# An Investigation of Real Versus Perceived CSP in S&P-500 Firms

Catherine Liston-Heyes Gwen Ceton

ABSTRACT. Firms are spending billions annually in the name of corporate social responsibility (CSR). Whilst markets are increasingly willing to reward good and responsible firms, they lack the instruments to measure corporate social performance (CSP). To convince investors and other stakeholders, firms invest heavily in building a reputation for good corporate behaviour. This article argues that reputations for CSP are often unrepresentative of true CSP and investigates how differences in 'perceived' and 'actual' - as measured by the Fortune and KLD databases, respectively - can partly be explained by firm characteristics. Amongst other things, it finds that overrated firms are more likely to be relatively big, profitable, operating in non-polluting but competitive industries and with no history of wrong doings to their primary stakeholders. They will also typically spend a lot of effort satisfying the claims of their secondary stakeholders. Above all, the results emphasise the need for researchers to recognise that the databases measure different phenomenon and are not interchangeable.

KEY WORDS: corporate reputation, corporate social responsibility, Fortune America's Most Admired Companies, KLD data regression analysis

Firms are spending billions [over \$US 9 billion in 2001 (Tyrrell, 2006)] annually in the name of corporate social responsibility (CSR). Whilst markets are increasingly willing to reward 'gentle' capitalism, the instruments required to measure corporate social performance (CSP) are lacking. This allows a gap to form between perceived and actual CSP. Since it is perceived CSP that ultimately dictates resource allocation decisions, firms conduct CSR investments strategically to enhance their reputation for good corporate behaviour.

This article argues that reputations for CSP may often be unrepresentative of true CSP and investi-

gates the factors that can help explain differences in 'actual' and 'perceived' CSP. It focusses on two popular measuring instruments used to assess the CSP of S&P 500 firms: the KLD database and the "responsibility to the community and the environment" scores found in Fortune's "America's Most Admired Companies" surveys. These indices are good representatives of two classes of CSP measurement approaches: the objective social audit and the reputation survey, respectively.

Our study demonstrates that these two indices measure different phenomena and should not be used interchangeably. It also emphasises the importance of measuring and understanding differences between perceived and actual CSP. Perceptions of CSP - in so far as economic agents are drawn to organisations with a good CSP - can influence a number of resource allocation decisions, such as how employees select employers, which investment stocks are chosen and the buying of everyday goods and services. We argue that if 'perceptions' of CSP are misaligned to actual CSP, an asymmetry of information between economic agents arises affecting resources allocation decisions and potentially creating a loss of economic efficiency. In other words, our premise is that the discrepancy between perceived and actual CSP is a source of market failure and hence of losses in social welfare. Whilst we do not test the scale and scope of these postulated losses, we identify when and where perceptions misrepresent actual performance using the KLD database as a measure of actual CSP and the Fortune social component of the reputation index as a measure of perceived CSP.

The assumption that the KLD database is a reliable measure of actual CSP is admittedly a big one. In our defence, this is an assumption made by many authors (Orlitzky et al., 2003), and the database is in many

respects the best instrument currently available to measure the CSP of US firms. Whilst there is still no consensus about what should and should not be included in a CSP assessment exercise, how performance should be evaluated, who should evaluate it and how it should be converted into quantifiable indicators, KLD provides an objective, uniform and systematic assessment of the social behaviour of firms (Graves and Waddock, 1994; Shalhoub, 1999; Wood and Jones, 1995).

More specifically, the KLD database provides 54 dichotomous measures of CSP components per firm. These include strengths and concerns in areas such as community, environment, employees, diversity and product/customer issues gathered from over 10,000 global media sources scrutinised on a daily basis by

independent experts.<sup>2</sup> Its rating scheme is seen as a major improvement over earlier methods because it ranks all companies in the S&P 500, uses multiple data sources, systematic ratings processes and independent assessors. (Table I summarises the KLD entry of a specific firm.)

A second popular approach to measuring CSP is to rely on reputational indices (Cochran and Wood, 1984; Moskowitz's, 1975; Sturdivant and Ginter, 1977). These are based on the assumption that CSP reputations are good reflections of underlying CSP values and behaviours. A popular example of such indices is extracted from *Fortune* magazine's annual ranking of "America's Most Admired Companies". More concretely, the Fortune data provide information about companies on eight qualitative attributes:

TABLE I
A selected KLD entry – Whirlpool Corporation

KLD index: components					
Community					
Strengths: Generous giving, innovative	giving, support for housing,	S = 2			
support for education, non-US charities	es, other strengths				
Concerns: Investment controversies, neg	gative economic impact, other	C = 1			
concerns					
Diversity					
Strengths: CEO, promotion, board of d	lirectors, work/life benefits,	S = 1			
women & minority contracting, emplo	yment of the disabled, gay &				
lesbian politics, other strengths					
Concerns: controversies, non-representa	tion, other concerns	C = 2			
Employee relations					
Strengths: union relations, profit sharing	g, employees involvement,	S = 1			
retirement benefits, other strengths					
Concerns: union relations, safety, workf	orce reductions, retirement	C = 1			
benefit, other concerns					
Environment					
Strengths: Beneficial products and service	ces, pollution prevention,	S = 2			
recycling, alternative fuels, communica	tions, other strengths				
Concerns: Hazardous waste, regulatory	problems, ozone depleting	C = 2			
chemicals, substantial emissions, agricult	tural chemicals, climate change,				
other concerns					
Product					
Strengths: quality, R&D innovation, be	nefits to economically disad-	S = 0			
vantaged, other strengths					
Concerns: product safety, marketing/con	ntracting controversy, antitrust,	C = 0			
other concerns					
Total strengths (S): 6	Total concerns (C): 6	Z – overall score: 2.42			

quality of management, quality of products or services, value as a long-term investment, innovativeness, soundness of financial position, ability to attract, develop and keep talented people, responsibility to the community and environment and wise use of corporate assets. Close to 10,000 company directors and industry analysts are then asked to give a rating of 0 (poor) to 10 (excellent) for each of the above criteria to the companies in their industry. The overall corporate reputation is computed by taking an average of the eight scores. The results of the survey are widely circulated and cited in newspapers, websites and popular media outlets. Authors interested in issues of CSR have used the 'responsibility to the community and the environment' component score of the Fortune Corporate Reputation index as a proxy measurement of CSP. This score and the KLD index are the measures of interest to us in this article.<sup>3</sup>

Many studies use these measures interchangeably (Margolis and Walsh, 2001; Meng-Ling, 2006; Pava and Krausz, 1996). Table II presents a sample of articles using KLD and/or Fortune to measure firms' CSP. Aside from notable exceptions including Orlitzky et al. (2003), none investigates the fact that

one is based on survey-based assessments of reputation, while the other is composed of independent accounts by expert analysts.

