



HAL
open science

Unaware Corporate Social Responsibility: Impact of Firm Size, Motivations and External Pressures

Olivier Beaumais, Mireille Chiroleu-Assouline

► **To cite this version:**

Olivier Beaumais, Mireille Chiroleu-Assouline. Unaware Corporate Social Responsibility: Impact of Firm Size, Motivations and External Pressures. 2023. halshs-04003040

HAL Id: halshs-04003040

<https://shs.hal.science/halshs-04003040v1>

Preprint submitted on 23 Feb 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



WORKING PAPER N° 2023 – 09

**Unaware Corporate Social Responsibility: Impact of Firm Size,
Motivations and External Pressures**

**Olivier Beaumais
Mireille Chiroleu-Assouline**

JEL Codes: M14, Q59, L29, C38.

Keywords: Corporate social responsibility, Non-parametric item response theory, Scoring, Stakeholders, SME, France

Unaware Corporate Social Responsibility: Impact of Firm Size, Motivations and External Pressures*

Olivier Beaumais^a and Mireille Chiroleu-Assouline^b

February 22, 2023

Abstract

We explore differences in firms' attitudes toward corporate social responsibility (CSR). Using a unique dataset covering 8,857 French firms, collected by the National Institute of Statistics and Economic Studies (INSEE), we identify firms conducting conscious CSR and others with effective but unaware CSR activities. We then construct three CSR pillar scores for each firm, using Mokken scale analysis, a form of non-parametric item response analysis. The CSR scores, along with responses to specific questions, allow us to characterize firms that implement conscious or unaware CSR. We then estimate simple probit and count data models to show that a significant share of firms are in fact significantly engaged in unaware CSR, with no monotonic size effect. Cooperation with external actors such as NGOs mitigates the effect of firm size on the likelihood of conducting unaware CSR, while the effect of NGO campaigns against large firms is mainly to increase the environmental score of small firms in the same industry.

Keywords: corporate social responsibility, non-parametric item response theory, scoring, stakeholders, SME, France.

JEL codes: M 14, Q 59, L29, C 38.

* This research has been funded by the French National Research Agency (ANR-15-CE05-0008-01) and the program Investissements d'Avenir of the French government (ANR-17-EURE-001). The authors thank Thomas Lyon, Catherine Liston-Heyes, Bernard Sinclair-Desgagné for helpful comments and suggestions. They are very grateful to conference participants at the FAERE (Nancy), CREE (London, Ontario) and GREENGO (Paris).

^a LERN UR-4702, University of Rouen Normandy and LISA UMR CNRS 6240, University of Corte, France. Email: olivier.beaumais@univ-rouen.fr.

^b Corresponding author. Paris School of Economics, University Paris 1 - Panthéon Sorbonne, 48 bd Jourdan-75014 Paris and Institut Universitaire de France. Email: m.chiroleu-assouline@psemail.eu. ORCID 0000-0001-8810-4258.

1 Introduction

Walking the walk, talking the talk or sleepwalking? Corporate social responsibility (CSR) is the foremost field in which talking the talk without walking the walk amounts to a specific form of greenwashing. (Lyon and Montgomery, 2015; Gatti et al., 2019). This gap between acts and speech is a criticism often leveled at large companies, which are thought to be more willing to use CSR simply as a communication tool, while small and medium enterprises (SMEs) are thought to have a less explicit but more sincere commitment to CSR. How true is this assertion? How different are small and large firms in their CSR practices? In the field of CSR, this is one of the topics most worthy of in-depth analysis (Kitzmueller and Shimshack, 2012; Schmitz and Schrader, 2015; Aguinis and Glavas, 2012; Croson and Treich, 2014; Crifo and Forget, 2015) and is all the more important since in most OECD countries SMEs account for an overwhelming majority of businesses (99%) and more than half of GDP (OECD, 2019). We show in this article that CSR practices are much more widespread among companies, including small ones, than one might think, but that many of them are clearly not aware of it, or at least do not express it.

CSR may be seen as an extension of Freeman's stakeholder theory, whereby companies go beyond simply maximizing shareholder value to account for the interests of their stakeholders - agents or groups that can influence or are affected by the achievement of the firm's objectives (Freeman, 1984; Delmas and Toffel, 2004, 2011; Russo and Perrini, 2010; Perrini et al., 2007). According to Russo and Tencati (2009), large corporations implement formal CSR strategies (notably by implementing formal management systems devoted to CSR), while SMEs run informal CSR programs. Among the possible explanations is a lack of understanding of the concept of CSR itself because of its vagueness. However, various other explanations have been offered for these different commitments to CSR, among which scarcity of resources and organizational costs (Perrini et al., 2007; Jenkins, 2009), and endogenous organizational characteristics that facilitate the internal implementation of CSR-related practices in core business functions (Baumann-Pauly et al., 2013)¹. On the basis of four in-depth case studies, Murillo and Lozano (2006) conclude that SMEs' may engage in CSR differently from large firms because they are closely connected to their environment or communities in which they often act as benefactors or strongly committed agents (Spence, 1999), the values of their manager or owner being one major driver (Spence et al., 2003). As a result, SMEs are especially interested in social capital,

¹ Magill, Quinzii and Rochet (2015) argue that it would not be socially optimal for small competitive firms to have the same level of CSR as large firms with significant market power. This stems from the specific way in which they define CSR in their theoretical framework: a responsible firm cares about social welfare, by weighing stakeholders' welfare instead of only shareholders'.

as predicted by Spence et al. (2003), but do not appear to communicate about their social practices, and thereby practice informal CSR.

These differences in behavior can be explained by different motivations: the instrumental motive when the firm sees CSR as an asset for its own interests, the relational motive when it is a matter of satisfying the demands of stakeholders, the moral motive when CSR corresponds to an ethical commitment of conviction (Aguilera et al., 2007). Trying to assess the empirical significance of these different motives, Dare (2016) uses the organizational location of CSR as a proxy for motive and finds unexpected results showing that the relational motive (visible when CSR falls under the purview of the communication and public relations department) is more influential than expected, more than the instrumental motive. Similarly, D'Souza et al. (2022) find an effect of external stakeholders, including pressure groups, on environmental and social CSR.

Among the external stakeholders, the role of NGOs has been examined by a few studies, with mixed results. Eesley and Lenox (2006) find that direct attacks by NGOs have little impact, just as Helmig et al. (2016) find that NGO pressure has no influence on CSR, in contrast to Arenas et al. (2009) who show that companies recognize NGOs as CSR drivers. Based on the premise that the informal procedures adopted by small firms are invisible to the media and NGOs, unlike the formalized processes implemented by large firms, Russo and Perrini (2010) finally suggest that these external stakeholders have no influence on the CSR behavior of small firms.

Our research questions are related to this set of theoretical assertions and first findings: beyond the usual distinction between formal and informal CSR, is the gap observed in the forms of CSR practiced by firms according to their size explained by a different knowledge of the concept of CSR or a different level of awareness of actual practices? Does this gap vary between CSR pillars? How is it affected by stakeholder pressure?

The empirical literature on this issue is scarce and scattered. The main difficulty lies in the fact that there is no common measure to assess companies' level of commitment in CSR, and therefore no specific measure for small and medium-sized enterprises. The best-known existing rating, the scores assigned by the KLD MSCI company, concerns only 8,500 companies worldwide². As a result, most articles adopt a restricted viewpoint or treat the different segments of the population differently from the start. Investigations to date, such as Murillo and Lozano

² MSCI KLD Research & Analytics <https://www.msci.com/esg-ratings>.

(2006)'s, have been based on small samples or been qualitative case studies. Kuhn et al. (2014), for example, conducted a qualitative content analysis based on Global Reporting Initiative (GRI) guidelines to address how transparently French companies listed on the CAC 40 communicate their CSR engagement externally, whereas Vo et al. (2015) used a sample of 155 firms (drawn from a panel of about 1,200 French SMEs) to compare the roles of economic, social, and environmental concerns in driving SMEs to integrate CSR into their business strategy. Very few articles are based on datasets large enough to reflect the size diversity of the business sector. Two exceptions are Russo and Tencati (2009)'s study of the behavior of a large sample of 3,626 Italian companies of all sizes, and Turker (2009)'s survey, in which she constructs a CSR scale for Turkish firms from the binary (yes/no) answers of 280 respondents to 42 statements about their firm's practices.

In contrast, our article aims to shed light on the potentially very different ways that companies view CSR by drawing a comprehensive and detailed picture of the range of CSR concepts and practices among firms. The dataset used in this article, which is the largest ever gathered on this topic (8,857 French firms), includes very small, small and medium enterprises as well as large firms, allowing us to take industry differences into account³. Because the data was provided by firms to the French National Institute of Statistics and Economic Studies (INSEE) for statistical use only and under confidentiality rules, it is very unlikely to be strategically biased, to generate good scores for the benefit of investors for example⁴. In addition, the dataset has a comprehensive coverage of firms with more than 500 employees and the remainder were sampled with the best available methods. One of the advantages of this extensive survey is that all firms answered the same questions, allowing their responses to be compared rigorously, in contrast with Baumann-Pauly et al. (2013), who preemptively defined different indicators for SMEs and multinational companies, and focused on 12 so-called “data-rich” case studies (biased toward CSR champions). Another essential characteristic is that this survey begins with a question on knowledge of the concept of CSR, which does not condition the answers to questions on actual practices. These data show that the first difference between SMEs and large firms lies in the understanding of and simple knowledge about CSR as a concept. However, we also note that among firms with knowledge of CSR, a significant proportion declare that they do not engage in any such activities. Perhaps the most striking point is that some firms walk the walk without talking the talk, declaring that they are not actively committed

³ To date, this database has been little used, except in an approach quite different from ours by Roudaut (2015).

