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# MOTIVATIONS FOR CORPORATE SOCIAL RESPONSIBILITY: ALL TALK AND NO WALK?

## Abstract

Corporate Social Responsibility (CSR) can be defined as voluntarily going beyond what the law requires to achieve social and environmental objectives. Present work provides the profile of the firms adopting CSR strategies in Luxembourg focusing on intrinsic and extrinsic motivations for CSR. The analysis is performed using ICT 2011 data representative of the whole economy, including large, medium and small enterprises of the manufacturing and service sectors. Contingency analysis contrasted the adoption of CSR with a set of firms' features (size, group, exports, sector of economic activity and perceived competition). The econometric analysis explores the link between firm's features and CSR disclosure. The typical firm that adopts CSR practices is a large market leader, part of an international group, with a strong international reputation and operating in the utilities sector. Looking at the reasons behind the CSR, both intrinsic and extrinsic motivations are strongly correlated with CSR. Firms choose CSR both as a tool to promote their image and as part of their corporate culture. Some policy implications conclude the research.

**Key words:** Corporate Social Responsibility; motivations; Luxembourg; logit; firms' characteristics.

# MOTIVATIONS FOR CORPORATE SOCIAL RESPONSIBILITY: ALL TALK AND NO WALK?

CESARE F.A. RIILLO<sup>1</sup> AND FRANCESCO SARRACINO<sup>2</sup>

## INTRODUCTION

The principles and practices of corporate social responsibility (CSR) plunge in the civic tradition of modern countries, but it is only after the 1960s that this concept experienced a significant resurgence of interest. It is in the United States of the 1960s and 1970s that voluntary codes of conduct, social audits, social investment funds, evaluations of corporate social and environmental performance and many other forms of civil regulation bloomed. This variety of initiatives gradually increased its critical mass until the early 1990s when this ferment resulted in a renewed attention of the academic world, of the press and of the policy makers for CSR (Carroll, 1991; Vogel, 2005; Aguinis and Glavas, 2012).

Corporate social responsibility refers to companies voluntarily going beyond what the law requires to achieve social and environmental objectives during the course of their daily business activities. More in general, CSR is regarded as a process aiming at internalizing the responsibility of company's actions and encouraging the integration of the economic activity with the needs of the environment, of consumers, of employees, of communities and of stake-holders, including all other members of the public sphere who may also be considered as stake-holders. CSR is widely regarded as a spontaneous contribution of business activities to social, economic and environmental sustainability that is independent from legal obligations (Donaldson and Preston, 1995; Martinuzzi et al., 2010).

To date, CSR and its potential for "good business" have become cross-cutting issues for companies seeking to be productive, competitive and innovative, as well as for policy-makers concerned with sustainability issues, for the academic world, and the public opinion more in general. Furthermore, even though CSR became prominent because of the debate about the side-effects of the economic activities of multi-national enterprises, it increasingly concerns also small and medium-sized enterprises which constitute an important part of the productive fabric of many modern countries (Draper, 2006; Zadek, 2006).

In present study, we intend to contribute to the literature addressing two important gaps: 1. describing the profile of the firms adopting CSR strategies to identify the features that promote a successful adoption of CSR strategies; 2. analysing the determinants of firms' investments in CSR. In particular, we test the hypothesis that intrinsic and extrinsic motivations play a different role in determining the adoption of a CSR strategy. Firms that adopt CSR practices as an end in itself (e.g. for the good of the society or of the environment) are defined as intrinsically motivated. On the contrary, firms engaging in CSR strategies as a tool to pursue other objectives (e.g. to gain financial advantages) are defined as extrinsically motivated (Du et al., 2007; Graafland and Mazereeuw-Van der Duijn Schouten, 2012; Vlachos et al., 2013).

In the next section we define CSR and summarize the state of the literature on the features and motivations for CSR. In section 3 we present the data available for present study. The profile of the firms adopting CSR strategies is illustrated using contingency analysis in section 4. Subsequently, in section 5 we illustrate our methodological strategy to explore the determinants of firms' investments in CSR. Section 6 presents our econometric results, whereas section 7 summarizes our work and provides some suggestions for future research.

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## LITERATURE REVIEW

A growing share of the economic literature sees CSR as a business strategy of a firm developed in response to a market demand for “good business” and mirrors the fact that consumers increasingly report a preference for “moral” companies and not just for material goods (Baron, 2007; Sacconi and Degli Antoni, 2009). This view is consistent with recent findings from well-being studies documenting that consumers are more complex than the standard representation of the homo oeconomicus: they are not egoistic, fully rational, and insatiable people. Rather consumers have social preferences and care for “others” (Degli Antoni and Sacconi, 2011). In particular, these preferences – sometimes also referred to as pro-social behaviours – seem to be positively associated with consumer’s interest in CSR of company managers (Benabou and Tirole, 2010). In other words, the economic literature tends to see CSR as a strategic tool in line with, and instrumental to, profitability (Heal, 2005, 2008).

Also the opinions expressed on the press have changed significantly. While at the beginning CSR was seen as a more or less desirable form of philanthropy, magazines have increasingly acknowledged that CSR can also be a form of “good business”, a part of the business strategy of any company operating in the global economy<sup>3</sup>. In sum, CSR rapidly spread in various sectors of economic activities – even though at different speed and not uniformly. Also international organizations started paying attention and established policies to regulate and promote CSR. The United Nations, the World Bank, the OECD, the European Union and various European member states adopt policies to promote CSR (Vogel, 2005; Martinuzzi et al., 2010). Active government policies are currently adopted world-wide, including countries such as Brazil, India and China (European Commission, 2011b).

The European Union refers to CSR as a strategy whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stake-holders on a voluntary basis. As such CSR is expected to support smart, sustainable and inclusive growth as envisaged in the Europe 2020 Strategy. In particular, its emphasis on establishing more socially and environmentally responsible business gave CSR a prominent role after the financial and economic crack of 2008 (European Commission, 2011b).

Despite its success, CSR remains a complex concept associated with a wide variety of meanings. Jonker and Schmidpeter (2005) report that for Chinese consumers, a socially responsible company makes safe, high-quality products; for Germans it provides secure employment; in South Africa it makes a positive contribution to social needs such as health care and education. And even within Europe the discussion about CSR is very heterogeneous. Such heterogeneity stems from the dynamic, context-dependent and multi-dimensional nature of CSR embodiments: as a part of the business strategy of a firm, CSR is subject to constant evolution and adaptation to new economic situations and market circumstances; accordingly, CSR hinges on the specific historical and cultural context in which the firm operates; finally, CSR is multi-dimensional as it involves and concerns the economy, the society and the environment.