The aim of this article is to quantify differences between the two rankings and investigate whether these can be explained systematically. Our results indicate that the two measurements differ substantially and should not be used interchangeably. The differences, it is argued, are indicative of gaps between perceptions of CSP – which can, to a certain extent, be manipulated – and actual CSP, which is harder to influence. Delineating patterns across firms can help identify the factors that influence perceptions in the business community and the source of the discrepancies. This information is valuable to firms in so far as perceptions influence decisions that impact directly on their survival and to social planners interested in improving the allocation process.

More concretely, we postulate that the possibility of overrating in terms of CSP (i.e., obtaining a Fortune ranking that is better than the KLD rank) increases with the size of the firm even after controlling for financial success (the 'halo' effect). Size is another sign of business success and may enhance perceptions of CSP. On the other hand, firms with

TABLE II
Selected users of KLD and Fortune databases

Author(s)	Pub. date	Author(s)	Pub. date	
Fortune CSP index		KLD CSP index		
Gössling and Vocht	2007	Liston-Heyes and Ceton	2007	
Black et al.	2003	Parthiban et al.	2007	
Rowe et al.	2003	Dyer and Whetton	2006	
Shalhoub	1999	Strike et al.	2006	
Stanwick and Stanwick	1998	Simerly	1995	
Preston and O'Bannon	1997	McGuire et al.	2003	
Hammond and Slocum	1996	Verschoor and Murphy	2002	
Simerly	1995	Hillman and Keim	2001	
Thomas and Simerly	1994	McWilliams and Siegel	2000	
Brown and Perry	1994	Agle et al.	1999	
Herremans et al.	1993	Johnson and Greening	1999	
Fombrun and Shanley	1990	Waddock and Graves	1997	
McGuire et al.	1998	Turban and Greening	1997	
Wokutch and Spencer	1987	Kinder and Domini	1997	
Fortune and KLD CSP index				
Margolis and Walsh	2001, 2003	Griffin and Mahon	1997	
Waddock and Graves	1997	Sharfman	1996	
Fernández and Santalo	2007			

higher risk ratings and more extensive media exposure should, other things equal, be more likely to be underrated reputation-wise (Mooweon and Haunschild, 2006; Rowe et al., 2003). We also stipulate that firms that cater relatively well to their secondary stakeholders (i.e., those that are not immediately necessary to the firm's survival) and those who avoid wrong doings to primary stakeholders (i.e., those the firm relies upon for its survival) are more likely to be overrated. We also investigate whether some industries (i.e., those that are in 'polluting' industries and those that operate in concentrated market structures) are more likely to be overrated than others. These hypotheses (eight in total) are investigated empirically using S&P 500 data.

This article is organised in five sections. Section II provides a brief review of the literature, including a discussion of the KLD and Fortune databases. Section III formalises the hypotheses and presents our methods. Results are communicated and interpreted in Sect. IV, followed by brief conclusions and policy implications (Sect. V).

# Corporate reputation and corporate social performance

Corporate reputation is "(...) a perceptual representation of a company's past actions and future prospects that describe a firm's overall appeal to all its key constituents when compared to other leading rivals" (Fombrun, 1996, p. 72). They are formed by people's relationship with a firm and their knowledge of its character, ability, products, services and behaviours (Dowling, 2004; Sjovall and Talk, 2004).

Reputations allow firms to signal their 'true' attributes over time (Rindova et al., 2005 and references therein). The information asymmetry that invariably exists between a firm and its consumers (and other stakeholders) requires it to use signals that will convey characteristics about its products, activities and intentions (Spence, 1974). A good signal is one that is relatively well correlated to the underlying, but unobservable characteristic – or characteristics, since corporate reputation is a multidimensional construct (Dowling, 2004).

In this article we are interested in the social dimension of corporate reputation – i.e., the unobservable characteristic is CSP, whilst the signal

is CSP reputation. Under this perspective, a firm's CSP reputation is interpreted as a signal that the firm can influence (at a cost) to convey information to its stakeholders about the quality of its products and the treatment of its stakeholders (including the environment). For instance, Fombrun and Shanley (1990), Brammer and Millington (2004) and Williams and Barrett (2000) all demonstrate how corporate philanthropy contributes to the enhancement of a firm's overall reputation, whilst others show how satisfying employees' claims and other proactive treatment of diversity issues enhances a firm's overall reputation (Turban and Greening, 1997). Williams and Barrett (2000) show that corporate philanthropy and social activities can lessen the damaging effects on corporate reputation of certain criminal activities and 'bad' behaviours (e.g., violations of employee safety standards, OSHA, EPA, criminal misconduct as well as product recalls) (Davidson et al., 1994; Dranove and Olsen, 1994; Frooman, 1997). Firms increasingly rely on a good CSP reputation to enhance, protect or repair their overall corporate image (Dowling, 2004; Fombrun and Riel, 2004; Orlitzky et al., 2003; Turban and Greening, 1997).

To develop a 'good' signal, a firm must be both active on the CSR front and publicise its performance efficiently. Whilst cynics argue that more time and money is spent on the latter, others suggest that media and public scrutiny ultimately punish firms for misguided CSP reporting (Brammer and Millington, 2005; Brown and Deegan, 1998). Recent audit guidelines and best practices are adding some transparency and uniformity to CSP assessments – thereby enhancing the quality of the signal – although much remains to be done.

Brammer and Pavelin (2004) suggest that to maximise reputational benefits of a strong CSP, firms need to fine tune their CSR strategies by realigning social activities to their corporate image. Their recommendation is based on a study of the relationship between CSP and overall corporate reputation of UK firms. They show that corporate reputation and social performance scores are often inconsistent. More specifically, they show that the retail, construction, business services and engineering sectors have overall corporate reputations that respond positively to good social performance, whilst the overall reputation of firms in the finance, utilities and chemicals industries are less responsive

to good CSP. Their results reinforce findings from Dowling (2004) suggesting that CSR activities are interpreted differently in different sectors and will consequently have different impacts on corporate reputation.