⁴ On the contrary of this greenwashing effect, Kim and Lyon (2014) also highlighted a potential under-declaration of certain firms to avoid the backlash effect from investors fearing that CSR may be sought at the expense of profitability.

to CSR while revealing significant CSR activities. This is what we call sleepwalking CSR, or simply unaware CSR.

Our contribution is multi-layered. We present the first large-scale quantitative study of the unaware CSR phenomenon. To this end, we propose an original way of constructing quantitative scores for the CSR practices of firms in the three traditionally-considered dimensions (societal, social, environmental), based on non-parametric Mokken scale analysis (Mokken, 1971). This approach is less intensive in terms of calculation than the Bayesian ICT method put forward by Carroll et al. (2016). The CSR scale that we obtain enables us to draw a very detailed picture of the features of CSR in French firms of all sizes. Our method could be used to construct scores independently of rating agencies on data from various sources.

The most important contribution of our work concerns the understanding of the generalization of CSR practices: beyond size effects, our estimates reveal the importance of NGO pressure and cooperation with other firms in generating substantial unaware CSR, especially among smaller firms. We find that the size effect in the likelihood of engaging in unaware CSR is mitigated when companies cooperate with external actors, such as associations and NGOs. We also assess the influence of NGO campaigns against large companies in the same industry, due to the threat of also being attacked as well or the increased salience of environmental issues (Baron, 2016; Baron and Diermeier, 2007). To our knowledge, these results are new and original: contrary to the existing literature (Murillo-Luna et al., 2008; Helmig et al., 2016; Forcadell et al., 2022), we are the first to highlight a visible effect of stimulation by the action of NGOs of the CSR of companies, including the smallest among them.

The remainder of the article is structured as follows. Section 2 presents the survey and the data. Section 3 is devoted to the implementation here of Mokken scale analysis, allowing us to construct an original CSR scale, which disentangles the scores in the different pillars. Section 4 examines certain features of CSR awareness and its implementation in French firms. Section 5 is devoted to discussion and Section 6 offers conclusions.

2 Data

2.1 *The Survey*

The data used in this article were collected through a survey conducted in France at the end of 2011 by the INSEE⁵. 8,857 French firms were required to answer about 60 questions regarding their knowledge and implementation of corporate social responsibility (CSR). The sample was carefully weighted to reflect the size composition of the business sector in France, excluding micro-enterprises (less than 10 employees)⁶. In the remainder of the article, we use the same definition of small, medium-sized, and large firms as Russo and Tencati (2009) based on the definition established by the EU (EC, 2003): small firms are firms with fewer than 50 employees (including the sub-category of the very small ones, with between 10 and 19 employees); medium-sized firms are those with fewer than 250 employees, and firms with a larger number of employees are considered large. In addition, the sample is comprehensive for firms with more than 500 employees.

Contrary to Ernst and Honore-Rouge (2012), who restricted their descriptive analysis of the survey's results to firms with more than 50 employees, we exploit the whole sample, to fully take stock of its diversity in a common framework (as deemed necessary by Blomback and Wigren, 2009), and also to be able to compare very small, small and medium-sized firms.

The survey instrument was carefully designed by a committee of experts assembled by the INSEE. The questionnaire has four main parts, the first of which focuses on general assertions about firms' knowledge about CSR and governance issues, and the three others focusing on the three traditional “pillars” of CSR, namely the societal pillar, the social pillar, and the environmental pillar⁷. A prominent feature of this survey is its first question (A1): “Have you ever heard of corporate social responsibility?”. For firms that had heard of CSR, the subsequent questions in section A explored the meaning of the concept, their feeling as to whether the firm behaved responsibly, their motivations to do this, and how the implementation of CSR was organized. After this section, they were asked to answer the questions in the following sections (B to D), to which respondents who answered "No" were instead directed immediately after question A1, as these sections assumed no prior knowledge of CSR. (a definition was then provided), but asked about behaviors that are known to constitute CSR.

⁵ Unfortunately, we only have this data for one year. Indeed, the survey was repeated in 2016, but with a modified questionnaire and a restricted sample, excluding very small firms.

⁶ In the remainder of the article we use the sampling weights provided by the INSEE ensuring that descriptive statistics and econometric results hold for the whole population of interest (around 150,000 firms).

⁷ The questionnaire is presented in full in the Appendix.

The societal pillar covers how firms manage their relationships with customers, suppliers and the wider society. Examples of questions in this part of the questionnaire are: “Do you ask some of your suppliers to commit to satisfying specific standards, some of which CSR-related?”, and “Does your company cooperate with other companies or organizations for CSR activities? If so, with whom (firms, administrations, NGOs, banks)?”

The social pillar covers actions undertaken by firms in human resource management to promote diversity and inclusion, and improve employee health and well-being. The questions in the social pillar part of the questionnaire include: “Do you have specific policies to avoid discrimination based on gender? ethnic origin? age? disability?”

The environmental pillar assesses firms' impact on the environment. Some of the questions in this part of the questionnaire are: “Does your firm develop eco-friendly products? ”, “Do you sell environmentally certified products? ” or more generally, “Is your company committed to improving its energy efficiency and/or reducing its carbon emissions? ”

2.2 *Descriptive Statistics*

About 60% of the firms stated that they had never heard about CSR. This percentage varied by industry (see Table 1) and also by firm size (Table 2): the proportion was as high as 67% in the “Other service activities” sector (personal services such as laundry and painting, hair and beauty care, or personal care services), while it was only 23.7% in the “Electricity, Gas, Steam” sector.

Likewise, while 40% of medium-sized firms (between 50 and 249 employees) declared that they had never heard about CSR, only 10% of very large firms (more than 500 employees) did so. It is not surprising that almost all large companies are aware of the concept of CSR, what is more surprising is that not all of them are in 2011. Indeed, since the NRE (New Economic Regulation) law of 2002, all French companies listed on the stock market are obliged to provide a CSR report in addition to their financial report. The question of its extension to all large companies was publicly debated in 2010, leading to the vote of the Grenelle 2 Law, which made the publication of this CSR report mandatory for companies with more than 5,000 employees⁸.

⁸ However, this law did not come into force until 2012. And companies with more than 500 employees are all concerned just since 2017.

Table 1: Knowledge of CSR (No/Yes) - Percentage by industry

Sector	No	Yes
Mining and Quarrying	65.09	34.91
Manufacturing	58.05	41.95
Electricity, Gas, Steam	23.70	76.30
Water supply, sewerage, waste management	40.57	59.43
Construction	66.65	33.35
Wholesale and retail trade	64.65	35.35
Transportation and storage	59.40	40.60
Accommodation and food service activities	63.47	36.53
Information and communication	51.47	46.53
Real estate activities	58.26	41.74
Professional, scientific and technical activities	48.31	51.69
Administration and support activities	58.34	41.66
Other service activities	66.96	33.04

Table 2: Having heard about CSR (No/Yes) - Percentage by firm size

Size	No	Yes
10-19	69.06	30.94
20-49	58.61	41.39
50-249	40.30	59.70
250-499	20.54	79.46
500+	9.24	90.76
Total	60.43	39.57

About 52% percent of the firms knew about CSR and were engaged in CSR activities; 12%, despite being aware of CSR, stated that they were not engaged in any CSR-related actions. Among the companies that are aware of CSR, more of those that are engaged in CSR than those that are not think that CSR is an opportunity (34% versus 22.7%) or a conviction-based approach (46.5% versus 22.7%). There are about as many who consider CSR to be a communication strategy (33% versus 30.7%), but it is essentially among those who do not practice CSR that we observe a feeling of constraint (23.9% versus 4.5%). Note that the design of the questionnaire allowed firms that stated that they had never heard about CSR to nevertheless answer all the questions under the three CSR pillar headings.

3 A Mokken Scale Analysis of CSR Practices

To measure commitment in CSR by a score, we rely on the Mokken scale analysis (MSA, Mokken, 1971). MSA is a non-parametric approach, thereby less demanding in terms of underlying assumptions than parametric models (like, *e.g.* the Rasch (1960) models), allowing

more items to be retained in the scale that serves as the basis for calculating the score. This makes the scores constructed by summing up the positive responses to the items in the scale more precise (Hardouin et al, 2011). Note that both Rasch models and Mokken scale analysis can be seen as successors of the Guttman scaling technique (van Schuur, 2003). A set of binary items is said to form a perfect Guttman scale if a respondent who gives a positive response to a difficult item (*i.e.*, with a high proportion of negative responses) also gives a positive response to all items that are less difficult. In terms of CSR construction, this means that a firm that claims to be involved in the least popular CSR-related activity, should also claim to be involved in all the other (more popular) CSR-related activities. Of course, empirical data sets violate this model (they are not perfect Guttman scales): a respondent who gives a positive response to a difficult item can give a negative response to an easier item. These violations are called Guttman errors. In short, MSA proceeds by assessing model violations by comparing actual Guttman errors with theoretical Guttman errors obtained under the assumption that the responses to two different items are independent. Loevinger coefficients are calculated on the basis of this comparison, notably the Loevinger coefficient of scalability (H^S) which measures whether a set of items actually forms a good scale, here denoted S . The following rule of thumb applies (Mokken, 1971; van Schuur, 2003): when $H^S < 0.3$, the scale is poor; when $0.3 \leq H^S < 0.4$, the scale is weak; when $0.4 \leq H^S < 0.5$, the scale is moderately strong; and finally when $0.5 \leq H^S$, the scale is strong. MSA has been widely used in the human resource management literature, to measure high-involvement work practices, for example (Zatzick and Iverson, 2006). Applying MSA to the 2011 survey data allows us to derive CSR scores for each of the CSR pillars.

