

The role of ‘public trust in corporations’ in CSR strategies which deliver value for both business and society

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Introduction

There has been a long debate in the literature on whether socially responsible activities pursued by firms (or else Corporate Social Responsibility (CSR) activities) can have an impact on the financial performance of the firm (see Margolis and Walsh 2001, 2003; Orlitzky et al 2003). However, “the question remains without a definitive answer” (Barnett, 2007:796). So far, the variability of empirical results suggests the need to examine various contingencies that make Corporate Social Responsibility (CSR) investments pay for some firms but not for others. The goal of this paper is to help move the research on the ‘business case for CSR’, towards better understanding of the contingencies that make CSR investments pay for some firms. In particular, we focus on one institutional level contingency, namely ‘public trust in corporations’. Hence, we examine the role of ‘public trust in corporations’, in affecting the return on CSR investments.

Given the various mechanisms that have been identified in the literature (Barnett, 2007; Brown and Dacin, 1997; Greening and Turban, 2000; McWilliams and Siegel 2001), through which corporate socially responsible activities may influence the profitability of the firm, we argue that ‘public trust in corporations’, play an important moderating role in this relationship. Building on the instrumental stakeholder theory’s argument that good stakeholder relationships can have an impact on a firm’s bottom line (Jones, 1995) we discuss how the level of ‘public trust in corporations’ moderates stakeholder relationships, hence affecting the returns on CSR investments. Hence, the focus of this paper is on examining whether the business case for CSR is not only firm specific but also country specific. In other

words, we develop and test the hypothesis that in countries where the general public trusts corporations, CSR activities will lead to increased profitability. Accordingly, we test for positive interaction effect.

Therefore, our hypothesis is:

H1: The higher the levels of 'public trust in corporations' in a country, the better the financial returns on CSR investments.

Our analysis of 224 large corporations, from 9 countries, over a 6-year period, confirms our hypothesis. Our results have important implications for developing countries in particular where public trust in large corporations is relatively low but the social need for bigger CSR investments from such corporations is high.

Empirical Analysis

Sample and data

The sample used in this study is drawn from companies on the Dow Jones Global Index (DJGI) and evaluated by Sustainable Asset Management firm (SAM) on their sustainable performance (environmental, social and economic performance) for inclusion in the Dow Jones Sustainability Index (DJSI). Our sample is drawn from all companies rated (including those that were excluded from the DJSI index) so that a bigger sample per year is available for analysis with greater variance in their sustainability performance. Our study covers 6 year data (2002-2007) of 224 companies (N=1344), located in USA, Canada, UK, Germany, France, Netherlands, Switzerland, Spain and Japan. The number of firms per country is shown in Table I below. Finally, we collected financial data from the 'Datastream' database and data on the public trust in corporations from the 'World Values Survey' database.

TABLE I
List of countries included in data analysis

<i>Country</i>	<i>Number of firms</i>
Canada	11
France	17
Germany	23
Japan	32
Netherlands	11
Spain	10
Switzerland	15
UK	48
USA	57
Total	224

Dependent variable: Corporate Financial Performance (CFP)

The majority of studies in this area of research have used accounting measures of financial performance (e.g. return on assets, return on equity, return on sales) rather than market measures (e.g. stock price, alpha, market risk) (see Margolis and Walsh, 2001 for an overview). Accounting measures are considered indicators of past performance, while market measures are considered as reflecting future performance. Overall, accounting data is considered less ‘noisy’ compared to market data, as it indicates what is actually happening in the firm rather than indicating the perception the market may have about the firm which is subject to macroeconomic factors, such as speculation (Lopez et al., 2007). Consistent with previous research, in this study we employ the two dominant accounting measures in the field, e.g. Return on Assets, computed as the ratio of operating income to total assets; and Return on Equity, computed as the ratio of operating income to equity (see, Russo and Fouts, 1997; Ahuja and Hart, 1996).