In this article, we focus exclusively on the relationship between CSP reputation and actual CSP. We argue that in so far as the long term viability of the firm is concerned, it is the perception of CSP that matters more than the actual CSP. However, from a social perspective, if perceptions are misrepresenting real stakeholder-firm relations such that the CSP signal is not an effective one, then resources will be misallocated and consumer surplus lost.

In other words, this article focusses on the potential discrepancy between perceptions and actual CSP and the resource allocation implications this may entail. A strong CSP reputation will attract investors, customers and employees to the firm and reduce the cost of contracts (implicit and explicit) with governments, suppliers, community representatives and other stakeholders. Firms that are underrated relative to their true CSP will suffer as a consequence, whilst those that are overrated are appropriating resources that should have been allocated elsewhere. Overrated firms also tend to be harshly punished by a sudden realignment of customer expectations (Fombrun and Riel, 1997; Greyser, 1999).

## Research hypotheses and methods

The existing literature suggests that size, past financial performance, attitude toward risk, industry and media exposure impact upon the overall corporate reputation of a firm (Fombrun and Shanley, 1990). We postulate that the same variables will also influence corporate social reputation and help explain why some firms are more likely to be under(over)rated relative to an objective assessment of their CSP.<sup>4</sup>

Firm size is likely to have an impact because size is a signal of success if and when growth is interpreted as the result of an effective corporate strategy (Brammer and Millington, 2005; Fombrun and Shanley, 1990). Moreover, larger firms are in the public eye (and scrutiny) and therefore more aware (and caring) of their reputation. They are also more likely to experience economies of scale in CSP and

reputation-building. These arguments are summarised in our first hypothesis:

H1: All else equal, the larger the firm, the more likely it is to be overrated in terms of its corporate social reputation.

Firms with higher financial returns will, all else equal, satisfy stakeholders and investors more easily than less successful ones, thereby securing a good overall corporate reputation regardless of how the firm has performed in other management areas (Hammond and Slocum 1996; Roberts and Dowling, 2002). Existing empirical research suggests that the financial performance of the largest 500 US firms can heavily influence the composite scores of their respective Fortune rankings. In particular, studies show that financial performance can explain up to 44% of the variations in Fortune's responsibility to the community and the environment ratings used in this study (Fombrun and Shanley, 1990; McGuire et al., 1990). Whilst Brown and Perry (1994) recommend removing the halo effect by means of a partialing-out strategy that neutralises the effect of financial performance on other variables, we follow Williams and Barrett (2000) by treating financial performance as a control variable in our regression analyses. This leads to our second hypothesis:

H2: All else equal, more profitable firms are more likely to be overrated in terms of their social reputation (the halo effect).

Whilst investors like successful firms, they will require a higher premium for firms with variable returns (Fombrun and Shanley, 1990). There is evidence that the Fortune reputation ratings in all categories are affected by investor risk aversion towards the volatility of firm returns (Rowe et al., 2003, p. 188). This motivates our third hypothesis, which states that firms with higher risk ratings are more likely to be underrated in terms of CSP reputation relative to their actual CSP.

*H3*: All else equal, greater financial risk will be associated with firms that are more likely to be underrated in terms of their social reputation.

The next hypothesis (H4) deals with media portrayal of the firm, a phenomenon that is somewhat out of

its control, but is important in forming public opinions. While some report inconclusive evidence about the effect of media visibility on corporate reputation (e.g., Brammer and Millington, 2005), Fombrun and Shanley (1990) find that any type of media exposure, whether positive or negative, has a negative affect on the overall corporate reputation of a firm. More concretely, they argue that even positive coverage can heighten expectations that firms find difficult to manage in the long run, leading to disappointed stakeholders and slumps in corporate reputation. For instance, the recent practice of 'green washing', where firms exaggerate their environmental friendliness, is increasingly punished by stakeholders informed by NGO and other scrutinising organisations. Mooweon and Haunschild (2006) exemplify this trend by reporting how highly visible firms tend to suffer more damaging effects from product defects than less visible ones. These insights underpin our fourth hypothesis:

H4: All else equal, firms with a greater media exposure are more likely to be underrated in terms of their CSP reputation.

The fifth and sixth hypotheses examine in more detail the treatment of primary and secondary stakeholders by the firm. Primary stakeholders are those who have prominent economic relationships with the firm and are hence essential to its survival. They appear in the KLD database under the categories of employees, diversity issues and products/ customers. Secondary stakeholders include the community and the environment (Graves and Waddock, 1994). The fifth hypothesis focusses explicitly on past social 'irresponsibilities' the firm has committed towards its primary stakeholders. We posit that social misbehaviour towards primary stakeholders can scar the corporate reputation of a firm, creating a long-term discrepancy between a firm's actual and perceived CSP.

H5: All else equal, firms that engage in social 'irresponsibilities' towards primary stakeholders are more likely to be underrated in terms of CSP reputation.

Our sixth hypothesis (H6) tests the notion that social activities geared towards the satisfaction of secondary stakeholder claims are easier to advertise and more

highly rewarded (in terms of corporate reputation) by external assessors. The satisfaction of these claims may not necessarily provide higher overall CSP ratings unless primary stakeholder claimants are also satisfied, but they are more effective in terms of building a strong corporate reputation in social matters. This, we argue, can explain some of the discrepancies in CSP ratings observed across firms as expressed in H6.

H6: All else equal, firms that emphasise the satisfaction of secondary stakeholder claims are more likely to be overrated in terms of their CSP reputation than their counterparts.

Our penultimate hypothesis (H7) is inspired by findings in Dowling (2004) suggesting that CSR activities are interpreted differently across industries and will consequently have different impacts on corporate reputation. It also reflects the work of Brammer and Pavelin (2004), who show that firms in the retail, construction, business services and engineering sectors have overall corporate reputations that respond positively to good CSP, whilst the overall reputation of firms in the finance, utilities and chemicals industries are less responsive. Preliminary testing of the database showed that discrepancies between perceptions and actual CSP were particularly pronounced in 'polluting' industries (e.g., utilities, energy, materials) relative to those in less polluting sectors (e.g., health care, financial services, IT). We hypothesise that firms in polluting industries will be treated differently in reputational terms by the business community than firms in other sectors. This is expressed in H7:

H7: All else equal, polluting industries will be treated differently in terms of corporate social reputation than firms in other sectors.