3.1 Pillar Scores

The part of the survey devoted to the societal pillar comprises 15 binary questions, of which 8 were found to form a weak scale ($H^S = 0.38$). The social part of the survey consisted of 21 binary questions, of which 18 were found to form a moderately strong scale ($H^S = 0.48$). Finally, the environmental pillar was assessed through 8 items which together form a strong scale ($H^S = 0.53$)⁹. The societal score and the environmental score both range from 0 to 8, with the same rather low median of 2, whereas the social score ranges from 0 to 18, with a median of 5.

Table 3 presents the mean scores by industry and their distributions within each sector. The sectors commonly identified as having significant impacts on the environment, “Electricity, Gas,

⁹ The questions that make up each score are those indicated by a dagger in the full questionnaire provided in the Appendix.

Steam” and “Water supply, sewerage, waste management”, have the highest average scores for all three pillars. The environmental score is the more widely distributed between industries with a standard error equal to 50% of the industry average (versus 38% for the economic and social score, and 26% for the social score).

Table 3: CSR scores by industry

	Societal score			Social score			Environmental score		
	Mean	Std	Min/Max	Mean	Std	Min/Max	Mean	Std	Min/Max
Mining and Quarrying	1.88	1.82	0/8	5.56	4.05	0/16	3.56	1.80	1/8
Manufacturing	1.60	1.73	0/8	4.36	3.91	0/18	2.35	2.05	0/8
Electricity, Gas, Steam	3.34	1.89	0/8	8.21	4.26	1/18	4.44	1.69	1/8
Water supply, sewerage, waste management	2.49	2.13	0/8	6.98	4.67	0/18	3.74	2.01	0/8
Construction	2.00	1.74	0/8	3.78	3.44	0/18	1.79	1.80	0/8
Wholesale and retail trade	1.34	1.63	0/8	4.25	3.85	0/18	2.01	2.01	0/8
Transportation and storage	1.15	1.48	0/8	5.06	4.10	0/18	2.06	1.88	0/8
Accommodation and food service activities	1.61	1.73	0/8	4.65	4.07	0/18	2.50	2.26	0/8
Information and communication	0.91	1.44	0/8	4.51	4.24	0/18	1.09	1.47	0/8
Real estate activities	1.54	1.70	0/8	4.36	4.54	0/18	1.80	2.12	0/8
Professional, scientific and technical activities	1.18	1.72	0/8	4.21	4.22	0/18	1.40	1.89	0/8
Administration and support activities	1.68	1.88	0/8	4.99	4.33	0/18	1.99	2.12	0/8
Other service activities	1.32	1.56	0/7	3.92	3.61	0/18	1.51	1.85	0/7

Another way to assess the internal consistency of scales, other than with the Loevinger scalability coefficients, is to calculate the associated Cronbach α values. Again, the rules for interpreting Cronbach's α are not set in stone, but values between 0.65 and 0.8 (or higher) are generally considered acceptable. For the three scales considered here, the values are 0.76 for the societal scale, 0.89 for the social scale and 0.79 for the environmental scale, indicating that they all have good internal consistency. This means that the scores do indeed reflect the latent CSR traits underlying firms' levels of involvement in the corresponding activities.

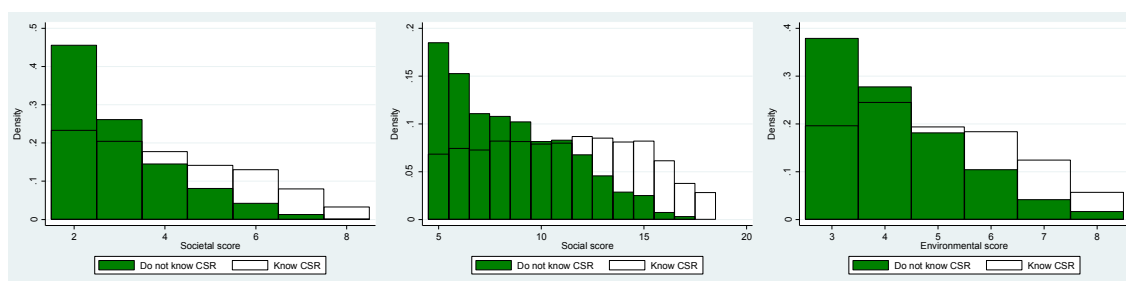
We assessed the external consistency of our scales by using the first question of the 2011 INSEE survey, on whether respondents “had ever heard about corporate social responsibility?”. This question was not used to construct any of the three scores; firms that answered “No” can be expected to score lower than those that answered “Yes”. Table 4 shows clearly that in keeping with the expected trend, and supporting the external validity of the scores, firms that declared having never heard about CSR had significantly lower scores for all three pillars. Relative to these lower scores, the percentage differences range from 76% (environmental score), to 88% (societal, social scores).

Table 4: Pillar scores - difference in means

	Do not know CSR Mean score	Know CSR Mean score	Difference
Societal score	1.13	2.12	0.99
	-	-	[0.97 ; 1.00]
Social score	3.23	6.09	2.86
	-	-	[2.82 ; 2.89]
Environmental score	1.54	2.71	1.17
	-	-	[1.14 ; 1.18]

95% confidence interval in brackets

Figure 1: CSR pillar score distributions



In fact, the scores differ both in their means and in their distributions. In Figure 1 for example, the three pillar scores for firms that stated that they “had never heard about CSR” are skewed to the left of those of firms who replied that they “had heard about CSR”, which is further evidence in favor to the external validity of the scores.

While rigorously validating the three scores would require a more in-depth analysis, we consider the evidence collected here sufficient to be reasonably confident in their external validity.

3.2 *Unaware and Conscious CSR*

In our data, we identify firms that engage in conscious CSR, as firms that declared that they implemented CSR strategies.

Two categories can be distinguished among the other firms: those that answered that they had never heard about CSR and firms that had heard of the concept (or at least the term) but declared that they were not involved in any CSR actions. Within these two categories, we consider firms scoring above a given mean pillar score to be engaged in *unaware CSR* for the corresponding

pillar.¹⁰ In view of subsequent estimations, we therefore define three binary indicators (one for each pillar score) which are equal to 1 when the firm scores above the mean and 0 otherwise.

Table 5: Pillar scores

		Knowledge of CSR		No knowledge of CSR
		Do not implement CSR	Implement CSR	
Societal score	Below the mean	66.30	37.62	69.21
	Above the mean	33.70	62.38	30.79
Social score	Below the mean	63.65	39.60	75.82
	Above the mean	36.35	60.40	24.18
Environmental score	Below the mean	73.87	41.59	73.71
	Above the mean	26.13	58.41	26.29

Table 5 shows that firms who answered that they have never heard about CSR do indeed mostly score below the mean. However, a significant percentage score above the mean: about 31% for the societal score, 24% for the social score and 26% for the environmental score. Likewise, a substantial proportion of firms that replied that they did know about CSR but were not implementing CSR strategies nevertheless score above the mean (respectively, 34%, 36% and 26%). Note that as expected, the balance of firms scoring below and above the mean is reversed for those that declared that they were implementing a CSR strategy.

It should be noted that this contrast between conscious CSR and unaware CSR does not perfectly match the contrast between formal and informal CSR (as defined by Russo and Tencati (2009)), although it is probably close. Indeed, among firms that are aware of having CSR activities, only 81.9% answer affirmatively to one of the questions relating to formal CSR actions (*e.g.* signature of an ethical charter, or consultation of employee representatives). In addition, the very structure of the questionnaire is such that the other firms did not have to respond to these actions. In other words, not all companies that consciously engage in CSR do so formally, and among those that do so in a somnambulistic way, the survey does not provide any information on whether this is only informal.

¹⁰ Because our data were transmitted by the companies within the framework of a survey for statistical purposes only, with all the required guarantees of anonymity, we consider it unlikely that this reflects strategic under-reporting, or brownwashing, as described by Kim and Lyon (2014) as well as by Lyon and Maxwell (2016).