For example, CSR can consist in actions to promote environmental sustainability through the adoption of recycling practices, waste management, water management, adoption of renewable energy sources, of reusable resources, implementing “green” supply chains, using digital technology rather than hard copies, etc. Other forms of CSR might target the promotion of community involvement through activities such as raising money for local charities, supporting community volunteering, sponsoring local events, employing people from a specific community, supporting a community’s economic growth, engaging in fair trade practices, etc. In some cases these practices took also the form of ethical marketing, where CSR actions are mainly focused on the value and the respect of the customers. These actions might take the form of special information campaigns, adopting more transparent labelling systems, correctly informing the potential consumers, etc.

Therefore, despite the long-standing debate, it is still difficult to identify a commonly shared definition of CSR (Freeman and Hasnaoui, 2011). In a recent review, Dahlsrud (2008) identified 37 different

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<sup>3</sup>The Economist, 19 Jan. 2008, p. 3, special report.. Vogel (2005) documents that in 2005 a search on Google for “corporate social responsibility” found more than 30,000 sites. Amazon listed more than 600 books on the topic; more than 1,000 corporations reported to have developed or signed codes of conduct setting their social, environmental and human rights practices; more than 2,000 firms produced a regular report on their CSR practices.

definitions of CSR and concluded that rather than providing a definition, they describe CSR as a phenomenon. In particular, the author remarks that the available definitions consistently refer to five dimensions: environmental, social, economic, stake-holder and voluntariness (Garriga and Melé, 2004). This makes the various definitions converging and compatible with the one adopted by the European Commission that defines CSR as “the responsibility of enterprises for their impacts on society. To fully meet their social responsibility, enterprises should have in place a process to integrate social, environmental, ethical human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders” (European Commission, 2011a).

One reason why CSR attracted so much attention is because, at least in some cases, it showed to support firm competitiveness along with the adoption of socially and environmentally sustainable behaviours. Undoubtedly, these are desirable features for any economic activity, however the evidence supporting this statement is diverse and contradicting: proponents of CSR argue that corporations make more long-term profits by operating with a perspective, while the critics argue that CSR distracts activities from their fundamental core business (Martinuzzi et al., 2010). Some studies, for example, found evidence of a neutral impact of CSR on financial outcomes after controlling for investment in Research and Development (McWilliams and Siegel, 2000).

Other studies found a positive correlation between social and environmental performance and financial performance (Orlitzky et al., 2003). Similarly, further research documented that the spontaneous adoption of CSR practices promotes Research and Development which, in turn, can produce both process and product innovation (McWilliams and Siegel, 2001; Wagner, 2010; Hoq et al., 2010; Surroca et al., 2010). On the contrary, some scholars documented a negative impact of CSR on innovation (Gallego-Álvarez et al., 2011). More recently, Bocquet et al. (2012) proposed a unifying explanation of such heterogeneous results. The authors stem from the observation that not all CSR practices create value and that firms with proactive social and/or environmental strategies are more innovative (Sharma and Vredenburg, 1998; Aragon-Correa and Sharma, 2003; Dibrell et al., 2011). Results confirm that firms intrinsically adopting CSR benefit from a competitive advantage ensuring better, longer-lasting economic performance than a firm with extrinsically motivated CSR strategies (Bocquet et al., 2012).

Further evidence suggests that CSR practices can promote competitiveness only at the level of individual companies, for example by increasing (eco-) efficiency, by market differentiation and creation, by addressing stake-holder demands, and by increasing the capacity for organizational learning (Donaldson and Preston, 1995; Harrison and Freeman, 1999; Vilanova et al., 2009). However, these factors seem to be less effective when considering economic sectors in which many other factors play important roles: the size of the company, the specific country and, therefore, its culture and its institutional and legal framework, the kind of ownership – whether it is family business or capital market – as well as the specific features of sub-sectors (Kay, 1993). In particular, Martinuzzi et al. (2010) document that policies aiming to promote CSR are more likely to be effective if designed at the closest possible level to the firm, in particular if the ultimate aim is helping companies to be more competitive.

Other streams of the literature emphasize the role that CSR can have in motivating the employees and, therefore, to enhance productivity through the creation of more committed and motivated employees. For example, Verghese (2013) looked at 230 workplaces with more than 100,000 employees and found that the more a company engages in environmentally and socially oriented commitments, the higher is the commitment of its employees. Further studies document that companies that have strong sustainability programs also report 55% higher morale, 43% more efficient business process, 38% higher employee loyalty than companies with poor sustainability programs (Cohen, 2010). These are aspects that play a significant role in enhancing firm productivity, efficiency and, more in general, competitiveness. Indeed, various studies have affirmed the connection between employee engagement and performance. In particular, the recent work by Watson Towers (2012) interviewing 32,000 employees across 30 countries documented that companies with highly committed employees have been found to provide three times the operating margin and four times the earnings per share of companies with low engagement. This explains the strong investments that various companies undertake to improve their environmental, social, and ethical performance throughout their value chains (Sacconi, 2004; Mohin, 2012).

However, the literature on the effects of CSR for innovation and competitiveness is highly heterogeneous and the results hinge heavily on the level of the analysis. Furthermore, there is scarce evidence of which are the features and the motivations of the companies that choose to invest in CSR (Mijatovic and Stokic, 2010, Brønn and Vidaver-Cohen, 2009).

## DATA

The analysis is based on Information, Communication, Technology (ICT) usage survey run in Luxembourg in 2011 (ICT, 2011). The ICT survey is the main official data source for ICT related activities in Luxembourg. The survey is conducted by the National statistical office (STATEC) and it is representative of the country economy, including manufacturing, ICT and services sectors (but excluding the financial sector).

The survey collects information about firms' characteristics, the market perception and ICT usage. A first part of the survey is common to all European Countries; the second part is country-specific. The ICT 2011 for Luxembourg includes a dedicated question about CSR. Firms are asked whether their web-sites offer pages presenting the firm approach to "Corporate Social Responsibility" or to "sustainable development"<sup>4</sup>. We consider the firms answering YES to this question as performing CSR, whereas those firms answering NO are regarded as not performing any CSR activity. Table 1 reports descriptive statistics. Figures show that almost 19% of firms in our sample declare to adopt CSR activities. To investigate whether the propensity for CSR, i.e. the likelihood of firms to adopt CSR practices, changes among firms, we perform a contingency and an econometric analysis.

