with greater levels of net income generally have higher ROA.

The correlations between the independent variables and the dependent variables, and among the independent variables, are generally moderate in magnitude. Although the number of employees (size) is positive and significantly related to net income ($\rho = 0.37$), it is only weakly related to ROA ($\rho = 0.05$). This is because ROA eliminates much of the scale effect, since total assets (a correlate of firm size) is in the denominator.

Despite the moderate correlations among the variables, we examined influence tests to see if the results might be impacted in any way by multicolinearity. No independent variable had a variance inflation factor greater than 10, which is the generally accepted range for individual variables (Kennedy, 1998), and no model exceeded the conventional threshold of 30 (Belsley, Kuh, and Welsch, 1980). We therefore conclude that multicolinearity does not negatively impact the results presented herein.

With respect to the main independent variable of interest (net KLD score), its correlation with both dependent variables is positive, although stronger for ROA ($\rho = 0.08$) than for net income ($\rho = 0.01$). We exercise caution, however, in drawing inferences from these relationships. First, the correlations are moderate in both statistical and economic magnitude. Second, the effect is linear. It does not explicitly test the quadratic relationship. Finally, it does not control for many other firm, industry, and time effects that we include in the multivariate analyses. Therefore, to better understand the nature of this relationship, we turn to the multivariate regression analyses.

In Table 2, we present results of regression models using the ROA dependent variable. In Model 1, we regress ROA on a base model of controls, including the within-firm AR(1) dynamics, but excluding fixed effects. Consistent with the correlation tables, we find a positive relationship between the prior year's ROA and current ROA. Model 1 also indicates that larger firms, and those that spend more on advertising, have higher ROA, while firms with larger debt burdens, and those that are more R&D intensive, have lower ROA.

Model 2 introduces our measure of social performance (net KLD score). Consistent with much of the social issues literature (e.g., Waddock and Graves, 1997), we find a positive and significant link between financial and social performance. That is, as firms become more socially responsible, their ROA increases. Although the results with the linear net KLD effect are upward sloping, Model 2 does not include the quadratic.

We introduce the quadratic in Model 3. The results support our hypothesis. The effect of corporate social responsibility (KLD net score) on financial performance is negative at first, but then positive. This indicates that the firms with the greatest ROA are those with the best social record *and* those with the worst social record. Firms in between risk getting 'stuck in the middle' (Porter, 1980: 41)—i.e., they neither benefit from the cost advantages of not engaging in discretionary expenditures over and above what is mandated by law, nor from the ability to use their social performance as a way to profitably improve stakeholder relations.

We subject our findings to stricter tests in Models 4, 5, and 6 by adding year fixed effects, industry (NAICS-6) fixed effects, and firm fixed effects. Although we included fixed effects (as noted at the bottom of each column), we do not report them here. Briefly though, the results suggest that firm performance was better in 2005 and 2006

[6] It has since been exceeded by AIG.

[7] That notwithstanding, in sensitivity analyses we dropped those firms that reported extreme values (e.g., greater than two standard deviations away from the mean). For example, since the mean for ROA is three percent (as described in Table 2) and the standard deviation is 19 percent, we dropped all observations for which ROA was greater than 41 percent and less than −35 percent. For net income, since the mean is $343M and the standard deviation is 1.8B, we dropped all observations with net income greater than $3.943B and less than −$3.257B. In both cases, the results were similar to those reported herein.