Independent variable: Corporate Social Performance (CSP)

In this study, we used SAM's composite index of social, environmental and economic sub-indexes. Each sub-index provided by SAM is the weighted average of a score produced over several categories (e.g. human capital development, social reporting, etc). Contrary to KLD data, that most researchers use without any weighting, assuming all social performance categories apply equally to all kind of firms, this weighting structure allows for industry specific criteria. The downside is that it also introduces a subjectivity bias, but since it is externally verified it is as objective and fair as possible.

The dimensions of SAM's ratings are:

Economic Dimension: Corporate Governance, Risk & Crisis Management, Codes of Conduct/Compliance/Corruption/Bribery

Environmental Dimension: Environmental Performance/Eco-efficiency, Environmental Reporting

Social Dimension: Labor Practice Indicators, Human Capital Development, Talent Attraction and Retention, Corporate Citizenship/Philanthropy, Social Reporting.

More details on these dimensions can be seen in Table II below.

Table II
SAM dimensions of CSP

SAM ratings dimensions		
<i>Dimension</i>	<i>Sub-dimension</i>	<i>Weight</i>
Economic	Codes of Conduct / Compliance / Corruption & Bribery	6.0
	Corporate Governance	6.0
	Risk & Crisis Management	6.0
	Industry Specific Criteria such as: Brand management, Marketing practices, R&D, Customer Relationship management, supply chain management etc	Depends on Industry
Environment	Environmental Reporting*	3.0
	Industry Specific Criteria such as: Environmental management systems, Climate strategy, Biodiversity impacts, Product stewardship etc	Depends on Industry
Social	Corporate Citizenship/ Philanthropy	3.0
	Labor Practice Indicators	5.0
	Human Capital Development	5.5
	Social Reporting*	3.0
	Talent Attraction & Retention	5.5
	Industry Specific Criteria such as: Product information Product quality and recall management Global sourcing Occupational health and safety Healthy living Bioethics etc	Depends on Industry

*Criteria assessed based on publicly available information only

Independent variable: Public Trust in Corporations

We constructed the variable of interest (public trust in corporations) from the ‘World Values Survey’ database (www.worldvaluessurvey.org). This is a public database covering a large range of political and sociocultural variables across many countries.

Control variables

We controlled for the four standard variables that have been regularly used in both CSP and CFP research such as firm size, firm risk/leverage, industry heterogeneity, R&D intensity (see Margolis and Walsh, 2001; McWilliams and Siegel, 2000; Capon et al., 1990).

Operationally, firm size was measured by two different variables: total number of employees, and total assets following previous studies (e.g. Waddock and Graves, 1997; Nelling and Webb, 2009). For risk/leverage, we used three different measures that have been previously used in the CSP-CFP area: long term debt/total assets (e.g. Dowell et al., 2000; Waddock and Graves, 1997), total debt/total equity (e.g. Pava and Krausz, 1996; Ahuja and Hart, 1996) or total debt/total assets (e.g. Elsayed and Paton, 2005). We measured R&D intensity as firm expenses on R&D / total sales, following previous researchers (e.g. McWilliams and Siegel, 2000; Elsayed and Paton, 2005; Garcia-Castro et al., 2010).

Descriptive statistics for all variables are shown in Table III below.

TABLE III
Descriptive statistics ^a

<i>Variable</i>	<i>Observations</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
ROA	1325	6.20	6.52	-41.90	62.35
CSP ^b	1343	60.95	13.44	10.68	87.89
Trust_Corp ^c	1344	2.23	0.08	2.08	2.328
LEV ^d	1338	171.28	508.08	-4965.34	1080.00
SIZE ^e	1334	78061.26	91269.52	99.00	536350.00
R&Dint ^f	813	4.13	5.05	0.00	49.56

^a All variables shown in the table were standardized (z-scores) before using them in the regression analysis.

^b CSP= SAM's composite index of social, environmental and economic performance.