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<sup>4</sup> The wording of the question is: "In January 2011, what services has your web site offered? - Pages that present the approach of 'Social Corporate Responsibility' or 'sustainable development' of your business."

Table 1 Descriptive statistics

	Variables	Mean	S.D.
CSR		0,189	0,391
Intrinsic motivations	Reduction of foot print	0,524	0,500
	Coherence with internal policies	0,444	0,497
Extrinsic motivations	Reduction of operating cost	0,644	0,479
	Improve corporate image	0,512	0,500
	Stake-holders pressure	0,283	0,451
Size	Ln. employees	3,421	0,964
Group	Independent	0,525	0,500
	National Group	0,270	0,444
	EU group	0,171	0,376
	International group	0,034	0,181
Sectors	Construction	0,087	0,282
	Manufacturing	0,008	0,087
	Utilities	0,246	0,431
	Wholesale and retail trade	0,229	0,420
	Transport	0,062	0,241
	Hotels and restaurants	0,090	0,286
	ICT	0,086	0,281
	Real estate and professionals_1	0,137	0,344
	Support Services	0,055	0,229
Public Authorities	Business with public authorities	0,221	0,415
Market position	Market follower	0,141	0,348
	Market challenger	0,566	0,496
	Market leader	0,293	0,455
Competition	Very limited competition	0,009	0,092
	Limited competition	0,084	0,278
	Intense competition	0,516	0,500
	Very Intense competition	0,391	0,488
Reputation	National reputation	0,450	0,498
	Great region reputation	0,226	0,418
	International reputation	0,324	0,468

Source: ICT usage survey 2011; Note: Observations=1,624, Weighted observation= 2,122

## CONTINGENCY ANALYSIS

The following figures show how many firms adopt CSR practices by firm characteristics (Chih et al., 2010). For example figure 1 shows that about 15% of all the firms with 10 - 19 employees in Luxembourg are implementing CSR practices, while this percentage increases to about 35% among firms with more than 250 employees. Overall, figure 1 suggests that the propensity to adopt CSR increases almost monotonically with size. The existence of some fixed costs to set-up a CSR strategy can explain this pattern.

Figure 1: CSR by firm size

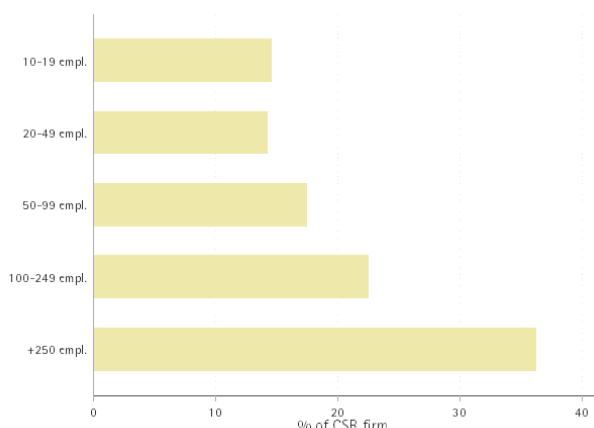
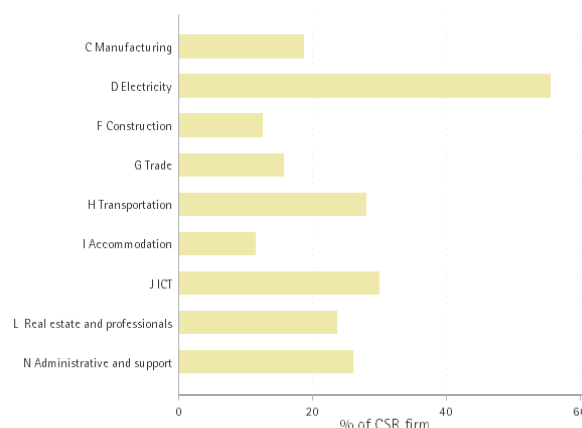


Figure 2: CSR by economic sector



As shown in figure 2, the propensity to adopt CSR practices differs considerably among sectors. The percentage of firms adopting CSR practices spans from 55% in the utilities sector (i.e. Energy and Water) to almost 10% of firms active in Hotels and restaurants sector. Such large percentage should not surprise considering the high regulation and the relatively high attention of the public sector towards firms in the utilities sector. Furthermore, about 25% of the firms in Transport, ICT, Real estates and supporting services adopts some form of CSR. Manufacturing, Construction, Wholesale and retail trade and Hotels and restaurants stay behind with a percentage of about 15%.

### 1.1 Motivations

The literature shows that a successful adoption of CSR depends on the motivation behind it (see, for instance, Mijatovic and Stokic, 2010, Graafland, and Mazereeuw-Van der Duijn Schouten, 2012).

A specific question of the ICT2011 allows exploring the motivations that are leading to the adoption of CSR in Luxembourg. The questionnaire asks explicitly about the objectives driving the implementation of Green IT. The wording of the question is: In January 2011, what were the objectives pursued by your company in the use of 'Green IT'? Possible dichotomous answers are: (a) Reduce the environmental footprint (b) Reduce operating costs (c) Improve the image of the company (d) Responding to a request from employees, customers, suppliers, shareholders, etc. (e) Align IT policy to internal environmental company policies<sup>5</sup>. If we assume that the adoption of Green IT is a good proxy of the more general adoption of CSR practices, then we have some elements to explore the motivations behind CSR. Our assumption is supported by previous evidence (Bohas et al., 2014).

<sup>5</sup> The original wording in French is: "En janvier 2011, quels étaient les objectifs recherchés par votre entreprise dans l'utilisation du 'Green IT'? a) Réduire l'empreinte écologique ; b) Réduire les coûts d'exploitation ; c) Améliorer l'image de l'entreprise ; d) Répondre à une demande émanant des salariés, clients, fournisseurs, actionnaires, etc ; e) Aligner la politique informatique sur la politique de l'entreprise en faveur de l'environnement.

After merging ICT 2011 with a dedicate survey on CSR, the authors find that firms with higher commitment to CSR are more likely to adopt Green IT. The same evidence is confirmed in our data. The following figures explore the bivariate correlation between motivations and CSR practices.