Table 2. Results with return on assets (ROA) as dependent variable

	Model 1 ROA	Model 2 ROA	Model 3 ROA	Model 4 ROA	Model 5 ROA	Model 6 ROA
Net KLD score		0.00***	−0.01**	−0.01**	−0.01**	−0.00
		(2.76)	(−1.89)	(−1.97)	(−1.73)	(−0.46)
Net KLD score^2			0.00***	0.00***	0.00***	0.00
			(2.50)	(2.60)	(2.60)	(1.08)
Lag ROA	0.43***	0.43***	0.43***	0.43***	0.38***	0.12***
	(44.29)	(43.98)	(43.96)	(43.79)	(37.46)	(9.40)
Size	0.00**	0.00**	0.00*	0.00*	0.00	−0.00
	(1.83)	(2.03)	(1.29)	(1.41)	(0.86)	(−1.07)
Debt ratio	−0.04**	−0.03**	−0.04**	−0.03**	−0.07***	−0.13***
	(−1.83)	(−1.68)	(−1.75)	(−1.74)	(−2.67)	(−3.44)
R&D intensity	−0.00***	−0.00***	−0.00***	−0.00***	−0.00***	0.00
	(−3.70)	(−3.71)	(−3.69)	(−3.72)	(−3.46)	(0.77)
Advertising intensity	0.12**	0.10*	0.09*	0.09*	−0.01	−0.03
	(1.86)	(1.48)	(1.46)	(1.48)	(−0.68)	(−0.13)
Constant	0.02***	−0.00	0.05**	0.07***	0.06**	0.04
	(10.23)	(−0.11)	(2.26)	(2.56)	(1.96)	(0.98)
Year effects	NO	NO	NO	FIXED	FIXED	FIXED
Industry effects	NO	NO	NO	NO	FIXED	NO
Firm effects	NO	NO	NO	NO	NO	FIXED
No. of observations	4730	4730	4730	4730	4730	4730
No. of firms	1214	1214	1214	1214	1214	1214
Adj./psuedo R-sq	0.301	0.302	0.304	0.312	0.310	0.167

* $p < .10$; ** $p < .05$; *** $p < .01$ (one-tailed tests).
z-statistics are in parentheses.

than in 2001, 2002, and 2003. Moreover, firms in service-based industries performed better (in terms of ROA) than those in manufacturing industries. This result is not surprising, as service firms generally have fewer total assets than manufacturing firms. Finally, the results for the firm fixed effects indicate that there is substantial firm-specific variation in performance in these data. That manifests in the adjusted R-square, as the explanatory power of the model (holding the firm effects aside) drops to 0.167.

Turning to our explanatory variables of interest, the quadratic effect remains robust to year and industry effects (from Models 4 and 5). However, the net KLD score result from Model 6, though directionally consistent, is not statistically different from zero. This likely has to do with the conservative nature of the fixed effect specification with firm dynamics, plus the limited variance in net KLD score within firms over time.[8] The conservative nature of the econometric approach including the firm fixed effect with AR(1) firm dynamics is also evident in the substantial drop in economic magnitude of the lag ROA effect in Model 6 compared to that in the other models. Nevertheless, we acknowledge that, in light of the findings from Column 6, our results are not unequivocal and warrant caution with respect to interpretation. For greater insight, we turn to results with net income as the dependent variable.

Results regressing net income on the independent variables of interest, plus controls, are presented in Table 3. As with the results from Table 2, the results indicate that last year's net income is positively related to this year's net income. Likewise, larger firms, and those with greater advertising intensity, have greater net incomes, while firms with greater debt ratios have lower net income. The impact of R&D, while directionally consistent with that presented in Table 2, does not statistically differ from zero.

With respect to the independent variable of interest (net KLD score), we do not find evidence in Model 2 that social performance is significantly linearly related to net income, as was the case with ROA. Using net income as a dependent variable,

[8] In models including fixed effects with only the linear net KLD score measure (as in Model 2), we likewise find a statistically insignificant effect for net KLD score.

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Table 3. Results with net income as dependent variable

	Model 1 Net income	Model 2 Net income	Model 3 Net income	Model 4 Net income	Model 5 Net income	Model 6 Net income
Net KLD score		−1.18	−355.00***	−361.95***	−278.01***	−218.11***
		(−0.15)	(−9.18)	(−9.37)	(−5.88)	(−3.44)
Net KLD score^2			14.55***	14.89***	12.53***	9.98***
			(9.33)	(9.56)	(6.69)	(3.98)
Lag net income	0.77***	0.77***	0.75***	0.75***	0.64***	0.22***
	(67.20)	(67.15)	(64.22)	(64.67)	(49.84)	(12.49)
Size	2.54***	2.54***	2.11***	2.15***	3.41***	5.91***
	(9.78)	(9.74)	(8.04)	(8.14)	(10.09)	(5.03)
Debt ratio	−544.61***	−546.17***	−605.63***	−578.57***	−291.13	−58.74
	(−2.69)	(−2.69)	(−3.01)	(−2.88)	(−1.18)	(−0.14)
R&D intensity	−0.07	−0.07	−0.04	−0.05	−0.17	−0.01
	(−0.23)	(−0.23)	(−0.14)	(−0.14)	(−0.55)	(−0.02)
Advertising intensity	881.87*	894.92*	889.51*	915.25*	1489.58**	−1672.90
	(1.37)	(1.38)	(1.38)	(1.43)	(1.69)	(−0.77)
Constant	96.77***	104.34	2193.57***	2263.01***	1571.66***	1151.77***
	(4.17)	(0.26)	(9.08)	(8.75)	(4.96)	(2.70)
Year effects	NO	NO	NO	FIXED	FIXED	FIXED
Industry effects	NO	NO	NO	NO	FIXED	NO
Firm effects	NO	NO	NO	NO	NO	FIXED
No. of observations	4730	4730	4730	4730	4730	4730
No. of firms	1214	1214	1214	1214	1214	1214
Adj./psuedo R-Sq	0.561	0.560	0.568	0.573	0.570	0.425