Our final hypothesis (H8) builds on insights from Baron (2001, 2006), which suggests that firms can use CSR strategically to improve their competitive position. According to one set of estimates of this proposition,<sup>5</sup> ceteris paribus, doubling competition in the marketplace increases the CSR ratings of an average company by between 184% and 800% (Fernández-Kranz and Santalo, 2007). In other words, CSP improves with higher levels of competition in the product market. We postulate that the

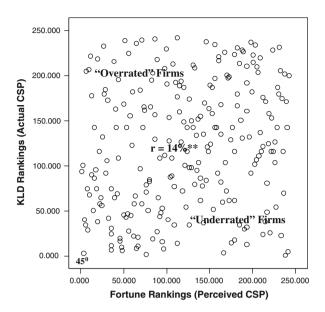


Figure 1. Scatter plot of KLD versus Fortune rankings.

business community takes this lack of incentive into account and 'punishes' firms by downgrading their assessment of CSP. Hypothesis 8 is worded as follows:

H8: All else equal, firms operating in concentrated market structures are more likely to be underrated in corporate social reputation terms than firms operating in more competitive settings.

The sample used in this study includes all companies that have been ranked by the KLD and Fortune's

Most Admired Companies databases in 2002 – this entails 242 companies, all of which are traded on the S&P 500.

Whilst the Fortune data (i.e., the social responsibility component of the overall corporate reputation index) are readily convertible into ranks because they appear in numerical format, the KLD data are presented in dichotomous format (yes/no) and had to be manipulated before they could be converted into ranks. We followed by aggregating strengths and concerns scores for each of the five CSP categories in the KLD database (Community, Diversity, Employee Relations, Environment and Product/ Customer) and converting these into z-scores (ZCSP).<sup>6</sup> The z-scores were subsequently aggregated into a single overall CSP score for each firm and ultimately converted into ranks. (See Figure 1 for a scatter plot of the KLD and Fortune rankings, and Tables I and III for selected KLD and Fortune ratings).

Our next step was to determine whether the differences between the two rankings are indeed significant. We found (using the Kendall tau correlation procedure) that there is only a small positive correlation between the KLD and Fortune social rankings (14% significant at 0.01 level) and that the mean difference between the ranks is 69 – a relatively high figure for data that essentially measure the same qualities in a firm (rank differences varied between 0 and 237 with a standard deviation of 54.7).

TABLE 3
Selected corporate rankings in KLD and Fortune databases

Company name	Fortune's social rating	KLD total z-score	Fortune ranks	KLD ranks	Differences in ranks (F-KLD)
Abbott Laboratories	5.16	-1.23	200.5	170	-30.5
Advanced Micro Devices	5.66	0.07	149	116.5	-32.5
Alberto-Culver Co.	5.83	2.27	130.5	46	-84.5
Albertson's, Inc.	5.96	0.07	112	116.5	4.5
Allegheny Tech., Inc.	6.22	-3.75	86	221	135
Allstate Corporation	6.41	-4.2	70.5	224	153.5
_	_	_	_	_	_
Weyerhaeuser Co.	6.73	-1.49	48	178	130
Whirlpool Corporation	2.96	2.42	241	44	-197
Williams Co., Inc.	5.47	-0.74	166	153	-13
Winn-Dixie Stores, Inc.	8.08	-1.27	3	171.5	168.5
Worthington Ind., Inc.	6.33	2.19	76	49	-27

We then computed the differences between the Fortune and KLD ranks (Fortune minus) to create a variable called 'FORKLD', which is used as the dependent variable in a multiple regression analysis designed to investigate our eight hypotheses, i.e., that firm size (H1), financial performance (H2), financial risk (H3), media exposure (H4), social '(ir)responsibilities' (H5) and efforts to fulfil secondary stakeholder claims (H6) are all factors that can help explain why the social reputation of some firms tend to be more highly rated than others of equal actual social performance. An industry dummy (H7) was introduced to capture additional variations due to firms operating in polluting industries, whilst a measure of market concentration (H8) monitors the extent to which perceptions are influenced by the recognition that certain markets lack the social incentives produced by competitive pressures.

The company accounts data were compiled using DataStream (2002 entries). Firm size (SIZE – H1) was measured by total sales [in (\$US 000000)], financial risk (RISK – H2) by the long-term debt to total assets ratio (Waddock and Graves, 1997) and profitability (ROA – H3) by return on assets. The data for media exposure (MEDIA – H4) were computed by recording the number of times each company was mentioned in a news story in the Wall Street Journal (WSJ) and/or *Fortune* magazine, two popular financial publications (between June 2001 and June 2002). The next two variables were compiled directly from the KLD database. The PRICON variable (H5) captures the number of social

concerns involving primary stakeholders divided by the total number of social concerns associated with that particular firm. The SECPRIM variable (H6) was computed by dividing the number of areas of social 'strengths' involving secondary stakeholders by the number of areas of social strengths targeting primary stakeholders. Industry affiliations (H7) were extracted from DataStream and grouped into two sets: those with versus those without activities that directly impact upon the environment. This meant that firms in utilities, energy, materials and telecoms (IND = 1) were grouped together separately from those in health care, consumer discretionary, consumer staples, financial services and IT (IND = 0). The data on market concentration (H8) were obtained from the US Census Bureau (2002 data).

The final sample size was  $N = 203.^7$  Table IV presents descriptive statistics of the variables used in our analyses.

### Results and discussion

The differences in actual and perceived rankings (KLDFOR) was used as the dependent variable in our regression analysis, while the variables contained in the first eight rows of Table V were used as independent variables. Together, these explain 27% of the variations in the dependent variable. Table V presents details of the regression results.