Figure 3: CSR to reduce operating costs  
(extrinsic motivation)

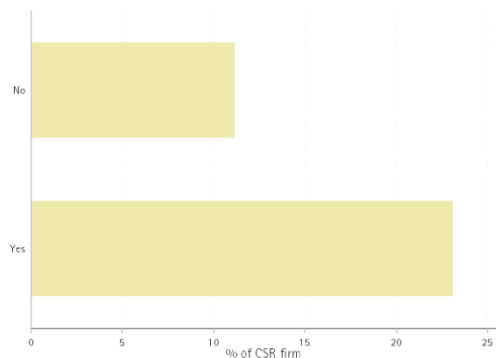
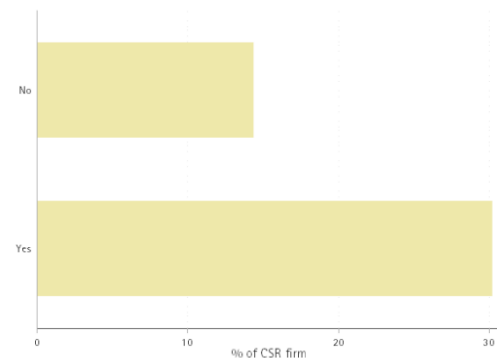


Figure 4: CSR to address stake-holders' concerns (extrinsic motivation)



About 22% of the firms concerned with reduction of operating costs are adopting CSR practices. Firms not concerned with cutting costs are about 12% (see Figure 3). These figures suggest that the adoption of CSR is compatible with costs-cutting strategies.

Figure 4 suggests a positive association between the adoption of CSR and pressure from the stake-holders. Almost one out of three firms receiving pressure from stake-holders (employees, clients, suppliers and stake-holders) implements CSR, while only one out of six firms adopts CSR strategies without being urged by stake-holder.

Figure 5: CSR to reduce firm's ecological footprint (intrinsic motivation)

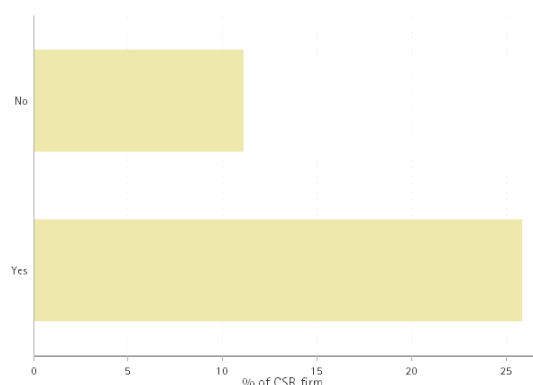
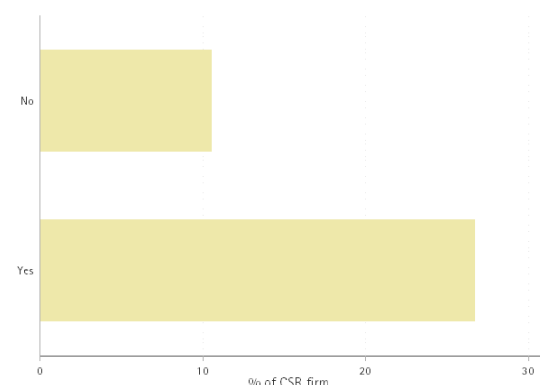


Figure 6: CSR to promote firm's identity and image (extrinsic motivation)

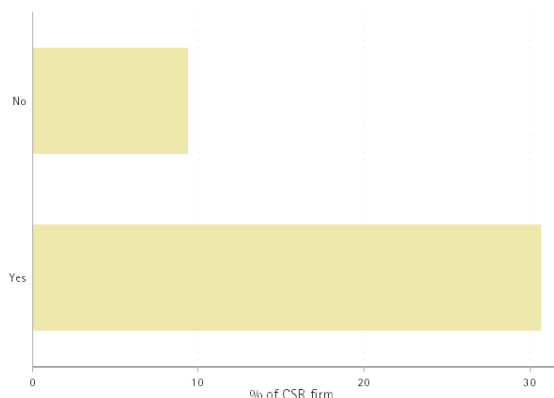


Firms aiming to reduce their ecological footprint are more likely to implement CSR practices. Among firms concerned with environmental issues, about 26% implements CSR practices, while this percentage is about 11% among other firms (see Figure 5).



Moreover, firms concerned with identity and image are more likely to implement CSR. In this case, almost one out of four declares to implement CSR, whereas among firms not concerned with their identity and image only one out of 10 is implementing CSR (see Figure 6).

Figure 7: CSR to act coherently with firm's  
internal policies (intrinsic motivation)



As shown in figure 7, CSR is implemented in coherence with internal policies in about 30% of the firms in our sample. The proportion of firms adopting CSR strategies is 10% among firms in which the adoption of CSR is not consistent with internal policies.

## 1.2 Market, Group and Business with Government

Market conditions are another aspect that could potentially determine the adoption of CSR practices. The ICT2011 provides various items to describe the market position of a firm: the perceived competitiveness in the market where firms operate; the position in such market (whether the firm is a leader, a challenger or a follower) and the reputation on the market (whether the firm is known only in Luxembourg, in the Great Region (Belgium, Germany and France) or internationally).

Available figures suggest that about 20% of the firms declaring to perceive very intense and intense competition on their market adopt CSR strategies, while this percentage reduces to 15% for firms perceiving limited or very limited competition (see Figure 8).

Figure 8: Adoption of CSR strategies by perception of competition in the market

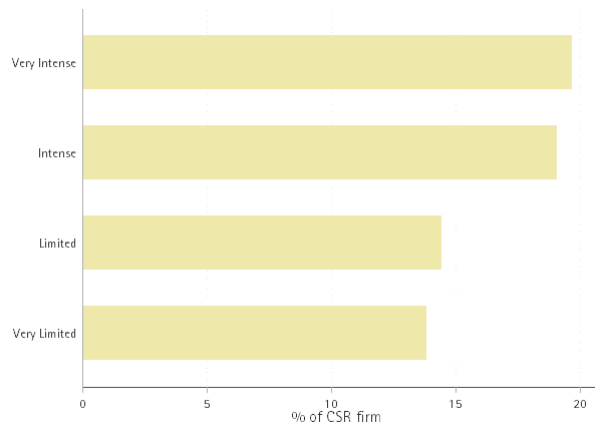
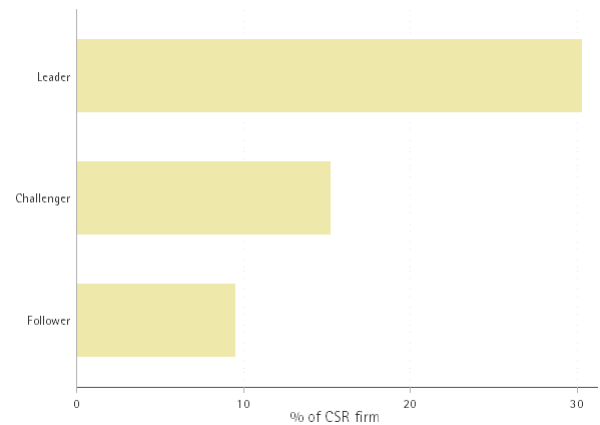


Figure 9: Adoption of CSR strategies by market position-



The difference among firms adopting CSR strategies and the others appears more substantial when considering the perceived position on the market. Firms having leading positions are three times more likely to report CSR practices (almost 30%) than firms perceiving themselves as followers (about 10%). Among challenging firms the percentage of companies adopting CSR strategies is about 15% (see Figure 9).