* $p < .10$; ** $p < .05$; *** $p < .01$ (one-tailed tests).
z-statistics are in parentheses.

we are unable to replicate the Waddock and Graves (1997) finding. This divergence in results across dependent variables is not altogether surprising and hints at a specific performance difference between service and manufacturing firms. Manufacturing firms generally have a much larger asset base than service firms, and they therefore generally have a lower ROA. Consistent with such an interpretation is the stylized fact that once we account for industry fixed effects (as in Model 5), we find a positive and significant effect for the linear net KLD score on net income, as for ROA.[9]

With respect to the quadratic effect introduced in Model 3, we find results that mirror those from Table 2. Namely, the impact of corporate social responsibility (net KLD score) on financial performance is U-shaped. As in Table 2, the results from Models 4 and 5 in Table 3 are robust to the inclusion of year and industry fixed effects. However, unlike in Table 2, the quadratic effect from Model 6 in Table 3 is robust to the inclusion of firm fixed effects. The evidence across Models 3–6 in Table 3 corroborates our previous findings and confirms that firms with the best social records and the worst social records perform best. These results likewise favor our hypothesis.

Figures 1 and 2 graphically depict the nonmonotonic, curvilinear relationship between social and financial performance.[10] With respect to ROA (from Figure 1), performance declines at first as a firm's KLD rating increases, reaching a minimum at a net KLD score of 9, but then increases continuously until it reaches a maximum net KLD score of 27. For net income, presented in Figure 2, financial performance reaches a minimum around 12. We note that in both cases, the financial performance for the most socially responsible firms is greater in magnitude than for the least socially responsible firms. That is, financial performance is greater (in both cases) for firms with a net KLD score of 27 than for those firms with a net KLD score of

[9] These results are available from the authors upon request.

[10] We use the models with the most explanatory power to graph these relationships. For ROA, we base Figure 1 on Model 5 from Table 3. For net income, we use Model 4 from Table 4. The alternative models generate qualitatively similar results.

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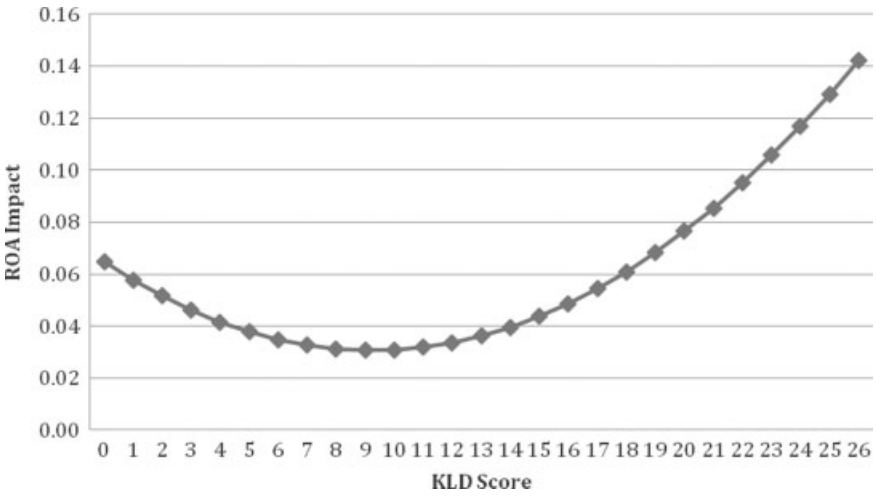