4 The Drivers of Unaware versus Conscious CSR

4.1 Size Effects

According to Russo and Tencati (2009), whether firms implement formal or informal CSR depends mainly on their size. Our data allow us to test a similar assumption regarding conscious or unaware CSR in detail. To do this, we estimate three simple probit models of the probability of implementing unaware versus conscious CSR. The results and the associated marginal effects are reported in Table 6.¹¹

Table 6: Probability of implementing unaware CSR vs conscious CSR

	Societal score		Social score		Env. score	
	Coeff.	Marg. eff.	Coeff.	Marg. eff.	Coeff.	Marg. eff.
Mining and Quarrying	0.853*** (0.146)	0.309*** (0.053)	0.593*** (0.136)	0.224*** (0.051)	0.973*** (0.145)	0.355*** (0.053)
Manufacturing	0.764*** (0.126)	0.276*** (0.046)	0.453*** (0.116)	0.171*** (0.044)	0.758*** (0.128)	0.276*** (0.047)
Water Supply, Sewerage	0.568*** (0.133)	0.206*** (0.048)	0.296* (0.123)	0.112* (0.046)	0.655*** (0.134)	0.239*** (0.049)
Construction	1.039*** (0.126)	0.376*** (0.046)	0.436*** (0.116)	0.164*** (0.044)	0.633*** (0.129)	0.231*** (0.047)
Wholesale	0.796*** (0.126)	0.288*** (0.046)	0.655*** (0.116)	0.247*** (0.044)	0.828*** (0.128)	0.302*** (0.047)
Transportation	0.608*** (0.127)	0.220*** (0.046)	0.634*** (0.117)	0.239*** (0.044)	0.711*** (0.129)	0.259*** (0.047)
Accommodation	0.685*** (0.127)	0.248*** (0.046)	0.531*** (0.116)	0.200*** (0.044)	0.845*** (0.129)	0.308*** (0.047)
Information	0.228 (0.129)	0.083 (0.047)	0.395*** (0.118)	0.149*** (0.044)	-0.138 (0.133)	-0.050 (0.048)
Real estate	0.605*** (0.132)	0.219*** (0.048)	0.667*** (0.120)	0.252*** (0.045)	0.587*** (0.135)	0.214*** (0.049)
Professional, scientific	0.142 (0.127)	0.051 (0.046)	0.092 (0.116)	0.035 (0.044)	0.054 (0.129)	0.020 (0.047)
Administration	0.597*** (0.127)	0.216*** (0.046)	0.539*** (0.116)	0.203*** (0.044)	0.549*** (0.129)	0.200*** (0.047)
Other service	0.853*** (0.132)	0.309*** (0.048)	0.388** (0.125)	0.147** (0.047)	0.651*** (0.136)	0.237*** (0.049)
20 - 49	-0.359*** (0.011)	-0.130*** (0.004)	-0.178*** (0.011)	-0.067*** (0.004)	-0.242*** (0.011)	-0.088*** (0.004)
50 - 249	-0.713*** (0.014)	-0.258*** (0.005)	-0.114*** (0.013)	-0.043*** (0.005)	-0.498*** (0.014)	-0.182*** (0.005)
250 - 499	-1.141*** (0.036)	-0.413*** (0.013)	-0.473*** (0.029)	-0.179*** (0.011)	-0.901*** (0.034)	-0.328*** (0.012)
500+	-1.477*** (0.044)	-0.534*** (0.016)	-0.931*** (0.037)	-0.351*** (0.014)	-1.314*** (0.043)	-0.479*** (0.016)
Constant	-0.590*** (0.126)		-0.626*** (0.115)		-0.694*** (0.128)	
Observations	5869		6327		5899	

Standard errors in parentheses

* $p < 0.5$, ** $p < 0.01$, *** $p < 0.001$

Keeping in mind that the reference industry is “Electricity, Gas, Steam”, and the reference

¹¹ Note that for each CSR pillar, the sample restricts to firms that either engage in conscious or unaware CSR, which implies that the sample sizes (number of observations) differ.

size is “10-19 employees”, the marginal effects show that in most other industries, the probability of implementing unaware CSR is higher. The tendency to implement unaware rather than conscious CSR is highest in the “Mining and Quarrying” sector for the environmental pillar, in the “Construction” sector for the societal pillar, and in the “Real estate” sector for the social pillar. These three sectors are among the least well informed about CSR (Table 1), but this does not explain everything, since the likelihood of implementing unaware rather than conscious CSR is also significantly higher in the “Water supply” sector, in which knowledge about CSR is more widespread, albeit less so than in the “Electricity, Gas, Steam” sector.

Unsurprisingly, there is a very clear size effect: Table 6 shows that the probability of implementing unaware CSR is negatively associated with firm size. However, this effect is most pronounced for the societal pillar and least pronounced for the social pillar, whatever the size category considered. There is a large difference between large firms and very small ones: for firms with more than 500 employees, the probability of implementing unaware CSR actions related to the societal pillar is 0.53 points lower than for firms with 10 to 19 employees. The difference is 0.35 probability points for the social pillar and 0.48 for the environmental pillar. This difference is also apparent between small and medium size firms: 0.13 points for the societal pillar (0.07/0.09 for the social/environmental pillars) for firms with 20-49 employees.

4.2 CSR Implementation in CSR Declaring and non-Declaring Firms

Baumann-Pauly et al. (2013) argue that *“small firms possess several organizational characteristics that are favorable for promoting the internal implementation of CSR-related practices in core business functions, but constrain external communication and reporting about CSR. In contrast, large firms possess several characteristics that are favorable for promoting external communication and reporting about CSR, but at the same time constrain internal implementation”*.

We test this hypothesis by further studying the effect of a firm's size on its commitment to CSR, focusing now on firms who stated that they had heard about CSR. These firms were asked whether they were implementing CSR-related actions (question A4).

Of course, we expect firms who replied that they were implementing CSR (hereafter labeled CSR-D, for CSR-declaring firms) to score higher than the others (CSR-ND firms, for CSR-non-declaring). Given our previous results, we would expect the scores to increase once again with the size of the firms. What is not clear, however, is whether the size effect is similar for CSR-D

and CSR-ND firms.

Since our dependent variable is count data, we could have estimated Poisson models for the sake of simplicity. However, it is clear that CSR engagement does not depend solely on firm size, which can only be considered a proxy for multiple size-related factors that influence CSR commitment (see, *e.g.* Udayasankar, 2008). From an econometric point of view, this raises the classical issue of (unobservable) omitted variables, which the Poisson model, by definition, cannot accommodate. To quote Greene (2012), p. 867, “*this is the compelling motivation for the negative binomial model*”. Following the usual terminology, the models estimated in this article are Negbin II. The negative binomial model is a Poisson-gamma mixture which accommodates for unobserved heterogeneity or omitted variables through a gamma distributed variable directly introduced in the conditional mean of the dependent variable (see Winkelmann, 2008, for additional details). We further introduce an interaction between firm size and the binary indicator coding CSR-D firms (variable *CSR-D* in Table 7, which also lists the associated marginal effects). Note that, for each of the models estimated and reported in the estimations results tables, Likelihood-ratio tests (LR-tests) were performed which always rejected the Poisson model in favor of the Negbin II model.¹²

As above, size has a significant positive effect on the score, and CSR-D firms score higher than CSR-ND firms. For example, the mean social score for CSR-D firms is about 1.74 points higher than the corresponding score for CSR-ND-firms, while for the environmental scores, the relative effect is even greater (1.36 points relative to a median value of 2). Compared with firms in the reference sector, “Electricity, Gas, Steam”, the scores in all the other sectors were lower, with some variations between sectors and between pillars. For the societal and environmental pillar, firms in the “Information” sector had the lowest scores, whereas for the social pillar, the lowest scoring sector was “Real estate”. Regarding interaction effects, the results are contrasting. Table 7 shows that some of the interaction effects are significant, and the coefficients are sometimes of opposite signs for different size categories. Compared with CSR-ND firms with 20 to 49 employees, CSR-D firms with 20 to 49 employees score higher in each pillar, i.e. they are more highly involved in pillar-related CSR activities. For CSR-D firms with 50 to 249 employees, the relationship is more complicated: these firms score higher in society-related CSR activities, but lower for CSR activities related to the two other pillars.

¹² Results of the LR-tests for each of the models estimated are available from the authors upon request.