Another key feature of the firms adopting CSR strategies is the market reputation (see Figure 10). More than 30% of the firms with well-known international brands adopt CSR practices. This percentage reduces to about 10% among firms with national reputation and 15% among firms known in the Great Region.

Figure 10: Adoption of CSR strategies by reputation on the market

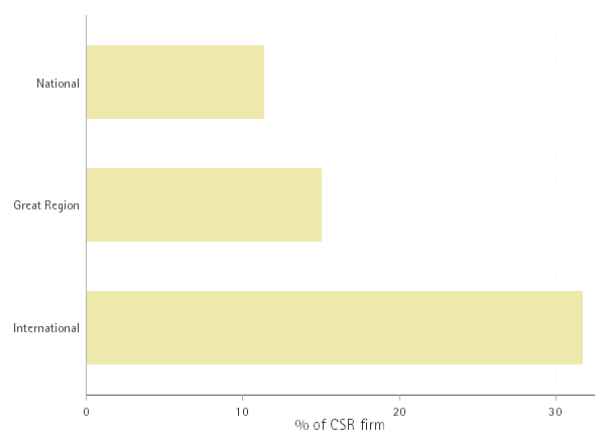
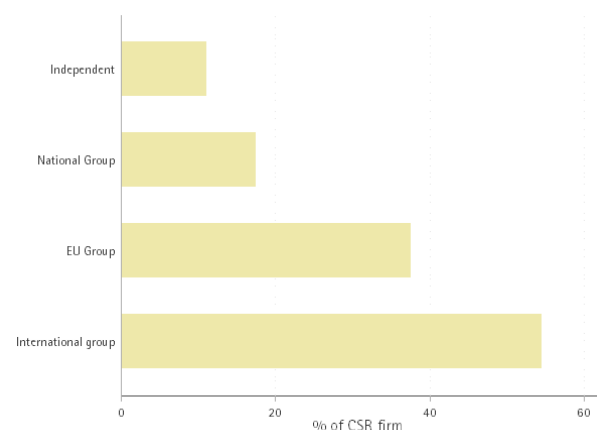


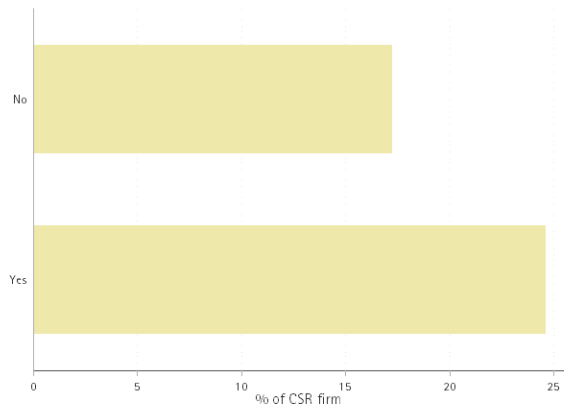
Figure 11: Adoption of CSR strategies by affiliation



While Figure 10 shows a positive relationship between international reputation and CSR, figure 11 suggests a positive relationship between being part of an international group and CSR. About 10% of independent firms adopt CSR strategies. This percentage increases among national, European and other international firms achieving almost 20%, 40% and 55%, respectively.

Finally, Figure 12 shows the association between the use of Internet to access documents to apply for tenders to public authorities (i.e. e-Procurement) and CSR. The e-procurement is interpreted here as a proxy to identify firms working for public authorities. Figure 12 suggests that among firms doing business with public authorities, about 25% adopt CSR strategies, while among the others only 17% report to have adopted CSR practices.

Figure 12: Adoption of CSR strategies by firms serving public authorities



## ECONOMETRIC ANALYSIS

While the contingency analysis explored the bivariate correlation between the adoption of CSR across various features of a firm's life, the econometric analysis allows to investigate the correlates of the adoption of CSR considering all these features simultaneously.

In particular, we investigate which factors affect the propensity of firms to implement CSR using a logit, a well-known binary response model. According to this model,  $CSR^*$  is an unobserved variable that represents the expected benefits from CSR. Firms decide to engage in CSR if the net expected outcome is positive. We proxy the adoption of CSR practices with a dichotomous dependent variable taking value 1 if the firm declares to have adopted CSR practices in 2011 and 0 otherwise. Formally, the econometric model can be summarized as follows:

$$\begin{cases} CSR = 1 & \text{if } CSR^* = \mathbf{X}' \cdot \beta + \epsilon > 0 \\ CSR = 0 & \text{if } CSR^* = \mathbf{X}' \cdot \beta + \epsilon \leq 0 \end{cases} \quad (1)$$

The vector  $\mathbf{X}'$  is the exogenous set of variables already detailed in section 3. The logit model assumes that the error term follows a logistic distribution. Parameters are estimated using the maximum likelihood method.

## RESULTS

The results of our estimates are reported in Table 1. Overall, the model fits the data well. The McFadden's R<sup>2</sup> (0.189) is adequate for this family of models. Moreover, the Hosmer-Lemeshow test for survey data (Archer and Lemeshow, 2006) provides evidence for adequacy of the model<sup>6</sup>. To facilitate the interpretation of the econometric model, the average marginal effects of the independent variables on the probability of implementing CSR are computed and presented in Table 2.