Figure 1. Relationship between KLD and ROA

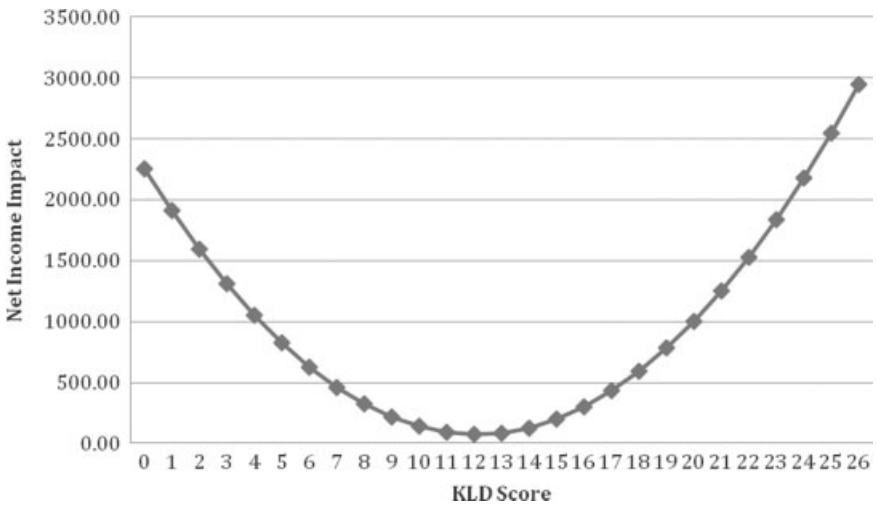

Figure 2. Relationship between KLD and net income

0. Therefore, our results suggest that it is more financially beneficial to be maximally socially responsible than minimally socially responsible.

Sensitivity and robustness

To assess the sensitivity and robustness of the results, we tested several variants of the models presented herein.[11] First, although we theoretically advance and empirically substantiate a quadratic, U-shaped relationship between CSP and CFP, there are myriad functional forms that could possibly describe the relationship between CSP and CFP. We therefore tested the robustness of our results to alternative functional forms. We ran models specifying a cubic function, a quartic function, and a fractional polynomial function. The findings supported none of these alternative functional forms, but rather, continued to support a U-shaped specification.

Second, although we follow the prevailing strategy and corporate social responsibility literatures in adopting ROA and net income as measures of firm performance, we checked the robustness of the results to market-based performance alternatives. Specifically, we tested models using two

[11] All results mentioned in this section are available from the authors upon request.

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alternative measures of performance: financial returns and market capitalization. Irrespective of the dependent variable used, we found U-shaped results consistent with those that we present herein.

Third, because KLD provides an imperfect proxy for corporate social performance (and SIC), we reran results using alternative net KLD scores. The inherent assumption in using an additive approach in calculating the net KLD score, as we have in this study, is that it treats any one KLD dimension the same as any other inasmuch as it impacts financial performance. However, each dimension may not equally impact financial performance. We therefore checked the robustness of the results by using different weightings of the social performance criteria as detailed by Ruf *et al*. (1998) and Waddock and Graves (1997). For example, we experimented with a KLD score whereby we weighted the dimensions by the underlying frequency with which firms receive positive and/or negative scores on each KLD dimension. The results were similar to those we present herein. In addition, because six of the KLD dimensions relate to whether the firm engages in 'controversial' areas of business activity, and those dimensions receive only negative scores, we reran results using a net KLD score based on the seven dimensions on which firms can receive both positive and negative scores. Not only does that create a measure that is wholly internally consistent (i.e., all KLD dimensions are measured in precisely the same way) but it also includes the subset of stakeholder attributes over which firms exercise the greatest discretion. Again, the results were consistent with those we present herein.

Finally, although we control for industry-specific effects in this study, we assessed the sensitivity of our results to industry effects at both greater levels of aggregation and disaggregation. For example, as an alternative to the six-digit NAICS industry fixed effects, we examined results using two- and three-digit NAICS industry effects. The results were entirely consistent with those we present in this study. In addition, we examined results using measures of market power based on firm market share, and overall industry measures of market power based on concentration ratios (CR) (both CR_4 and CR_8). The results for the KLD measures of interest are consistent with those reported herein, whether we control for market power using market share or concentration.