Table 7: Effects of CSR knowledge, CSR action and firm size - Accounting for interaction effects

	Societal score		Social score		Env. score	
	Coeff.	Marg. eff.	Coeff.	Marg. eff.	Coeff.	Marg. eff.
Mining and Quarrying	-0.122 (0.088)	-0.259 (0.187)	-0.336*** (0.076)	-2.048*** (0.466)	-0.194** (0.072)	-0.526** (0.195)
Manufacturing	-0.361*** (0.068)	-0.769*** (0.145)	-0.299*** (0.059)	-1.822*** (0.361)	-0.361*** (0.056)	-0.980*** (0.151)
Water Supply, Sewerage	-0.108 (0.073)	-0.229 (0.156)	-0.018 (0.063)	-0.108 (0.386)	-0.231*** (0.060)	-0.626*** (0.163)
Construction	-0.049 (0.068)	-0.105 (0.145)	-0.186** (0.059)	-1.132** (0.362)	-0.483*** (0.056)	-1.309*** (0.152)
Wholesale	-0.411*** (0.068)	-0.876*** (0.145)	-0.206*** (0.059)	-1.258*** (0.361)	-0.481*** (0.056)	-1.305*** (0.151)
Transportation	-0.660*** (0.069)	-1.404*** (0.148)	-0.129* (0.060)	-0.785* (0.365)	-0.528*** (0.057)	-1.434*** (0.154)
Accommodation	-0.131 (0.069)	-0.278 (0.147)	0.014 (0.060)	0.085 (0.364)	-0.246*** (0.056)	-0.669*** (0.153)
Information	-0.688*** (0.070)	-1.464*** (0.150)	-0.174** (0.060)	-1.062** (0.367)	-0.997*** (0.058)	-2.704*** (0.157)
Real estate	-0.304*** (0.072)	-0.646*** (0.154)	-0.436*** (0.062)	-2.659*** (0.381)	-0.577*** (0.060)	-1.565*** (0.162)
Professional, scientific	-0.517*** (0.069)	-1.100*** (0.146)	-0.208*** (0.059)	-1.267*** (0.362)	-0.782*** (0.056)	-2.121*** (0.153)
Administration	-0.254*** (0.069)	-0.540*** (0.147)	-0.097 (0.060)	-0.594 (0.364)	-0.522*** (0.056)	-1.416*** (0.153)
Other service	-0.871*** (0.079)	-1.855*** (0.169)	-0.290*** (0.065)	-1.771*** (0.396)	-0.940*** (0.065)	-2.552*** (0.177)
20 - 49	-0.107*** (0.019)	0.242*** (0.017)	0.141*** (0.013)	1.023*** (0.035)	0.154*** (0.016)	0.492*** (0.018)
50 - 249	0.229*** (0.023)	0.776*** (0.023)	0.749*** (0.015)	4.079*** (0.057)	0.526*** (0.018)	1.063*** (0.024)
250 - 499	0.455*** (0.059)	1.374*** (0.058)	0.948*** (0.041)	6.285*** (0.165)	0.639*** (0.048)	1.656*** (0.061)
500+	0.529*** (0.081)	2.061*** (0.074)	1.095*** (0.056)	7.813*** (0.222)	0.630*** (0.068)	2.043*** (0.074)
CSR-D	0.528*** (0.013)	1.194*** (0.015)	0.336*** (0.010)	1.737*** (0.040)	0.612*** (0.012)	1.366*** (0.017)
20 - 49 x CSR-D	0.284*** (0.022)		0.080*** (0.015)		0.057** (0.018)	
50 - 249 x CSR-D	0.164*** (0.025)		-0.138*** (0.018)		-0.164*** (0.021)	
250 - 499 x CSR-D	0.147* (0.062)		-0.099* (0.044)		-0.096 (0.050)	
500+ x CSR-D	0.294*** (0.083)		-0.119* (0.059)		0.031 (0.070)	
Constant	0.502*** (0.069)		1.450*** (0.059)		0.808*** (0.056)	
Observations	5345		5345		5345	

Note that the sample restricts to firms who stated that they had heard about CSR (N=5345) Standard errors in parentheses

* $p < 0.5$, ** $p < 0.01$, *** $p < 0.001$

4.3 Pressure from NGOs and CSR Scores

We now explore the effect on the CSR scores of pressure from non-governmental organizations (NGOs). In particular, we would like to test the hypothesis that NGO campaigns against large companies may have both a direct effect on large firms and a crowding-in effect on

smaller firms in the same sector, as suggested by Lyon and Maxwell (2008) and Chiroleu-Assouline and Lambert-Mogiliansky (2023). For this purpose, we matched the data in our main database with data from the Sigwatch database, which lists all NGO campaigns against multinational firms between 2010 and 2015 in 103 different countries (Koenig, 2017; Hatte and Koenig, 2018). We extracted the number of NGO campaigns against French companies by industry for the years 2010 and 2011: 138 campaigns focusing almost all (96%) on environmental issues. We then calculated the intensity of the campaigns in each sector as the ratio between the number of campaigns and the number of large companies (more than 500 employees) in that sector.¹³ The corresponding ratios (variable *attack_intens*) range from 0 to 5 (see Table 8), since the same firm can be targeted several times.

Table 8: NGO attack intensity by sector

	NGOs actions (number of campaigns)	500+ (number of firms)	Attack intensity
Mining and Quarrying	2	5	0.4000
Manufacturing	52	656	0.0793
Electricity, Gas, Steam	55	11	5.0000
Water Supply, Sewerage	3	36	0.0833
Construction	7	145	0.0483
Wholesale	5	362	0.0138
Transportation	6	140	0.0429
Accommodation	4	61	0.0656
Information	4	129	0.0310
Real estate	0	34	0.0000
Professional, scientific	0	136	0.0000
Administration	0	182	0.0000
Other service	32	10	3.2000

Possible crowding-in effects were analyzed by including an interaction between this ratio and firm size in negative binomial models. Table 9 shows how the size effect is modulated by the intensity of the campaigns. As before, the dependent variables are the scores for each pillar score.

The results in Table 9 show that the direct effect of firm size on the scores is always positive (relative to firms with 10-19 employees). For the social and societal pillars, the size effect is, in most cases, significantly moderated by the intensity of the NGO campaigns. In contrast, the size effect is significantly strengthened for the environmental pillar score, but only for firms with 20-49 employees. The effect is very significant. There therefore seems to be a crowding-in effect for firms with 20-49 employees, in relation to the intensity of campaigns against large firms

¹³ Due to statistical confidentiality constraints, we are not allowed to explicitly link the Sigwatch database to the ENDD database. For this reason, we do not attempt to explore the direct effect of NGO pressure on target companies, but focus on the potential sectoral spillover effect.

belonging to the same industry.

Table 9: CSR and NGOs attack intensity by sector

	Societal score		Social score		Env. score	
	Coeff.	Marg. Eff.	Coeff.	Marg. Eff.	Coeff.	Marg. Eff.
20 - 49	0.212*** (0.007)	0.314*** (0.010)	0.341*** (0.005)	1.482*** (0.022)	0.296*** (0.006)	0.606*** (0.013)
50 - 249	0.525*** (0.009)	0.796*** (0.014)	0.875*** (0.007)	3.807*** (0.031)	0.590*** (0.008)	1.192*** (0.017)
250 - 499	0.900*** (0.021)	1.363*** (0.032)	1.207*** (0.016)	5.258*** (0.071)	0.895*** (0.019)	1.793*** (0.039)
500+	1.225*** (0.022)	1.857*** (0.035)	1.384*** (0.018)	6.015*** (0.079)	1.082*** (0.021)	2.166*** (0.043)
attack_intens		-0.063*** (0.013)		-0.100** (0.032)		0.052** (0.017)
20 - 49 x attack_intens	-0.074*** (0.018)		-0.026* (0.013)		0.067*** (0.016)	
50 - 249 x attack_intens	-0.057* (0.026)		-0.044* (0.019)		0.030 (0.024)	
250 - 499 x attack_intens	-0.101* (0.049)		-0.041 (0.039)		-0.029 (0.047)	
500+ x attack_intens	-0.130** (0.050)		-0.082* (0.041)		-0.059 (0.048)	
Constant	1.109*** (0.087)		1.774*** (0.069)		1.134*** (0.080)	
Observations	8757		8757		8757	

Standard errors in parentheses

** $p < 0.5$, * $p < 0.01$, *** $p < 0.001$

The total effect of the intensity of the campaigns on the three scores is significant and slightly negative for the social and societal scores, and significant and slightly positive for the environmental score. This suggests that NGO campaigns, generally focusing on large firms and environmental issues, may lead firms to concentrate their CSR policies on environmental actions, to the detriment of actions under the other pillars. In short, there may be a crowding-out effect related to the intensity of NGO campaigns on social and societal scores. It can be assumed that the attention and resources devoted to CSR actions are being redeployed in favor of the environmental pillar, under pressure from NGOs.

4.4 Cooperation with Other Firms and Associations as a Path towards Conscious CSR

To further illustrate the impact of cooperation with different stakeholders, Table 10 presents additional interaction effects showing how the effect of firm size on the probability of implementing conscious rather than unaware CSR is reinforced when firms cooperate with other firms, association and/or non-governmental organizations in the implementation of CSR related actions.