Results suggest that both intrinsic and extrinsic motivations have a positive impact that is statistically significant at conventional level. *Ceteris paribus*, firms motivated by coherence with internal policies, are 12.4 percentage points more likely to implement CSR. When motivated by the need to improve the corporate image, the likelihood of adopting CSR practices increases by 6.6 percentage points.<sup>7</sup>

With respect to firm's characteristics, size is positively correlated with the adoption of CSR practices, possibly suggesting some economy of scale. As shown in Figure 13, *ceteris paribus*, the predicted probability of CSR is 16,55 % for firms with 10 employees and almost 23% for firms with 250 employees. Table 2 shows that compared to being independent, belonging to a European or to an international group increases the probability of CSR by 11.2 and 21.2 percentage points, respectively. Being part of a national group has no statistically significant impact.

Results show that, generally, there is no statistical difference among economic sectors. The only exception is the utilities sector, where firms have 27.7 percentage points more than firms in the construction sector. This evidence confirms the result from contingency analysis and the peculiar nature of the utility sector which is characterized by strong regulation. Doing business with the government through e-procurement has not a statistically significant impact on the probability of adopting CSR practices. This result suggests that public authorities do not discriminate firms on the basis of their involvement in CSR practices.

With respect to market conditions, firms that report to be market leaders are, *ceteris paribus*, 10.2 percentage points more likely to adopt CSR than followers. Challengers and followers have not a statistically different attitude towards CSR. Interestingly, the intensity of perceived competition does not statistically affect CSR. Firms with an international reputation are more likely to adopt CSR practices compared to firms known only in the national market (8.6 percentage points). The difference in the probability of adopting CSR among firms known only in Luxembourg or in the Great Region is not significantly different from zero. This evidence suggests that firms operating in international markets are more inclined to adopt CSR practices probably because of the higher exposure and pressure from international public opinion.

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<sup>6</sup>  $F(9,1615) = 0.97$  Prob > F = 0.4604. It worth to note that if the estimated values fit well observed values the F-test is not statistically significant at conventional level.

<sup>7</sup> As explained in data section, the motivations for adopting CSR are proxied by the motivations for adopting green IT.

Table 1: Logit estimates

	Variables	Coef.	S.E.
Intrinsic motivations	Reduction of foot print	-0.023	(0.203)
	Coherence with internal policies	0.987***	(0.207)
Extrinsic motivations	Reduction of operating cost	-0.039	(0.204)
	Improve corporate image	0.543***	(0.188)
Size	Stake-holders pressure	0.150	(0.160)
	Ln. employees	0.149*	(0.079)
Group	Independent	Base	-
	National Group	0.189	(0.180)
	EU group	0.821***	(0.199)
	International group	1.390***	(0.372)
Sectors	Construction	Base	-
	Manufacturing	-0.364	(0.302)
	Utilities	1.684***	(0.622)
	Wholesale and retail trade	-0.197	(0.232)
	Transport	0.131	(0.313)
	Hotels and restaurants	-0.306	(0.333)
	ITC	0.340	(0.264)
	Real estate and professionals	0.345	(0.251)
	Support services	0.142	(0.349)
	Business with public authorities	0.135	(0.165)
Public Authorities	Market follower	Base	-
	Market challenger	0.194	(0.264)
	Market leader	0.806***	(0.277)
Competition	Very Limited competition	Base	-
	Limited competition	0.382	(0.884)
	Intense competition	0.542	(0.849)
	Very intense competition	0.563	(0.850)
Reputation	National reputation	Base	-
	Great region reputation	0.230	(0.202)
	International reputation	0.675***	(0.191)
Statistics	Constant	-4.482***	(0.896)
	Observations	1,624	
	Weighted observations	2,122	
	LL0	-1028	
	LL	-833.2	
	R <sup>2</sup>	0.189	
	Hosmer-Lemeshow test p-value	0.460	

Robust standard errors in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

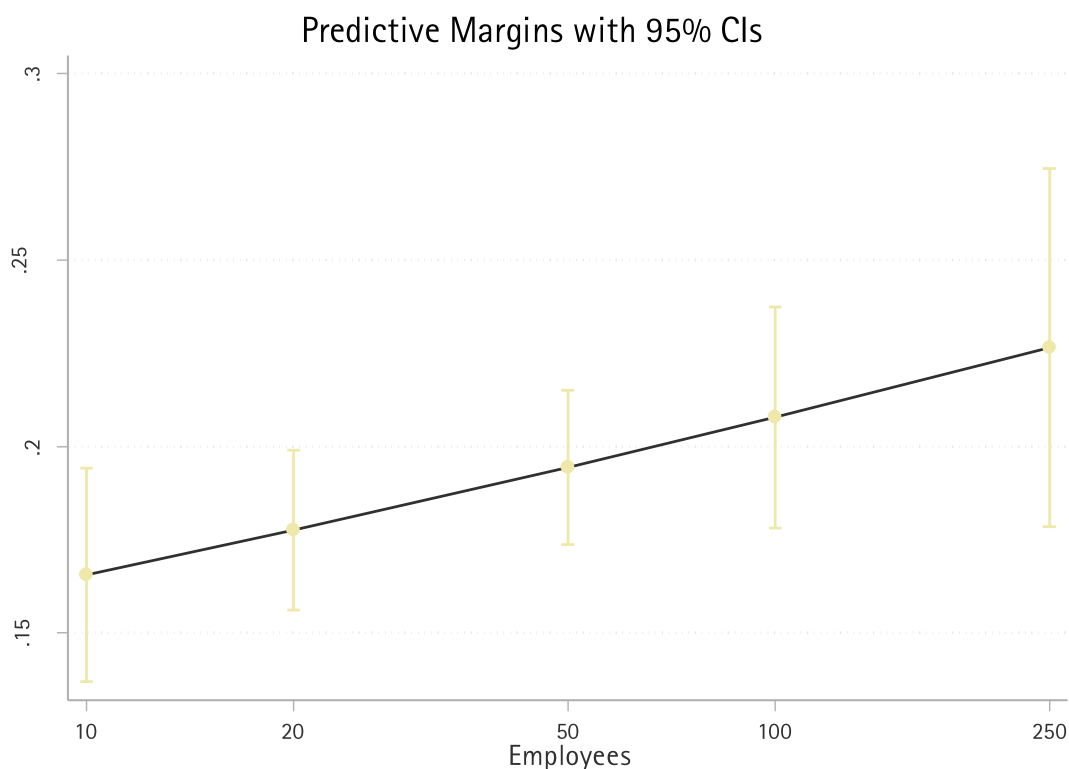
Table 2: Average marginal effects of Logit model