The variable SIZE (H1) is negative and statistically significant, suggesting that a 1% increase in

TABLE IV				
Descriptive statistics and frequencies ( $n = 203$	()			

Variables	Minimum	Maximum	Mean	SD
HI – SIZE	0.84	217.80	17.58	28.95
H2 – ROA	-66.47	32	3.40	7.60
H3 – RISK	0.00	0.59	0.21	0.13
H4 – MEDIA	0.00	537.00	25.83	50.71
H5 – PRICONS	0.00	1.00	0.54	0.42
H6 – SECPRIM	0.00	300	0.30	0.49
H7 – IND (dichotomous)	0 non-polluting	1 polluting	0: 64% - 1: 3	5%
H8 – N50CON	9.10%	100%	79.51%	19.83%
Fortune Social Res. Score	2.32	8.60	5.93	0.94
z-score KLD	-6.55	7.75	0.05	2.74
FORKLD	-211	237	0.00	88.35

TABLE V	
Multiple regression analysis: differences in rankings (	(KLD-Fortune)

Variables	Unstanda coeffic		Standardized coefficients	t	Sig.	Collinearity	statistics
	В	S.E.	Beta			Tolerance	VIF
Constant	2.41	23.67		0.10	0.92		
HI − SIZE**	-0.67	0.18	-0.27	-3.67	0.00	0.89	1.123
H2 − ROA**	-2.76	0.65	-0.283	-4.25	0.00	0.96	1.044
H3 – RISK	-64.57	41.83	-0.11	-1.54	0.13	0.89	1.123
H4 – MEDIA	0.10	0.11	0.07	0.95	0.35	0.78	1.277
H5 – PRICONS**	24.57	12.15	-0.14	-2.02	0.05	0.91	1.101
H6 − SECPRIM**	-58.18	18.00	0.22	3.23	0.00	0.92	1.09
H7 − IND <b>**</b>	-50.87	12.47	-0.30	-4.08	0.00	0.72	1.263
H8 - N50CON**	0.64	0.26	0.17	2.43	0.02	0.91	1.104
Model summary	$R^2$ : 0.27;	adjusted R	<sup>2</sup> : 0.24; SE: 67.52; regression	F: 7 882; S	Sig.: 0.000	0	

<sup>\*\*</sup>Significant beyond the 0.05 level.

annual sales revenues at the firm increases the probability of CSP overrating by 0.67%. These results support past findings on the importance of size on CSP - e.g., big firms are good at publicising their social activities - and their inclusion in our model (Margolis and Walsh, 2001). The variable ROA (H2), which captures financial performance, is, as expected, also negative and statistically significant. This is effectively the halo effect, where a firm's financial performance enhances the perception of other non-financial achievements. Our results suggest that, ceteris paribus, a 1% increase in the rate of return of assets of a firm enhances its Fortune placement over its KLD placement by almost three ranks (2.76). Neither the risk (RISK) nor the media (MEDIA) variables were significant, implying that our claims that risky companies tend to be more harshly treated in reputation terms (H3) and that, all other things equal, media attention is counterproductive (H4) are not supported by the data. These two variables are nonetheless important theoretically and were kept in the final regression to reduce the probability of omission bias.

Our fifth and sixth hypotheses (H5 and H6) are both supported. More concretely, the regression results show that wrong doings to primary stakeholders reduce perceived CSP relatively more than actual CSP, thereby enhancing the probability of an underrated reputation. In other words, the business community punishes social irresponsibilities to pri-

mary stakeholders harshly. The results also suggest that catering to secondary stakeholders is highly rewarded in perceived CSP, leading to overrating in reputation terms. These results are interesting and emphasise the need to examine the composition of social activities the firm engages in and the impact these have on its reputation. Some social activities (e.g., satisfying the demands of secondary stakeholders) are more effective in building a reputation for corporate good deeds than others. The industry dummy was also statistically significant, confirming our hypothesis (H7) that firms in polluting industries are relatively more penalised in actual than perceived CSP, enhancing the probability of overrating. And finally, there is our hypothesis that the business community will recognise the lack of incentives of firms in concentrated produce markets in developing their CSP (H8). Other things equal, an increase in the joint market share owned by the top 50 firms decreases the likelihood that a firm will be overrated in reputation terms. These two last findings also support our claims that industry affiliation will impact upon the overall probability of overrating. Table VI summarises these findings.

#### Conclusions

Many researchers have used 'actual' and 'perceived' measures of CSP interchangeably in their studies of

TABLE VI Summary of the regression results

Firm characteristics	Impact on the difference between Fortune and KLD rankings
HI – SIZE**	Increasing the size of the firm increases the likelihood of reputation 'overrating'
H2 – ROA**	Increasing the financial performance of the firm increases the likelihood of reputation 'overrating'
H3 – RISK	Increasing the risk rating of the firm has no statistical impact on the dif- ferences in CSP ratings
H4 – MEDIA	Increasing the media exposure of the firm has no statistical impact on the differences in CSP ratings
H5 – PRICONS**	Increasing the extent of wrongdoings to primary stakeholders decreases the likelihood of reputation 'overrating'
H6 − SECPRIM**	Increasing the focus on the satisfaction of secondary stakeholder claims increases the likelihood of reputation 'overrating'
H7 – IND**	Moving from a non- to a polluting industry increases the likelihood of reputation 'overrating'
H8 – N50CON**	Increasing the total market shares owned by the top 50 firms decreases the likelihood of reputation 'overrating'

<sup>\*\*</sup>Significant beyond the 0.05 level.

corporate social responsibility (Margolis and Walsh, 2001; Meng-Ling, 2006; Pava and Krausz, 1996). This study demonstrates that CSP reputations are often unrepresentative of true CSP using the KLD and the Fortune score of 'responsibility to the community and environment', two popular and widely used measures of CSP in US firms. It investigates the scale of the discrepancy between the two measures and examines the factors that can help explain differences in 'actual' and 'perceived' CSP.

The underlying premise is that CSP reputations are used as signals of true CSP and have a genuine impact on markets by influencing the resources allocation choices of economic agents. More concretely, we argue that perceptions will ultimately influence how employees select employers, the choice of investment stocks, the pricing and buying of goods, how subsidies are allocated between firms and other similar decisions, thereby exerting a real impact on the allocation of resources. When perceptions are misaligned to reality, resources may not be allocated to their most productive use, generating potential losses in social welfare.

Using statistical analyses, the article uncovers a number of interesting findings, including: (1) the existence of a wide discrepancy between the perceived and actual CSP of S&P 500 firms. The regression

analyses show that: (2) larger firms are more likely to be overrated in terms of their true CSP, as are (3) firms that are financially successful, thereby confirming existing findings on the halo effect. They also suggest that (4) the consequences of wrong doings to primary stakeholders are harsher in reputation than real terms and that (5) investing in satisfying the claims of secondary stakeholders is more productive in reputational than real terms – i.e., such investments enhance the probability of overrating in corporate reputation. The regression analyses also reveal that (6) polluting industries are treated more harshly in corporate reputation terms than in actual terms and that (7) the business community 'punishes' firms operating in concentrated product markets by recognising that they lack the incentives to develop leading CSR programmes. The regression results do not, however, support our claims that higher risk ratings and extensive media profiles will impact upon the likelihood that a firm's corporate social reputation will be out of sync with its actual corporate social performance.