DISCUSSION

Social issues scholars have begun to back away from the long-pursued but fruitless quest to demonstrate that social responsibility is either always good or always bad. Some now seek to develop a contingent perspective that specifies the variables that determine not whether, but under what conditions it does or does not pay to be good (Rowley and Berman, 2000). In that vein we develop a contingent model that specifies a quadratic, U-shaped relationship between CSP and CFP. We hypothesized that though it is costly for firms to engage in socially responsible practices, there are benefits from improved stakeholder relations that can offset these costs. However, a firm's ability to capitalize on these potential benefits, and so profit from CSP, depends upon the firm's stock of SIC. For firms with weak social performance, and accordingly, inadequate SIC, the benefits do not arise, and so the costs produce a negative relationship between CSP and CFP. More investment in social issues, absent the ability to transform it into improved stakeholder relations, produces only more losses. However, as firms accrue SIC through increasing levels of social performance, they become better able to gain and profit from improved stakeholder relations, and so an inflection point in financial performance arises. Firms with the greatest social performance possess a superior capacity to transform social investment into positive financial returns, generating the upward slope in financial returns.

Consistent with our underlying theory, we indeed found a U-shaped relationship between CSP and CFP. We also discovered that firms with the highest CSP generally have the highest CFP. Thus, our findings support Barnett's (2007) theoretical argument that as firms engage in social responsibility, they amass stakeholder influence capacity that improves their ability to transform social investment into financial returns. The accrual of SIC causes the benefits of CSP to increase at a higher rate than the costs, producing an eventual upturn in the CSP-CFP relationship.[12]

[12] This begs the question: if extreme investments in SIC leads to increasing profitability, why not invest all of a firm's assets in building SIC? Barnett (2007: 808) explained how unusually high CFP increases stakeholder expectations of CSP and so dampens a firm's ability to produce SIC. Thus, firms have to spend more to create SIC, creating a 'self-regulating cycle that places upper bounds on CSR contributions.' For this reason, firms are likely

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Our findings add richness to Brammer and Millington's (2008: 1339) conjecture that the benefits of CSP, or lack thereof, come only in the extreme:

> *Those that give at an unexpectedly high rate differentiate themselves in the eyes of stakeholders and reap the benefits of this differentiation... Firms that give at an unexpectedly low rate conserve the financial resources they might have otherwise donated to charity.*

Indeed, we find a tipping point at which the total benefits of CSP outweigh the mounting costs (around a net KLD score of 12 for ROA and 9 for net income). But going beyond Brammer and Millington's (2008) findings, our study suggests that firms do not gain all the benefits only after exceeding this tipping point and none prior. Rather, our study suggests that there is variation in benefits across the range of CSP, such that as SIC accrues, it provides benefits that come to meet and then exceed the costs of being socially responsible. Much the same as the CSP-CFP relationship is neither purely positive nor negative, a firm is neither purely good nor bad. Consider Walmart, which provides low cost prescriptions, yet is frequently criticized for its labor practices; or Ben and Jerry's, which is renowned for its strong support of social and environmental issues yet produces a product that contributes to obesity. In this sense then, our study moves understanding of the CSP-CFP relationship beyond a linear, dichotomous world in which a firm is either socially responsible or not in the eyes of stakeholders, and into a world wherein a firm can accrue varying stocks of SIC that create a range of benefits.

Our findings complement a 'theory of the firm' perspective on corporate social responsibility. McWilliams and Siegel (2001) suggest that the CSP-CFP relationship is neutral because profit-maximizing firms will supply social responsibility at a level that meets demand. Some firms are more socially responsible than others because they face market conditions that demand more social responsibility. But all firms exhaust all profitable social investment opportunities by producing social responsibility at a level that equates to their marginal costs, with the result being an overall neutral relationship. In contrast, we do not assume that firms are producing social responsibility at a level that equates to their marginal cost. Rather, we allow for the possibility that firms develop capabilities that allow some to better meet the market demand for social responsibility. If managers are aware that their firm has less capacity to influence its stakeholders through social performance than does its rivals, then they may make a rational strategic decision to be less socially responsible. Thus, different firms, at any given point in time, have different profit-maximizing levels of CSP due to their different stocks of SIC.