	Variables	Coef.	S.E.
Intrinsic motivations	Reduction of foot print	-0.003	(0.025)
	Coherence with internal policies	0.124***	(0.026)
Extrinsic motivations	Reduction of operating cost	-0.005	(0.025)
	Improve corporate image	0.066***	(0.023)
Size	Stake-holders pressure	0.019	(0.020)
	Ln. employees	0.018*	(0.010)
Group	Independent	Base	-
	National Group	0.022	(0.021)
	EU group	0.112***	(0.029)
	International group	0.212***	(0.068)
Sectors	Construction	Base	-
	Manufacturing	-0.041	(0.033)
	Utilities	0.278**	(0.119)
	Wholesale and retail trade	-0.023	(0.027)
	Transport	0.017	(0.040)
	Hotels and restaurants	-0.035	(0.037)
	ICT	0.045	(0.036)
	Real estate and professionals_1	0.046	(0.034)
	Support Services	0.018	(0.045)
Public Authorities	Business with public authorities	0.017	(0.021)
Market position	Market follower	base	-
	Market challenger	0.021	(0.028)
	Market leader	0.102***	(0.032)
Competition	Very limited competition	Base	-
	Limited competition	0.040	(0.085)
	Intense competition	0.059	(0.080)
	Very Intense competition	0.061	(0.080)
Reputation	National reputation	Base	-
	Great region reputation	0.026	(0.023)
	International reputation	0.086***	(0.025)
Statistics	Observations	1,624	
	Weighted observation	2,122	

Robust Standard errors in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

Figure 13 Predicted probabilities by size



## CONCLUSIONS AND POLICY RECOMMANDATIONS

Broadly speaking CSR can be defined as voluntarily going beyond what the law requires to achieve social and environmental objectives. As such, CSR has become a cross-cutting issue for companies, for policy-makers concerned with sustainability issues and for the public opinion more in general. Even though the features associated with CSR have been widely explored, still the multi-dimensionality and diversity of CSR prevents to achieve generally agreed conclusions about why firms adopt CSR and under which conditions the adoption of CSR represents an asset. Some recent research documents that the motivations – whether intrinsic or extrinsic – behind the adoption of CSR seem to play a key role in predicting the probability of success on the market. To explore more in detail this hypothesis, we use data from ICT 2011 which contains a dedicated module on CSR practices from three economic sectors surveyed only in Luxembourg in 2011.

Present work sheds some lights on the taxonomy of the firms adopting CSR strategies in manufacturing and services sector in Luxembourg. We first contrasted the adoption of CSR with a set of features to identify which are the characteristics of a firm that are more frequently associated with the adoption of CSR. Subsequently, we performed a multivariate econometric analysis to investigate the probability of adopting CSR for a firm operating in business sectors, keeping all other characteristics constant.

The contingency and econometric analyses are conducted on a representative sample of Luxembourgian firms. The main result is that both intrinsic and extrinsic motivations are strongly correlated with CSR, after controlling for firms characteristics (size, group), market (exports, sector of economic activity) and perceived competition.

The empirical analysis shows that the typical firm that adopts CSR practices is a large market leader, part of an international group, has a strong international reputation and operates in the utilities sector. Looking at the reasons behind the adoption of CSR practices, it appears that both intrinsic and extrinsic motivations are important. In other words, our results suggest that firms choose CSR both as a tool to promote their image and as part of their corporate culture.

However, the investigation shows as well that CSR is perceived as a marketing tool to improve the corporate image. The fact that a firm is motivated by marketing reasons does not prevent from effectively implementing CSR practices that promote social, environmental and sustainable practices. If brand reputation acts as a trigger for the proper implementation of CSR practices, public opinion and relevant stake-holders can promote the adoption of CSR practices among the less active firms by increasing pressure on the reputation of their brands. However, if CSR is a mere “fig leaf” used only for marketing purpose and it is not associated with daily corporate practices, then the credibility of all CSR movement can be undermined. Unfortunately, only the managers know whether the motivations for CSR are intrinsic or extrinsic. This generates a situation of asymmetric information. The effort devoted to CSR practices are difficult to measure and consumers and stake-holders might have difficulties telling intrinsically from extrinsically motivated CSR.

This study stemmed from the belief that if economic analysis should inform public policy, than it is important to take a close look at who are the actors mainly involved in CSR strategies and which are the features that might ensure a successful and durable adoption of CSR. This is pivotal for policy makers who have to choose among the best possible strategies to support the adoption of virtuous economic practices. Results suggest that policy makers aiming to promote responsible behaviour should pay attention to small firms that can lack resources to actively engage in CSR. For example, the provision of financial stimuli (e.g. through subsidies) or the support of R&D programs leading to sustainable technologies need to be, as much as possible, targeted on SMEs.

A wide array of policies is available to policy-makers, but they require to be calibrated on the specific context to reduce waste of resources and to promote the effective achievement of the expected goals. As far as the consumer dimension is concerned, public CSR policies serve to raise consumers’ awareness (e.g. through information campaigns), ensure credibility (e.g. through eco-labels) or influence prices (e.g. taxes or tax reductions). Policy makers who want to promote the adoption of CSR can either focus on the state’s own activities (e.g. by sustainable public procurement) or try to improve transparency and disclosure (e.g. by promoting or requiring CSR reporting).

Present work is intended to provide an exploration of the main features of the firms adopting CSR in Luxembourg. Many questions remain unanswered. For example, it is interesting to explore how the various features identified in present work can help explaining the success of the firms adopting CSR. From this point of view, present work represents a preliminary step for further research.