Caveats aside, our study accomplishes three things: Firstly, it highlights the importance of developing measurement instruments (i.e., CSP audits) that are reliable, comparable and tamper proof. Their widespread use will, we argue, improve the ability of the business community to assess the

'true' CSP of firms, thereby reducing the gap between corporate social reputations and actual CSP. Improved and more accurate CSP reputations will reduce the likelihood of market failure and enhance the efficiency of resource allocations in the market place.

Secondly, it provides insights into the factors that enhance the probability of corporate reputation over- and underratings. In particular, it shows that size and a strong financial performance can enhance a social reputation, whilst wrong doings to primary stakeholders can weaken it. It also shows that it pays in reputation terms to focus on satisfying the claims of secondary stakeholders and that Fortune scorers are relatively more lenient to firms operating in polluting industries than their KLD counterparts, but less so towards firms operating in more concentrated product markets. This sort of insight is particularly important when firms are spending increasing amounts of time and money on CSR-related activities to influence the decision of their stakeholders and enhance their corporate reputations.

The final goal of this study is to emphasise the need to recognise and monitor the gap between perceived and actual CSP. As argued throughout, CSP perceptions (e.g., Fortune) matter in so far as they impact upon the allocation of resources when they differ from more objective and less malleable ratings (e.g., KLD). Researchers need to recognise this phenomenon and select their CSP measurement tools accordingly. Some may be interested in the factors that impact upon corporate reputation, whilst others may be more concerned about the real improvement in welfare of a firm's stakeholder groups. Both objectives are important, but necessitate different approaches. Our emphasis here is on understanding the extent of the gap between these two sets of measures, the consequences of a persisting discrepancy and the factors that create it.

The study is admittedly based on the very strong assumption that the KLD data provide a reliable measure of true CSP; some would disagree with this assumption (e.g., Entine, 2003; Igalens and Gond, 2005; Schwartz, 2003). Its conversion into z-scores and subsequently into ranks also adds elements of uncertainty to the process. Nonetheless, our results highlight the extent to which the databases differ and document some of these differences. Many studies do not specify at the onset whether the research is

concerned with CSP reputation or with actual CSP – i.e., what firms are perceived to be doing versus what they are actually doing. Our article emphasises, amongst other things, the importance of doing so.

### Notes

- <sup>1</sup> For critics of the KLD database as a measure of CSP, see Entine (2003), Igalens and Gond (2005) and Schwartz (2003).
- <sup>2</sup> Additional details of the KLD database are presented in Kinder and Domini (1997). This database is used to construct the Domini 400 Social Index, a popular rating service for investors.
- Table III below presents a selection of the KLD and CSR Fortune scores for specific companies.
- <sup>4</sup> Advertising expenditures is another factor often considered in CSP-related regressions (Fombrun and Shanley, 1990). We tested this variable, but found little evidence of strong explanatory power. As it was strongly correlated to the sales data (SIZE), it was dropped from further analyses.
- <sup>5</sup> The findings in Fernández-Kranz and Santalo (2007) apparently holds for different measures of CSR ratings and three different proxies of competition.
- <sup>6</sup> Our preference for *z*-scores over the ±2 truncated scores favoured by the majority of authors using the KLD database is largely due to the unequal number of activities in each category. The *z*-scores normalise the weight allocated to each category in the final scores, whilst maintaining the richness of the data. We are grateful to Professor Sandra Waddock for this suggestion.
- <sup>7</sup> A total of 39 firms were dropped from the final sample due to missing variables. We subsequently tested for differences between our sample and the S&P 500 firms. No significant differences were found between the two sets of firms.
- We tested the regression results in the usual ways i.e., we verified the normality of the error term, checked for homoscedasticity and confirmed the independence of the error term with each of the predictors. We also conducted a residual analysis to assess model fit and looked for indications of collinearity, a condition that arises when some of the explanatory variables are highly correlated with each other. When present, the values of the regression coefficients for the correlated variables may fluctuate drastically, depending on which independent variables are included in the model. We were particularly concerned about this possibility given the potential links between the market data we used as predictors. A common practice is to compute the tolerance and variance inflationary factor (VIF) for each of

the variables. If a set of explanatory variables is uncorrelated, then its VIF will be equal or close to 1. In common practice, a tolerance of less than 0.20 and/or a VIF of 5 and above indicates a multicollinearity problem (see O'Brien, 2007). As the results in the two last columns of Table V indicate, our regression results are not affected by collinearity.

#### References

- Agle, B. R., R. K. Mitchell and J. A. Sonnenfeld: 1999, 'Who Matters to CEOs? An Investigation of Stakeholder Attributes and Salience', *Academy of Management Journal* **42**(5), 507–525. doi:10.2307/256973.
- Baron, D.: 2001, 'Private Politics, Corporate Social Responsibility and Integrated Strategy', Journal of Economics & Management Strategy 10, 7–45. doi:10.1162/ 105864001300122548.
- Baron, D.: 2006. 'A Positive Theory of Moral Management, Social Pressure, and Corporate Social Performance', Research Paper Series No. 1940, Stanford Graduate School of Business.
- Black, E. L., T. A. Carnes and V. J. Richardson: 2003, The Market Valuation of Corporate Reputation (Palgrave Macmillan, UK).
- Brammer, S. and A. Millington: 2004, 'The Development of Corporate Charitable Contributions in the UK: A Stakeholder Analysis', *Journal of Management Studies* **41**(8), 1411–1434. doi:10.1111/j.1467-6486.2004.00480.x.
- Brammer, S. and A. Millington: 2005, 'Corporate Reputation and Philanthropy: An Empirical Analysis', *Journal of Business Ethics* **61**(1), 29–44. doi:10.1007/s10551-005-7443-4.
- Brammer, S. and S. Pavelin: 2004, 'Building a Good Reputation', European Management Journal 22(6), 704–713. doi:10.1016/j.emj.2004.09.033.
- Brown, N. and C. Deegan: 1998, 'The Public Disclosure of Environmental Performance Information A Dual Test of Media Agenda Setting Theory and Legitimacy Theory', *Accounting and Business Review* **29**(1), 21–41.
- Brown, B. and S. Perry: 1994, 'Removing the Financial Performance Halo from Fortune's "Most Admired" Companies', *Academy of Management Journal* **37**(5), 1347–1359. doi:10.2307/256676.
- Cochran, P. L. and R. A. Wood: 1984, 'Corporate Social Responsibility and Financial Performance', Academy of Management Journal 27, 42–56. doi:10.2307/255956.
- Davidson, W. N., D. Worrell and L. T. W. Cheng: 1994, 'The Effectiveness of OSHA Penalties: A Stock-Market-Based Test', *Industrial Relations* **33**(3), 283–296. doi:10.1111/j.1468-232X.1994.tb00341.x.