Table 10: Probability of implementing unaware CSR vs conscious CSR - Interaction effects with cooperation and NGO campaigns

	Societal pillar	Social pillar	Env. pillar		Societal pillar	Social pillar	Env. pillar
Cooperation with other firms = Yes				Commitment to various actions and cooperation with NGOs = Yes			
20 - 49 x Yes	-0.343*** (0.031)	-0.370*** (0.037)	-0.382*** (0.036)	20 - 49 x Yes	-0.947*** (0.078)	-0.419*** (0.081)	-0.904*** (0.073)
50 - 249 x Yes	-0.269*** (0.036)	-0.627*** (0.040)	-0.346*** (0.040)	50 - 249 x Yes	-1.531*** (0.117)	-1.304*** (0.107)	-1.643*** (0.103)
250 - 499 x Yes	-0.175* (0.081)	-0.515*** (0.078)	-0.257** (0.085)	250 - 499 x Yes	-0.825*** (0.174)	-0.922*** (0.175)	-1.221*** (0.172)
500+ x Yes	-0.499*** (0.099)	-0.704*** (0.095)	-0.435*** (0.103)	500+ x Yes	-1.373*** (0.271)	-1.176*** (0.235)	-1.698*** (0.272)
Cooperation with associations = Yes				NGOs' attack intensity = Yes			
20 - 49 x Yes	-0.362*** (0.059)	0.854*** (0.120)	-1.224*** (0.078)	20 - 49 x attack_intens	-0.202*** (0.028)	-0.023 (0.029)	-0.044 (0.028)
50 - 249 x Yes	-0.406*** (0.066)	0.607*** (0.122)	-0.772*** (0.072)	50 - 249 x attack_intens	-0.351*** (0.058)	-0.157*** (0.042)	-0.245*** (0.055)
250 - 499 x Yes	-0.384** (0.124)	0.558*** (0.161)	-0.731*** (0.135)	250 - 499 x attack_intens	-0.530 (0.359)	0.010 (0.073)	-0.056 (0.101)
500+ x Yes	-0.658*** (0.142)	0.462** (0.171)	-0.823*** (0.148)	500+ x attack_intens	-0.158 (0.164)	0.006 (0.094)	0.086 (0.094)

Standard errors in parentheses

** $p < 0.5$, * $p < 0.01$, *** $p < 0.001$

Once again, the probability of implementing unaware CSR decreases the larger the firms are. Firms were asked: “Do you cooperate with other firms or organizations for CSR actions?”; those that answered yes, were then asked “With associations? (yes/no)”. There was also a specific question on whether firms cooperated with NGOs in carrying out CSR-related actions. All the interaction effects between size and binary variables coding for the three types of cooperation are highly significant and negative, meaning that cooperation acts as a lever for conscious CSR, with the noticeable exception of the size/cooperation with associations interaction for the social pillar. Firms probably cooperate with associations in the field of human resources management, which is at the core of the social pillar of CSR in the questionnaire (see the questionnaire in Appendix). The strongest negative interaction effect on the probability of implementing unaware CSR comes from cooperation with NGOs, keeping in mind nevertheless that the percentage of firms which actually cooperate with NGOs is low, ranging from 1.69% for firms with 10-19 employees to 8.76% for those with 500+ employees. It can be noted that the incentive effects for conscious CSR seem to be weaker for medium-sized companies, with 50 to 499 employees, than for large or small companies (less than 20 employees). We find here a U-shaped curve influenced by attributes that were not considered by Udayasankar (2008).

5 Discussion

For various reasons, our distinction between conscious and unconscious CSR does not exactly overlap with the distinction made by Russo and Tencati (2009) between formal and informal CSR, depending on whether CSR practices are embedded in formalized procedures or not. Certainly, in our database, all firms that consciously engage in CSR do so formally, in the sense that they adhere to formalized charters or guidelines. However, given that the questions on formal aspects (section A) are not asked to those who answered “No” to question A1, it would be excessive to say that all the others are exclusively engaged in informal CSR. Despite this, our results provide an interesting insight that can be compared to their main findings, which are that small firms have a CSR practice that is more focused on licensing their operations in their community and on elements that immediately improve their bottom line.

Our results in Section 4.1 confirm those of Russo and Tencati (2009) but in a more precise and detailed way because we are able to identify differentiated effects across firm size categories and sectors. The probability of consciously committing to a CSR approach increases significantly and monotonically with the size of the firm, for all three pillars. And it is for the social pillar that the difference is the smallest between the very small and the largest companies, which supports their result that all categories of companies have strategies concerning their employees, while the very small ones are less concerned with the environment and their societal impact. Furthermore, the size effect differences between the scores are reversed when looking only at companies that know what CSR is (Section 4.2): the social score increases more strongly with the size of the companies for those that declare to be engaged in CSR.

With regard to the influence of NGOs on the CSR behavior of companies, our research provides interesting insights from several perspectives. First, we show that collaboration with NGOs increases the likelihood of consciously engaging in formal CSR in all three dimensions, with less strong effects for mid-sized firms than for very large or small ones (Section 4.4). Our results are in line with Kujala et al. (2022) who shows the importance of secondary external stakeholders engagements, but they are at odds with those of Russo and Perrini (2010), who argue that small companies are characterized by informal procedures that are invisible to the media and NGOs, while large companies use formalized processes that are visible to external stakeholders.

We also obtain a clear intra-sectoral diffusion effect of NGO attacks on (large) firms in a given sector that stimulates CSR in smaller firms, but in favor of the environmental pillar and at

the expense of the other two pillars (Section 4.3). Here once again, this contradicts Eesley and Lenox (2006), for whom direct attacks by NGOs have little impact on firms' responsible behaviors. The main methodological difference of our paper with the scarce existing literature, beyond the size and detail of our sample, is that we use an exogenous measure of NGO pressure, attack intensity by sector, whereas Murillo-Luna et al. (2008) and Helmig et al. (2016) exploit company self-reports on their perception of NGO pressure. As for Forcadell et al (2022), whose study concerns a sample of nearly 5800 firms in 23 countries, by measuring the pressure of NGOs by their number per country, without any indicator of their activity, they find, as we do, a positive effect on CSR along its three dimensions.

Thus, overall, we provide new evidence to support Kourula and Laasonen's (2010) assertion that partnership and conflict between NGOs and firms go hand in hand.

6 Conclusions

In this article, we have shown, using first-hand raw data from a large-scale survey of French firms' commitment to CSR, the value of item response theory, implemented through Mokken scale analysis, for the construction of appropriate scores to assess actual CSR-related behaviors. We provide convincing evidence supporting the internal and external validity of these scores. It would have been great to compare the scores from the database we use with the MSCI KLD data, at least for the subsample of large companies analyzed by MSCI. But it turns out this is not possible. Indeed, our data were collected by INSEE under the seal of confidentiality, i.e. the companies interviewed were assured that the data would only be used for statistical purposes and not for targeted studies on certain companies. The matching of this database with any other external database is thus formally prohibited.

Nevertheless, using simple but robust econometric techniques, we draw a detailed picture of size effects in firms' commitment to CSR. Beyond that, we characterize unaware and conscious CSR on the basis that a significant proportion of firms are in truth committed to CSR but state that they are not. The original features of our work allow us to obtain a very precise and detailed description of the CSR behaviors of French firms for the three pillars: societal, social, environmental. Finally, our analysis of the influence of NGOs on the type of CSR (conscious or unconscious) provides new results that would merit further investigation using different measures of NGO pressure and CSR scores constructed using our method on the data usually mobilized in the literature.

References

- Aguilera, R. V., Rupp, D. E., Williams, C. A., and J. Ganapathi. 2007. "Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations." *Academy of Management Review*, 32(3): 836-863.
- Aguinis, H., and A. Glavas . 2012. "What we know and don't know about corporate social responsibility: a review and research agenda." *Journal of Management* 38(4): 932-968.
- Arenas, D., Lozano, J. M., and L. Albareda. 2009. "The role of NGOs in CSR: Mutual perceptions among stakeholders." *Journal of Business Ethics* 88: 175-197.
- Baron, D. P. 2016. "Self-Regulation and the Market for Activism." *Journal of Economics and Management Strategy* 25(3): 584-607.
- Baron D.P. and D. Diermeier. 2007. "Strategic Activism and Non-Market Strategy." *Journal of Economics and Management Strategy* 6/3: 599-634.
- Baumann-Pauly, D., Wickert, C., Spence, L. J. and A. G. Scherer. 2013. "Organizing corporate social responsibility in small and large firms: Size matters." *Journal of Business Ethics* 115(4): 693-705.
- Blomback, A. and C. Wigren. 2009. "Challenging the importance of size as determinant for CSR activities." *Management of Environmental Quality: An International Journal* 20(3): 255-270.
- Buysse, K., and A. Verbeke. 2003. "Proactive environmental strategies: A stakeholder management perspective." *Strategic Management Journal* 24(5): 453-470.
- Chiroleu-Assouline, M., and A. Lambert-Mogiliansky. 2023. "Radical activism and self-regulation: An optimal campaign mechanism." *Journal of Environmental Economics and Management*, <https://doi.org/10.1016/j.jeem.2023.102789>.
- Crifo, P. and V. D. Forget. 2015. "The economics of corporate social responsibility: A firm-level perspective survey." *Journal of Economic Surveys*,29(1): 112-130.
- Croson, R. and N. Treich. 2014. "Behavioral environmental economics: promises and challenges." *Environmental and Resource Economics* 58(3): 335-351.
- Dare, J. 2016. "Will the truth set us free? An exploration of CSR motive and commitment." *Business and Society Review*, 121(1): 85-122.
- D'Souza, C., Ahmed, T., Khashru, M. A., Ahmed, R., Ratten, V., and M. Jayaratne. 2022. "The complexity of stakeholder pressures and their influence on social and environmental responsibilities." *Journal of Cleaner Production* 358 :132038.