## REFERENCES

- Aguinis, H. and Glavas, A. (2012). What we know and don't know about corporate social responsibility: a review and research agenda. *Journal of Management*, 38(4):932–968.
- Aragon-Correa, J. A. and Sharma, S. (2003). A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review*, 28(1):71–88.
- Archer, K. J. and Lemeshow, S. (2006). Goodness-of-fit test for a logistic regression model fitted using survey sample data. *The Stata Journal*, 6(1):97–105.
- Baron, D. P. (2007). Corporate social responsibility and social entrepreneurship. *Journal of Economics & Management Strategy*, 16(3):683–717.
- Benabou, R. and Tirole, J. (2010). Individual and Corporate Social Responsibility. *Economica*, 77(305):1–19.
- Bocquet, R., Le Bas, C., Mothe, C., and Poussing, N. (2012). Are firms with different csr profiles equally innovative? an empirical analysis with survey data. *European Management Journal*.
- Bohas A., Dagorn N., Poussing N. (2014), « Responsabilité Sociale de l'Entreprise : quels impacts sur l'adoption de pratiques de Green IT ? », *Système d'Information et Management*, Vol. 19, n°2, pp. 9-43.
- Brønn, P. S., and Vidaver-Cohen, D. (2009). Corporate motives for social initiative: Legitimacy, sustainability, or the bottom line?. *Journal of Business Ethics*, 87(1), 91-109.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: toward the moral management of organizational stakeholders. *Business horizons*, 34(4), 39-48.
- Chih, H. L., Chih, H. H., & Chen, T. Y. (2010). On the determinants of corporate social responsibility: International evidence on the financial industry. *Journal of Business Ethics*, 93(1), 115-135.
- Cohen, E. (2010). *CSR for HR: A necessary partnership for advancing responsible business practices*. Greenleaf Publishing.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: an analysis of 37 definitions. *Corporate social responsibility and environmental management*, 15(1):1–13.
- DEGLI ANTONI, G., and SACCONI, L. (2011). Does a virtuous circle between social capital and CSR exist? A network of games model and some empirical evidence, Department of Economics, University of Trento Working Paper, No. 1103.
- Dibrell, C., Craig, J., and Hansen, E. (2011). Natural environment, market orientation, and firm innovativeness: An organizational life cycle perspective. *Journal of Small Business Management*, 49(3):467–489.
- DONALDSON, T., and Preston I. (1995). The stakeholder theory of the corporation: concepts, evidence, and implications. *Academy of management review*, 20(1):65–91.
- Draper, S. (2006). Key models for delivering sector-level corporate responsibility. *Corporate Governance*, 6(4):409–419.
- Du, S., Bhattacharya, C. B., & Sen, S. (2007). Reaping relational rewards from corporate social responsibility: The role of competitive positioning. *International Journal of Research in Marketing*, 24(3), 224-241.
- European Commission (2011a). *Corporate Social Responsibility - National Public Policies in the European Union*. Publications Office of the European Union.

European Commission (2011b). A renewed EU strategy 2011-14 for Corporate Social Responsibility. European Commission, Brussels.

Freeman, I., and Hasnaoui, A. (2011). The meaning of corporate social responsibility: The vision of four nations. *Journal of Business Ethics*, 100(3), 419-443.

Gallego-Álvarez, I., Prado-Lorenzo, J. M., and García-Sánchez, I.-M. (2011). Corporate social responsibility and innovation: a resource-based theory. *Management Decision*, 49(10):1709–1727.

Garriga, E., and Melè, D. (2004). Corporate social responsibility theories: mapping the territory. *Journal of business ethics*, 53(1-2), 51-71.

Graafland, J., and Mazereeuw-Van Der Duijn Schouten, C. (2012). Motives for corporate social responsibility. *De Economist*, 160(4), 377-396.

Harrison, J. S., & Freeman, R. E. (1999). Stakeholders, social responsibility, and performance: empirical evidence and theoretical perspectives. *Academy of management Journal*, 42(5), 479-485.

Heal, G. (2005). Corporate social responsibility: An economic and financial framework. *The Geneva papers on risk and insurance-Issues and practice*, 30(3):387–409.

Heal, G. (2008). *When principles pay*. Columbia Business School: New York and Chichester.

Hoq, M. Z., Sulaiman, M. A., and Sharifah Faridah Syed, A. (2010). The role of 'ethical brand' and its effects on company reputation. *Administration and Management Review*, 22(1):60–73.

Jonker, A. H. J. and Schmidpeter, M. W. R. (2005). *Social Responsibility Across Europe*. Springer Berlin - Heidelberg.

Kay, J. (1993). *Foundations of corporate success: how business strategies add value*. Oxford University Press.

Martinuzzi, A., Gisch-Boie, S., and Wiman, A. (2010). Does corporate responsibility pay off? Exploring the links between CSR and competitiveness in Europe's industrial sectors. Final Report to the European Commission, Directorate-General for Enterprise and Industry. Wien.

McWilliams, A. and Siegel, D. (2000). Corporate social responsibility and financial performance: correlation or misspecification? *Strategic management journal*, 21(5):603–609.

McWilliams, A. and Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of management review*, 26(1):117–127.

Mijatovic, I. S., and Stokic, D. (2010). The influence of internal and external codes on CSR practice: The case of companies operating in Serbia. *Journal of business ethics*, 94(4), 533-552.

Mohin, T. (2012). The top 10 trends in CSR for 2012. *Forbes*. <http://www.forbes.com/sites/forbesleadershipforum/2012/01/18/the-top-10-trends-in-csr-for-2012/>.

Orlitzky, M., Schmidt, F. L., and Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization studies*, 24(3):403–441.

Sacconi, L. (2004). Corporate Social Responsibility (CSR) as a Model of "Extended" Corporate Governance: An Explanation Based on the Economic Theories of Social Contract, Reputation and Reciprocal Conformism. *LIUC, Ethics, Law and Economics Paper*, (142).

Sacconi, L., and Degli Antoni, G. (2009). A theoretical analysis of the relationship between social capital and corporate social responsibility: concepts and definitions. *Knowledge in the Development of Economies. Institutional Choices under Globalisation*, 134-157.

Sharma, S. and Vredenburg, H. (1998). Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strategic management journal*, 19(8):729–753.

Surroca, J., Tribó, J. A., and Waddock, S. (2010). Corporate responsibility and financial performance: The role of intangible resources. *Strategic Management Journal*, 31(5):463–490. Verghese, A. K. (2013). Role of internal communications in championing corporate social responsibility and employee volunteering initiatives. *Parikalpana: KIIT Journal of Management*, 9(1).

Vilanova, M., Lozano, J. M., & Arenas, D. (2009). Exploring the nature of the relationship between CSR and competitiveness. *Journal of Business Ethics*, 87(1), 57-69.

Vlachos, P. A., Panagopoulos, N. G., & Rapp, A. A. (2013). Feeling good by doing good: Employee CSR-induced attributions, job satisfaction, and the role of charismatic leadership. *Journal of business ethics*, 118(3), 577-588.

Vogel, D. (2005). *The market for virtue: the potential and limits of corporate social responsibility*. The Brookings Institution.

Wagner, M. (2010). Corporate social performance and innovation with high social benefits: A quantitative analysis. *Journal of Business Ethics*, 94(4):581–594.

Watson Towers (2012). *Engagement at Risk: Driving Strong Performance in a Volatile Global Environment*. Global Workforce Study, Toronto.

Zadek, S. (2006). Responsible competitiveness: reshaping global markets through responsible business practices. *Corporate Governance*, 6(4):334–348.