- Dowling, G. R.: 2004, 'Corporate Reputations: Should You Compete on Yours?', California Management Review 46(3), 19–36.
- Dranove, D. and C. Olsen: 1994, 'The Economic Side Effects of Dangerous Drug Announcements', *The Journal of Law & Economics* **37**, 323–348. doi:10.1086/467316.
- Dyer, W. G. and D. A. Whetten: 2006, 'Family Firms and Social Responsibility: Preliminary Evidence from the S&P 500', *Entrepreneurship: Theory & Practice* **30**(6), 785–802. doi:10.1111/j.1540-6520.2006.00151.x.
- Entine, J.: 2003, 'The Myth of Social Investing', Organization & Environment 10(5), 1–17.
- Fernández-Kranz, D. and Santalo, J.: 2007. 'When Necessity Becomes a Virtue: The Effect of Product Market Competition on Corporate Social Responsibility', June. Available at SSRN: http://ssrn.com/abstract=997007.
- Fombrun, C. J.: 1996, Reputation: Realizing Value from the Corporate Image (Harvard Business School Press, Cambridge, MA).
- Fombrun, C. and C. B. M. Riel: 1997, 'The Reputational Landscape', *Corporate Reputation Review* **1**(1/2), 5–13.
- Fombrun, C. J. and C. B. M. Riel: 2004, Fame & Fortune: How Successful Companies Build Winning Reputations (FT/Prentice Hall, Upper Saddle River, NJ).
- Fombrun, C. and M. Shanley: 1990, 'What's in a Name Reputation Building and Corporate Strategy', *Academy of Management Journal* **33**(2), 233–258. doi:10.2307/256324.
- Frooman, J.: 1997, 'Socially Irresponsible and Illegal Behavior and Shareholder Wealth: A Meta-Analysis of Event Studies', *Business & Society* **36**(3), 221–249. doi:10.1177/000765039703600302.
- Gössling, T. and C. Vocht: 2007, 'Social Role Conceptions and CSR Policy Success', *Journal of Business Ethics* **74**(4), 363–372. doi:10.1007/s10551-007-9512-3.
- Graves, S. B. and S. A. Waddock: 1994, 'Institutional Owners and Corporate Social Performance', Academy of Management Journal 37(4), 1034–1046. doi:10.2307/ 256611.
- Greyser, S. A.: 1999, 'Advancing and Enhancing Corporate Reputation', *Corporate Communications: An International Journal* **4**(4), 177–181. doi:10.1108/13563289910299292.
- Griffin, J. J. and J. F. Mahon: 1997, 'The Corporate Social Performance and Corporate Financial Performance Debate: Twenty-Five Years of Incomparable Research', *Business & Society* 36, 5–31. doi:10.1177/ 000765039703600102.
- Hammond, S. A. and J. W. Slocum Jr.: 1996, 'The Impact of Prior Firm Financial Performance on Subsequent Corporate Reputation', *Journal of Business Ethics* **15**(2), 159–165. doi:10.1007/BF00705584.

- Herremans, I. M., P. Akathaporn and M. McInnes: 1993, 'An Investigation of Corporate Social Responsibility and Economic Performance', *Accounting, Organizations and Society* **18**(7/8), 587–604. doi:10.1016/0361-3682(93)90044-7.
- Hillman, A. J. and G. D. Keim: 2001, 'Shareholder Value, Stakeholder Management, and Social Issues: What's the Bottom Line', *Strategic Management Journal* **22**(2), 125–139. doi:10.1002/1097-0266(200101)22:2<125::AID-SMJ150>3.0.CO;2-H.
- Igalens, J. and J. P. Gond: 2005, 'Measuring CSP in France: A Critical and Empirical Analysis of ARESE Data', *Journal of Business Ethics* **56**, 131–148. doi:10.1007/s10551-004-3529-7.
- Johnson, R. D. and D. W. Greening: 1999, 'The Effects of Corporate Governance and Institutional Ownership Types on CSP', Academy of Management Journal 42, 564–576. doi:10.2307/256977.
- Kinder, P. and A. Domini: 1997, 'Social Paradigms Old and New', *Journal of Investing* **6**(4), 12–19.
- Liston-Heyes, C. and C. G. Ceton: 2007, 'Corporate Social Performance and Politics', *Journal of Corporate Citizenship* **25**, 95–108.
- Margolis, J. D. and J. P. Walsh: 2001, People and Profits? The Search for a Link Between a Company's Social and Financial Performance (Lawrence Erlbaum Ass, Mahwah, NJ).
- Margolis, J. D. and J. P. Walsh: 2003, 'Misery Loves Companies: Rethinking Social Initiatives by Business', *Administrative Science Quarterly* **48**(2), 268–305. doi: 10.2307/3556659.
- McGuire, J., S. Dow and K. Argheyd: 2003, 'CEO Incentives and Corporate Social Performance', *Journal of Business Ethics* **45**(4), 341–359. doi:10.1023/A:1024119604363.
- McGuire, J. B., T. Scheeweis and B. Branch: 1990, 'Perceptions of Firm Quality: A Cause or Result of Firm Performance', *Journal of Management* **16**(1), 167–180. doi:10.1177/014920639001600112.
- McGuire, J. B., A. Sundgren and T. Schneeweis: 1988, 'Corporate Social Responsibility and Firm Financial Performance', *Academy of Management Journal* **31**(4), 854–872. doi:10.2307/256342.
- McWilliams, A. and D. Siegel: 2000, 'Corporate Social Responsibility and Financial Performance: Correlation or Misspecification?', *Strategic Management Journal* **21**(5), 603–609. doi:10.1002/(SICI)1097-0266(200 005)21:5 < 603::AID-SMJ101 > 3.0.CO;2-3.
- Meng-Ling, W.: 2006, 'Corporate Social Performance, Corporate Financial Performance, and Firm Size: A Meta-Analysis', Journal of American Academy of Business 8(1), 163–171.
- Mooweon, R. and P. H. Haunschild: 2006, 'The Liability of Good Reputation: A Study of Product Recalls in