Also consonant with a theory of the firm perspective, our findings suggest that some firms are more efficient at supplying social responsibility than are others. Contrasting Figures 1 and 2, the gap between firms with the lowest and highest net KLD scores is greater for ROA than for net income. The fact that the upturn in ROA outpaces that of net income suggests that much of the benefit of high CSP comes from increased efficiency at the production of social responsibility rather than from increased ability to generate new customers or new markets, or to charge premium prices. This suggests that SIC operates not simply by increasing a firm's capacity to capture additional revenues by bringing in new customers and entering new markets but also by lowering operating costs through CSP. That is, the benefit of high CSP may primarily be the ability to better leverage existing assets rather than to convince skeptical consumers to pay, or buy, more. Future research should attempt to sort out the degree to which financial benefits from CSP come through decreased costs, perhaps from improved efficiency at providing social programs, rather than the ability to increase revenues.

There are some caveats to note with this study. First, we acknowledge that our KLD measure is an imperfect proxy for SIC in much the same way that R&D is an imperfect proxy for absorptive capacity. SIC, as originally conceptualized in Barnett (2007), is meant to be a dynamic, path-dependent construct; however, our measure captures relative differences in performance across firms at a given point in time. Although our econometric specification helps explain how within-firm deviations from a firm's mean CSP score affect CFP, our study does not explicitly examine how firms may alter their levels of SIC. Our research design does not

to stop investing in SIC when it no longer provides benefits, and we therefore do not observe firms overinvesting in SIC in our sample.

allow us to measure the ability of a low or moderate CSP firm to become a high CSP firm in time or to determine the most efficient way to make such a move, should it decide to do so. Future research would therefore be well served to reexamine our results using alternative proxies of SIC that better capture its underlying dynamic nature. We would also encourage future research to better exploit the extant KLD data to generate better proxies for SIC.

That notwithstanding, our results indicate that improving social performance is subject to a learning process. In order for some firms to increase their capacity to benefit from investments in social responsibility, they might have to endure a period of decreased financial performance. This is consistent with SIC as subject to learning effects whereby firms that commit to improving their SIC sacrifice performance in the near term in an effort to improve performance after they successfully build stakeholder relations.

For managers, this suggests that improving financial performance through social investments is not as simple as adopting certain practices in isolation. Rather, firms must make an earnest commitment to building stakeholder influence capacity over time before they can expect to see gains from such investments. Those who rely on measures of near-term financial returns to justify investment in any particular social action are likely to be disappointed. Rather, the returns may be intangible at first, in the form of increasing levels of SIC, with financial returns to follow thereafter. If firms, lacking evidence of immediate financial returns, abandon socially responsible practices, they may be abandoning a growing pool of SIC as well. Thus, managers ought to take heed of more intermediate measures of the returns to social responsibility—SIC—and seek ever improving ways to measure how a firm's socially responsible (and irresponsible) actions advance (or harm) its relationships with stakeholders, as it is SIC that facilitates (or hampers) the transformation of social responsibility into profit.

Second, although we believe that the quadratic, U-shaped relationship we propose is supported by recent advances in both the theoretical and empirical literatures, we acknowledge that we have not closed the book on the precise functional form of the relationship between CSP and CFP. Indeed, we would welcome additional research into the contingent nature of the relationship between CSP and CFP and, more specifically, the relationship between CSP and SIC. In this respect, we hope that others will improve upon our contribution.

Finally, we note that our results were not robust to the firm fixed effects specification with ROA as the dependent variable (Model 6 from Table 2). Although we believe that this is largely a function of the conservative nature of our econometric specification (driven by temporal persistence in ROA coupled with the static nature of the fixed effects), we cannot be sure that this is the *de facto* explanation. We therefore acknowledge that one needs to exercise caution with respect to the inferences drawn from our results. Though our results overall are strongly suggestive, further corroboratory research is needed.

The aforementioned limitations notwithstanding, this study provides novel insight into the contingent relationship between CSP and CFP. It extends the burgeoning theoretical and empirical literature to demonstrate a U-shaped relationship between firm-level CSP and CFP, as shaped by a firm's stock of SIC. The relationship among CSP, SIC, and CFP is likely more complex than the available data allowed us to model herein, of course, and so we hope that this study will encourage future work that specifically examines how SIC mediates the relationship between social and financial performance. As such work progresses, we can move beyond the false 'Friedman vs. Freeman' debate (Freeman, 2008) and toward a clearer understanding of the contingent conditions under which it does, and does not, pay to be good.

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