^c Trust_Corp= Constructed Variable indicating public trust in corporations based on World Values Survey Data

^d LEV=total debt / equity

^e SIZE₁=total number of employees

^f R&Dint=R&D expenses/sales

Econometric Analysis

Panel data analysis was used to control for omitted/unobservable variables that threaten causal inference in observational studies (Lee 2002; Halaby 2004). The problem of 'omitted variable bias' or 'unobserved heterogeneity' is quite a serious problem in empirical research, especially in CSP empirical research where the list of potential determinants can be large (Zyglidopoulos and Georgiadis 2006). Firm-specific unobserved variables, i.e. unobserved variables that represent time-invariant properties of firms, such as corporate culture or managerial ability/quality or the political context in which a firm operates, may affect CSP but are difficult to observe or measure; and so are usually omitted from the statistical analysis. Traditional panel data analysis (such as fixed-effects analysis) can account for such endogeneity under certain assumptions (Wooldridge 2002). However, since simultaneity/reverse causality issues might also be present in this line of research (Waddock and Graves

1997) we used ‘Instrumental Variable’ (IV) estimation. In addition, we controlled for previous financial performance using a dynamic panel data model.

A common estimation in such models is to use Arellano and Bond’s (1991) difference generalised method of moments (GMMs) estimator. This estimator uses first differences in the regression equation to remove any unobserved effects and then instruments any endogenous explanatory variables by using lagged values of the original regressors. However, Arellano and Bover (1995) have improved the efficiency of the difference GMM estimator as far as the quality of instruments is concerned by introducing the system GMM estimator. This method was fully developed later by Blundell and Bond (1998). In addition, with short panels (small T), Blundell and Bond (2000) used Monte Carlo experiments to examine the benefits of system GMM and found that these extra instruments can overcome two problems associated with first differenced estimator: (1) precision and (2) finite sample bias. Therefore, in this study, we employed the two-step system GMM estimation, with Windmeijer-corrected robust errors (Windmeijer 2005).

Finally, we used the STATA10 software package. All regression results are shown in Table IV below.

TABLE IV
Regression results ^{a b c}

<i>Dependent variable=ROA</i>	<i>Model 1</i>	<i>Model 2</i>
Lagged ROA	0.499*** (0.181)	0.474 *** (0.148)
CSP	0.494 * (0.273)	0.514** (0.234)
Size	-0.168 (0.333)	-0.129 (0.323)
Leverage	-0.005 (0.117)	0.017 (0.104)
R&Dint	-0.033 (0.193)	-0.008 (0.228)
TrustCorp	-0.031 (0.451)	0.164 (0.413)
TrustCorp X CSP		0.169** (0.069)
Observations (N)	676	676

^a Significance of coefficients: *p<.10, **p<.05, ***p<.01

^b All variables in standardized form (z scores).

^c Robust standard errors in parentheses

Our results, as shown in Model 2 (Table IV), confirm our hypothesis. The coefficient of the interaction term between CSP and trust in corporations is found positive and significant (b= 0.169, p<0.05). We also performed robustness test with other metrics of independent and

dependent variables such as ROE for CFP, total assets for size and Long term debt over total assets for leverage. Our results remained virtually the same.

Discussion and Conclusions

Firstly, this study confirms the business case for CSR, i.e. that CSP positively affects CFP, with a new dataset across countries and by using advanced econometric techniques to control for most potential control variables that have been identified in the literature so far. Our dynamic panel data model, through the use of Instrumental Variable estimation, has controlled for potential sources of endogeneity (e.g. measurement errors, omitted variables, reverse causality), hence improving previous statistical methods of analysis often used in this line of research and enhancing confidence in causal inference.

Moreover, this study confirms that public trust in corporations is a significant positive moderator in this relationship, which means that the impact of CSP on CFP is stronger in countries with higher levels of trust in corporations. Hence, firms operating in these countries can capitalize more on their CSR investments. These results emphasize the importance of contingences in this area of research and opens up a new path for further examination of the institutional environment which can affect CSR investments. To our knowledge this is the first study to go beyond firm level contingencies and empirically test institutional level contingencies in the CFP-CSP link.

Our results are based on a sample of 224 companies operating in 9 OECD countries. A larger sample would greatly improve the robustness of results and enhance confidence in causal inference. Hence, it is necessary that future studies test this effect in more countries, especially in the developing world where public trust in large corporations is low but the need for CSR investments is quite high. If the business case proves to be contingent on public trust in these countries, too, then developing countries need first to take significant action to restore public confidence in corporations, else the aspiration of ‘inclusive development’ may fail to realize.

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