- Delmas, M. and M. W. Toffel. 2004. "Stakeholders and environmental management practices: an institutional framework." *Business Strategy and the Environment*, 13(4): 209-222.
- Delmas, M. and M. W. Toffel. 2011. Institutional pressures and organizational characteristics: Implications for environmental strategy. In *Oxford handbook of business and the environment* (Ch. 13. pp. 229-247). Oxford: Oxford University Press.
- Den Hond, F., and F. G. De Bakker. 2007. "Ideologically motivated activism: How activist groups influence corporate social change activities." *Academy of Management Review* 32(3): 901-924.
- Eesley, C., and M. J. Lenox. 2006. "Firm responses to secondary stakeholder action." *Strategic Management Journal* 27(8): 765-781.
- Ernst, E. and Y. Honore-Rouge. 2012. "La responsabilité sociétale des entreprises : une démarche déjà répandue." *INSEE Première*, 1421.
- European Commission. 2003. *SMEs in Europe 2003*. Enterprise Publications. Luxembourg.
- Forcadell, F. J., Lorena, A., and E. Aracil. 2022. "The firm under the spotlight: How stakeholder scrutiny shapes corporate social responsibility and its influence on performance." *Corporate Social Responsibility and Environmental Management*.
- Gatti, L., Seele, P. and L. Rademacher. 2019. "Grey zone in-greenwash out. A review of greenwashing research and implications for the voluntary-mandatory transition of CSR." *International Journal of Corporate Social Responsibility* 4(1): 1-15.
- Greene W. 2012. *Econometric Analysis*, 7th ed., Prentice Hall: New York (International Edition).
- Hardouin, J.-B. , Bonnaud-Antignac, A. and V. Sebillle. 2011. "Nonparametric Item Response Theory using Stata." *The Stata Journal* 11(1): 30-51.
- Hatte, S. and P. Koenig. 2018. "The Geography of NGO Activism against Multinational Corporations." *The World Bank Economic Review*. doi: 10.1093/wber/lhy007
- Helmig, B., Spraul, K., and D. Ingenhoff. 2016. "Under positive pressure: How stakeholder pressure affects corporate social responsibility implementation." *Business and Society* 55(2): 151-187.
- Jenkins, H. 2009. "A 'business opportunity' model of corporate social responsibility for small- and medium-sized enterprises." *Business Ethics: a European Review* 18(1): 21-36.
- Kim, E. H. and T. P. Lyon. 2014. "Greenwash vs. brownwash: Exaggeration and undue modesty in corporate sustainability disclosure." *Organization Science* 26(3): 705-723.
- Kitzmueller, M. and J. Shimshack. 2012. "Economic perspectives on corporate social responsibility." *Journal of Economic Literature* 50(1): 51-84.

- Koenig, P. 2017. "Notes on Sigwatch's NGO campaign database." halshs-01671758.
- Kourula, A., and S. Laasonen. 2010. "Nongovernmental organizations in business and society, management, and international business research: Review and implications from 1998 to 2007." *Business and Society* 49(1): 35-67.
- Kuhn, A. L., Stiglbauer, M. and J. Heel. 2014. "Does mandatory CSR reporting lead to higher CSR transparency? The case of France." *Corporate Ownership and Control* 11(2): 29-45.
- Kujala, J., Sachs, S., Leinonen, H., Heikkinen, A., and D. Laude. 2022. "Stakeholder engagement: Past, present, and future." *Business and Society* 61(5): 1136-1196.
- Lyon, T. P. and J. W. Maxwell. 2008. "Corporate social responsibility and the environment: A theoretical perspective." *Review of Environmental Economics and Policy* 2(2): 240-260.
- Lyon, T. P. and J. W. Maxwell. 2016. "Self-Regulation and regulatory discretion: Why firms may be reluctant to signal green." In *Strategy Beyond Markets*. Emerald Group Publishing Limited.
- Lyon, T. P. and A. W. Montgomery. 2015. "The means and end of greenwash." *Organization and Environment* 28(2): 223-249.
- Magill, M., Quinzii, M. and J. C. Rochet. 2015. "A theory of the stakeholder corporation." *Econometrica* 83(5): 1685-1725.
- Mokken, R. J. 1971. *A theory and procedure of scale analysis*. De Gruyter.
- Murillo, D., and J. M. Lozano. 2006. "SMEs and CSR: An approach to CSR in their own words." *Journal of Business Ethics* 67(3): 227-240.
- Murillo-Luna, J. L., Garcés-Ayerbe, C., and P. Rivera-Torres. 2008. "Why do patterns of environmental response differ? A stakeholders' pressure approach." *Strategic Management Journal* 29(11): 1225-1240.
- OECD. 2019, *OECD SME and Entrepreneurship Outlook 2019*, OECD Publishing, Paris. <https://doi.org/10.1787/34907e9c-en>
- Perrini, F., Russo, A., and A. Tencati. 2007. "CSR strategies of SMEs and large firms. Evidence from Italy." *Journal of Business Ethics* 74(3): 285-300.
- Rasch, G. 1960. *Probabilistic Models for Some Intelligence and Attainment Tests*. Copenhagen: Danmarks Pedagogiske Institut.
- Roudaut, G. 2015. *Corporate governance and firm performance: the sustainability equation?* Ph.D. University Paris-Saclay Ecole Polytechnique.
- Russo, A. and F. Perrini. 2010. "Investigating stakeholder theory and social capital: CSR in large firms

- and SMEs.” *Journal of Business Ethics* 91(2): 207-221.
- Russo, A., and A. Tencati. 2009. “Formal vs. informal CSR strategies: Evidence from Italian micro, small, medium- sized, and large firms.” *Journal of Business Ethics* 85: 339-353.
- Spence, L. J. 1999. “Does size matter? The state of the art in small business ethics.” *Business Ethics: a European Review* 8(3): 163-174.
- Spence, L. J., Schmidpeter R. and A. Habisch. 2003. “Assessing Social Capital: Small and Medium Sized Enterprises in Germany and the UK.” *Journal of Business Ethics* 47(1): 17-29.
- Schmitz, J., and J. Schrader. 2015. “Corporate social responsibility: A microeconomic review of the literature.” *Journal of Economic Surveys* 29(1): 27-45.
- Turker, D. 2009. “Measuring corporate social responsibility: A scale development study.” *Journal of Business Ethics* 85(4): 411-427.
- Udayasankar, K. 2008. “Corporate social responsibility and firm size.” *Journal of Business Ethics* 83(2): 167-175.
- van Schuur, W. H. 2003. “Mokken scale analysis: Between the Guttman scale and parametric item response theory.” *Political Analysis* 11(2), 139-163.
- Vo, L. C., Delchet-Cochet, K. and H. Akeb 2015. “Motives Behind The Integration Of CSR Into Business Strategy: A Comparative Study In French SMEs.” *Journal of Applied Business Research* 31(5): 1975.
- Winkelmann R. 2008. *Econometric Analysis of Count Data*, 5th ed., Springer.
- Zatzick, C.D., and R. D. Iverson. 2006. “High-Involvement Management and Workforce Reduction: Competitive Advantage or Disadvantage? .” *Academy of Management Journal* 49(5): 999-1015.

Appendix – Survey questionnaire

Each pillar score is made of items marked below by a dagger.

A - "Transversal" and "Corporate governance" pillar

The position of CSR in company strategy

- A1** Have you ever heard of Corporate Social Responsibility (CSR*) YES NO
If NO, go to **B1**
- A2** Have you ever heard of the Global Reporting Initiative (GRI*) or ISO 26000? YES NO
- A3** For you, CSR is above all (tick only one box):
 an opportunity a conviction a constraint a means of communication
- A4** Do you think that you are engaged in CSR activities?
 YES NO
- A4a** If YES, what are the expected results?
 (Select no more than 2 answers)
- Reduction of production costs
 Development of new products
 Risk Management
 Employee motivation and involvement
 Improvement of the company's external image
 Environmental and social sustainability
- A4b** If NO, what are your reasons for not engaging in CSR activities ?
 (multiple answers possible)
- No expected benefit or economically too risky
 Lack of time
 Lack of information and public support
- Go to question **A5** Go to question **B1**
- A5** Does your company have reporting procedures for CSR performance (reports, SRI questionnaires*, brochures, etc.)? YES NO
DO NOT KNOW
- A6** To assess your company's CSR performance, have you:
A6a used external auditors? YES NO
A6b set up an internal auditing or self-assessment procedure? YES NO

Corporate governance / internal organization

- A7** Have you consulted on the implementation of CSR actions with:
A7a employee representatives? YES NO
A7b external stakeholders*? YES NO
- A8** Have you set up an information and/or management system? YES NO
- A9** Does your company have unit(s) fully dedicated to sustainable development or CSR? YES NO
If NO, go to **A11**
- A10** Is this unit attached to one of the following departments?
 Technical departments: health and safety, environment, purchasing, etc.
 Human Resources Department
 Communication, marketing or sales department
 Corporate Strategy Department
 Other, specify:
- A11** Has your company implemented any of the following CSR measures
A11a a charter, code of good conduct or a scope statement? YES NO
A11b a roadmap? YES NO
A11c awareness programs for employees (training, presentations, conferences, etc.)? YES NO

B - "Societal" pillar

Warning: For respondents who answered NO to question A1: in the following questions, the term CSR (Corporate Social Responsibility) is used in its conventional meaning of the set of corporate initiatives to consider the social, societal and environmental impacts of their activity through, for example, vocational training, fighting discrimination, employee wellbeing, environmental protection, etc.