- the U.S. Automobile Industry', *Organization Science* **17**, 101–117. doi:10.1287/orsc.1050.0175.
- Moskowitz, M. R.: 1975, 'Profiles in Corporate Social Responsibility', Business and Society Review 13, 29-42.
- O'Brien, R. M.: 2007, 'A Caution Regarding Rules of Thumb for Variance Inflation Factors', *Quality & Quantity* **41**(5), 673–690. doi:10.1007/s11135-006-9018-6.
- Orlitzky, M., F. L. Schmidt and S. L. Rynes: 2003, 'Corporate Social and Financial Performance: A Meta-Analysis', *Organization Studies* **24**(3), 403–441. doi:10.1177/0170840603024003910.
- Parthiban, D., M. Bloom and A. J. Hillman: 2007, 'Investor Activism, Managerial Responsiveness, and Corporate Social Performance', Strategic Management Journal 28(1), 91–100. doi:10.1002/smj.571.
- Pava, M. L. and J. Krausz: 1996, 'The Association Between Corporate Social-Responsibility and Financial Performance: The Paradox of Social Cost', *Journal* of Business Ethics 15(3), 321–357. doi:10.1007/ BF00382958.
- Preston, L. E. and D. P. O'Bannon: 1997, 'The Corporate Social-Financial Performance Relationship: A Typology and Analysis', *Business & Society* 36(4), 419–429. doi:10.1177/000765039703600406.
- Rindova, V. P., I. O. Williamson, A. P. Petkova and J. M. Sever: 2005, 'Being Good or Being Known: An Empirical Examination of the Dimensions, Antecedents, and Consequences of Organizational Reputation', Academy of Management Journal 48(6), 1033–1049.
- Roberts, P. W. and G. R. Dowling: 2002, 'Corporate Reputation and Sustained Superior Financial Performance', *Strategic Management Journal* **23**(12), 1077–1093. doi:10.1002/smj.274.
- Rowe, W. G., I. C. Harris, A. A. Cannella Jr. and T. Francolini: 2003, 'In Search of Meaning: Does the Fortune Reputation Survey Alter Performance Expectations?', Canadian Journal of Administrative Sciences 20(3), 187–195.
- Schwartz, M.: 2003, 'The "Ethics" of Ethical Investing', *Journal of Business Ethics* **43**, 195–213. doi:10.1023/ A:1022933912939.
- Shalhoub, Z. K.: 1999, Organisational Downsizing, Discrimination and Corporate Social Responsibility (Greenwood Publishing Group, Westport, CT), p. 176.
- Sharfman, M.: 1996, 'The Construct Validity of the Kinder, Lydenberg & Domini Social Performance Ratings Data', *Journal of Business Ethics* **15**(3), 287–296. doi:10.1007/BF00382954.
- Simerly, R. L.: 1995, 'Institutional Ownership, Corporate Social Performance, and Firms' Financial Performance', *Psychological Reports* **77**, 515–525.
- Sjovall, A. M. and A. C. Talk: 2004, 'From Actions to Impressions: Cognitive Attribution Theory and the

- Formation of Corporate Reputation', Corporate Reputation Review 7(3), 269–281. doi:10.1057/pal-grave.crr.1540225.
- Spence, A. M.: 1974, *Market Signalling* (Harvard University Press, Cambridge, MA).
- Stanwick, P. A. and S. D. Stanwick: 1998, 'The Relationship Between Corporate Social Performance, and Organizational Size, Financial Performance, and Environmental Performance: An Empirical Examination', *Journal of Business Ethics* **63**(2), 195–204. doi:10.1023/A:1005784421547.
- Strike, V. M., J. Gao and P. Bansal: 2006, 'Being Good While Being Bad: Social Responsibility and the International Diversification of US Firms', *Journal of International Business Studies* 37, 850–862. doi:10.1057/palgrave.jibs.8400226.
- Sturdivant, F. D. and J. L. Ginter: 1977, 'Corporate Social Responsiveness: Management Attitudes and Economic Performance', *California Management Review* 19, 30–39.
- Thomas, A. S. and R. L. Simerly: 1994, 'The Chief Executive Officer and Corporate Social Performance: An Interdisciplinary Examination', *Journal of Business Ethics* **13**(12), 959–968. doi:10.1007/BF00881665.
- Turban, D. B. and D. W. Greening: 1997, 'Corporate Social Performance and Organizational Attractiveness to Prospective Employees', Academy of Management Journal 40(3), 658–670. doi:10.2307/257057.
- Tyrrell, A.: 2006, 'CSR—What's Your View', *Accountancy Ireland* **38**(1). http://www.accountancyireland.ie/dsp\_articles.cfm/goto/1196/page/Corporate\_Social\_Respon sibility\_-\_Whats\_your\_view?.htm.
- Verschoor, C. C. and E. A. Murphy: 2002, 'The Financial Performance of Large U.S. Firms and Those

- with Global Prominence: How Do the Best Corporate Citizens Rate?', *Business and Society Review* **107**(3), 371–380. doi:10.1111/1467-8594.00141.
- Waddock, S. A. and S. B. Graves: 1997, 'Quality of Management and Quality of Stakeholder Relations: are They Synonymous', *Business & society* **36**(3), 250–279. doi:10.1177/000765039703600303.
- Williams, R. J. and J. D. Barrett: 2000, 'Corporate Philanthropy, Criminal Activity, and Firm Reputation: Is There a Link?', Journal of Business Ethics 26(4), 341–350. doi:10.1023/A:1006282312238.
- Wokutch, R. E. and B. A. Spencer: 1987, 'Corporate Saints and Sinners: The Effects of Philanthropic and Illegal Activity on Organizational Performance', California Management Review 29(2), 62–77.
- Wood, D. J. and R. E. Jones: 1995, 'Stakeholder Mismatching: A Theoretical Problem in Empirical Research on Corporate Social Performance', The International Journal of Organizational Analysis 3(3), 229–267. doi:10.1108/eb028831.

Catherine Liston-Heyes Business Economics, School of Management, Royal Holloway, University of London, Egham, Surrey, TW20 0EX, U.K. E-mail: c.liston-heyes@rhul.ac.uk

Gwen Ceton School of Management, Royal Holloway, University of London, Egham, Surrey, TW20 0EX, U.K.