The position of CSR in company strategy

- B1** Who are your company's main customers? (multiple answers possible)
Companies public administrations mainly individuals
- B2**[†] Do you advise your clients of the impacts of their choices of goods or services on the environment and their well-being? YES NO
Not concerned
- B3**[†] Do some of your customers require the satisfaction of specifications, some of which are CSR-related? YES NO
Not concerned
- B4**[†] Does your company take measures, beyond regulatory requirements, to limit the use of substances that are hazardous to health in the development of your products? YES NO
Not applicable
- B5**[†] Does your company have measures in place to ensure that it does not sell goods or services to human rights violators? YES NO
Not applicable

Relations with suppliers (including subcontractors)

- B6**[†] Do you ask some of your suppliers to commit to satisfying specific standards some of which are CSR-related? YES NO
Not applicable
If NO or Not applicable, go to **B8**
- B6a** What criteria do you ask them to satisfy (multiple answers possible)?
- Workers' rights protection (SA 8000*,...)
 - Occupational health and safety (OHSAS 18001*, ILO-OSH 2001*,...)
 - Environmental performance (EMAS regulation*,
ISO 14001*, ecolabelling...)

- B7** Do you employ the following procedures to assess your suppliers' social and/or environmental commitments?
- B7a** sending a questionnaire YES NO
- B7b** checks, inspections or third-party evaluations, social auditing YES NO
- B8** Has your company altered its purchasing policy by:
- B8a** setting up longer-term contracts with its suppliers YES NO
- B8b**[†] considering CSR criteria in the selection of tenders and contracts YES NO
- B9**[†] Do you help your suppliers set up at least one sustainable development measure (training, support, advice, self-diagnosis assistance, etc.)? YES NO
- B10** Are some of your suppliers social integration companies for people with disabilities? YES NO
If NO, go to B11
- B10a** What share of purchases do these companies account for?
less than 0.1% between 0.1% and 1% between 1% and 10% more than 10% of total purchases
- B11** For equivalent services, do you favour local suppliers YES NO

Relations with civil society

- B12**[†] Does your company cooperate with other companies or organisations for CSR activities? YES NO
If NO go to **B13**
- B12a** With whom? (several possible answers)
- National or international administrations, local government, associated authorities
 - Associations, NGOs,... (including international)
 - Companies (outside your group/network) or professional associations

	Banks or insurance companies in the context of SRIs*	<input type="checkbox"/>
B13	Are you engaged in the following relationships with civil society?	
	B13a Long-term partnership with an association	YES <input type="checkbox"/> NO <input type="checkbox"/>
	B13b Involvement in projects for the occupational integration of disadvantaged persons	YES <input type="checkbox"/> NO <input type="checkbox"/>
	B13c Long-term partnership with educational institutions	YES <input type="checkbox"/> NO <input type="checkbox"/>
	B13d Sponsorship or philanthropy	YES <input type="checkbox"/> NO <input type="checkbox"/>
C - "Social" pillar		
<i>Fighting discrimination in the company</i>		
C1 [†]	Are there arrangements in place to collect and process any complaints in the event of discrimination?	YES <input type="checkbox"/> NO <input type="checkbox"/>
C2	Have you	
	C2a [†] signed up to the "Diversity Charter *"	YES or in progress <input type="checkbox"/> NO <input type="checkbox"/>
	C2b obtained the AFNOR "diversity*" certification?	YES or in progress <input type="checkbox"/> NO <input type="checkbox"/>
C3	Do you have specific policies to avoid discrimination on the basis of	
	C3a [†] gender	YES <input type="checkbox"/> NO <input type="checkbox"/>
	C3b [†] origin (ethnic, social or cultural)	YES <input type="checkbox"/> NO <input type="checkbox"/>
	C3c [†] old age	YES <input type="checkbox"/> NO <input type="checkbox"/>
	C3d [†] young age	YES <input type="checkbox"/> NO <input type="checkbox"/>
	C3e [†] disability	YES <input type="checkbox"/> NO <input type="checkbox"/>
C4 [†]	Have you produced or updated a report comparing the situation of men and women in the company over the last 12 months?	YES <input type="checkbox"/> NO <input type="checkbox"/>
C5 [†]	Does your company have specific measures in place for the employment of older workers?	YES <input type="checkbox"/> NO <input type="checkbox"/>
		If NO go to C6
	C5a In which domain(s)? (multiple answers possible)	
	Recruitment	<input type="checkbox"/>
	Training	<input type="checkbox"/>
	Career progression	<input type="checkbox"/>
	Workstation design	<input type="checkbox"/>
C6 [†]	In 2010, did you employ workers on apprenticeship contracts or sandwich courses?	YES <input type="checkbox"/> NO <input type="checkbox"/>
C7 [†]	Have you set up training programs to increase discrimination awareness?	YES <input type="checkbox"/> NO <input type="checkbox"/>
<i>Working conditions</i>		
C8 [†]	In addition to an inventory of occupational risks, has your company established measures to mitigate these risks?	YES <input type="checkbox"/> NO <input type="checkbox"/>
C9 [†]	Does your company have measures in place to mitigate psychosocial risks (stress, harassment, workplace unease, etc.)?	YES <input type="checkbox"/> NO <input type="checkbox"/>
C10 [†]	In the last two years, has your company run information campaigns for its employees on addictions (tobacco, alcohol, drugs, food)?	YES <input type="checkbox"/> NO <input type="checkbox"/>
C11 [†]	Does your company have a charter to protect employees' personal data and privacy?	YES <input type="checkbox"/> NO <input type="checkbox"/>
C12	In terms of work-life balance, does your company offer its employees	
	C12a flexible working arrangements for childcare constraints?	YES <input type="checkbox"/> NO <input type="checkbox"/>
	C12b [†] other measures besides those undertaken by the works council (crèches, travel plans, return from maternity/parental leave system, workplace services, etc.)	YES <input type="checkbox"/> NO <input type="checkbox"/>

Job management, training, SRI funding*

- C13** Does your company assess its future qualifications and skills needs?
NO YES, but not regularly Yes, regularly
- C14**[†] Over the past three years, has your company undertaken strategic workforce planning? YES NO
If NO, go to **C15**
C14a Were these measures the subject of negotiations? YES NO
- C15**[†] In 2010, did your company establish an annual training program? YES NO
- C16** In 2010, approximately how much did your company spend on continuing education as a percentage of its payroll?
Less than 1.5% Between 1.5% and 2% Between 2% and 4% More than 4%
- C17** If you have profit-sharing, and/or employee savings programs (company pension and/or investment plan), do these programs invest in SRI funds*?
YES, fully YES, in part NO No such program

D - "Environmental" pillar

General approach to the environment

- D1** Which of the following problems does your company make the most negative contribution to? (only 1 answer)
- climate change (greenhouse gas emissions)
 - biodiversity loss (loss of species, natural habitats and ecosystem degradation)
 - air pollution
 - water pollution
 - soil pollution
 - waste generation
 - the use or generation of toxic or hazardous substances
- D2**[†] Is your company engaged in environmental management*? YES NO
- D3**[†] Do you develop eco-friendly products*, i.e. environmentally friendly goods or services YES NO
Not applicable
- D4**[†] Do you sell environmentally certified products* (European Ecolabel, NF NF Environnement, Blaue Engel, Nordic Swan,...)? YES NO
Not applicable

Approaches to different environmental challenges

(a) energy savings and fighting climate change

- D5**[†] Is your company committed to improving energy efficiency and/or reducing greenhouse gas emissions? YES NO
If NO go to **D8**
- D6** Do you have the following means of enacting this commitment?
- D6a** an energy efficiency or emissions reduction program YES NO
 - D6b** follow-up monitoring of greenhouse gas emissions (carbon footprint type,...) YES NO
 - D6c** a company travel plan (staff travel) YES NO
 - D6d** a freight reduction program YES NO
- D7** Does this commitment cover most of your company's facilities? YES NO
Single site

(b) waste reduction and recycling

- D8** Does your company implement:
- D8a**[†] a resource saving program (raw materials, water) YES NO
 - D8b**[†] a waste reduction or recycling program YES NO
 - D8c**[†] eco-friendly product design* YES NO

If you answered NO to these 3 questions, go to D11

- D9** Do you have the following means of enacting this commitment?
- D9a** mass flow monitoring for production and operational procedures YES NO
- D9b** a program to reduce raw materials use YES NO
- D9c** a waste reduction and recycling plan YES NO
- D10** Does this commitment cover most of your company's facilities? YES NO
- Single site

(c) biodiversity

- D11**[†] Is your company involved in biodiversity preservation (species, natural habitats and ecosystems)? YES NO
If NO go to **
- D12** What means do you have to implement this commitment?
- D12a** a biodiversity impact monitoring YES NO
- D12b** a production system encompassing biodiversity preservation YES NO
- D12c** a philanthropy program focusing on biodiversity YES NO

** If you have answered NO to D2, D3, D5, D7, D11 and all the terms and conditions of D8, skip forward to the last question.

- D13** What is the main driver of your commitment to the above approach(es)?
- to develop new products and/or respond to customer requests
 - to enhance your company's image
 - to engage in an ethical approach to environmental protection
 - to motivate staff
 - to reduce costs
- D14** What partner(s) did you develop these approaches with?
- another company or private consulting firm
 - an environmental NGO
 - others (local authority, public body, chamber of commerce,...)
 - internally only

How long did you take to complete this questionnaire?..... _ _ _ _ _ min