

# Mapping Social Responsible Practices in Portuguese SME's

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## Abstract

Corporate Social Responsibility (CSR) has been mainly associated with big, often multinational, companies. Small and Medium Enterprises (SME) represent an important part of the economic structure globally. Specifically in Portugal, SME's represent more than 90% of the economic structure, which makes them the most important contributor to the Portuguese economy. Even though, there is still much to know about the implementation of CSR practices in this type of companies. This paper investigates what social responsible practices Portuguese SME implement, identifying different company profiles. The concept of social responsibility was operationalized in eight groups of practices, corresponding to the economic, social and environmental dimensions.

Data collection was made using a structured questionnaire sent to 5452 companies and 421 valid answers were obtained (response rate of 21%). Following the descriptive analysis, a cluster analysis was performed using the hierarchical method.

The cluster analysis revealed four groups of companies that represent four different implementation levels of social responsibility practices: low CSR implementation; medium-low CSR implementation; medium-high CSR implementation; and high CSR implementation. The low CSR implementation (45,8%) is the major cluster, followed by the medium-low CSR implementation (26,4%). Based on the cluster analysis, companies' profiling was developed allowing an in-depth understanding of the most and less implemented CSR practices in each cluster. The companies revealing higher levels of CSR practices tend to be larger, older, with a higher turnover value and with some type of certification.

**Keywords:** Corporate Social Responsibility, SME's, Portugal, Cluster Analysis

**JEL classification:** M14, L11

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## **1. Introduction**

The growing awareness of the importance of organizations, whatever their nature, in the development of modern societies, provided a greater visibility of the responsibility of those organizations in the transformation and development of social environments in which they act. As social and environmental issues become an integral part of the company's operations, whether due to legal requirements or the growing level of information, knowledge and awareness, managers begin to perceive that corporate performance, environmental preservation and social issues, can generate value to businesses.

The focus of the CSR debate has frequently been associated with large companies (Spence & Rutherford, 2003; Perrini et al., 2007; Spence, 2007; Jamali et al., 2009; Santos, 2011; Herrera et al., 2014), particularly those with a governance model that integrates the principles of sustainability and seek to make it operational, combining CSR dimensions and building mechanisms for monitoring and internal evaluation (Santos et al., 2006). However, CSR is not a strategic tool that should be studied only from the perspective of large companies, but should also be considered within Small and Medium Enterprises (SME) (Herrera et al., 2014).

In fact, the large number of this type of companies, alongside their weight for national economies is, by itself, an important reason to look at CSR practices in SMEs. Portuguese business companies, as in every European country, are essentially micro, small and medium-sized enterprises. According to data from the National Institute of Statistics (INE), in 2013 there were 1,119,447 companies in Portugal. Almost all non-financial companies in Portugal were SMEs (99.9%), with a decisively importance for the employment in the non-financial sector (80.5%).

Another important reason to understand how SMEs approach CSR practices is the specific nature of these companies' decision and action processes. In contrast to large companies, CSR practices adopted by SMEs tend to be perceived as informal, non-bureaucratic and spontaneous (Spence, 2007; Fisher et al., 2009), which makes them more difficult to measure (Wickert, 2014). In the crucial "who, why, how and what's" of CSR, SMEs response may differ due to cultural differences created by diverse ownership structures, strategic direction, owner-manager characteristics and geographic location (Jenkins, 2004), among others.

The goal of this research is twofold: on the one hand it examines CSR approaches of Portuguese SMEs, by mapping CSR practices implemented; on the other hand it explores the importance of several companies' attributes to the level of CSR practices implementation.

## **2. Literature Review**

The origin of the concept of CSR is not visibly established, or at least there is not a total agreement among researchers, fundamentally as to when and where exactly the concept originates. This disagreement may be rooted on the influence of diverse economic, political, social or philosophical streams of thought that have marked the development and analysis of the phenomenon throughout its history (Freeman, 1984; Carroll, 1999; Melé, 2007).

The European Commission, in its Green Book "Fostering a European framework for corporate social responsibility" (COM, 2001), defines CSR as "essentially a concept whereby companies decide on a voluntary

basis to contribute to a fairer society and a cleaner environment” (COM, 2001: 4), adding that CSR “not only means to comply fully with legal obligations, but to go beyond their compliance by investing more in human capital, in the environment and relations with stakeholders” (COM, 2001: 7). The European Commission emphasizes the need for a CSR that responds to social and environmental demands, respect for rights and common values such as solidarity, understood as a source of sustainable growth and better jobs (COM, 2006).

Even though, John Elkington (1998), co-founder of the international non-governmental organization SustainAbility, made an important contribution to the development of CSR, by suggesting the concept of Triple Bottom Line or People, Planet, Profit. Opposing the traditional form of corporate action, the Triple Bottom Line is presented as a model for organizations to interpret sustainability through the integration of three dimensions (economic, environmental and social), that is, refers to a way of thinking and acting in a company that puts at the same level of importance turnover objectives, environmental and CSR issues.

At the academic level, the contributions of authors such as Garriga and Melè (2004) emphasize that the field of CSR is formed by different approaches, which become contradictory, complex and unclear. The authors manage to map the main theories and approaches around CSR in four groups: instrumental theories, political theories, integrative theories and ethical theories. Thus, they warn the need to deepen the relationship between society and business through a thorough knowledge of reality and a solid ethical basis.

### *2.1. CSR Dimensions*

When determining the number of dimensions that exist in CSR, several contributions with different approaches appear in the literature. The abovementioned Green Paper (COM, 2001) analyses CSR through two main dimensions: the internal dimension and the external dimension. The internal dimension essentially involves workers and issues related with investment in human capital, health and safety, and change management; it also incorporates environmental practices and the management of natural resources. In relation to the external dimension, this can be defined as the responsibility that goes beyond the company and includes the local community, business partners, suppliers, customers, public authorities and non-governmental organizations (NGOs).

De la Cuesta and Valor (2003) point out three dimensions of CSR: economic responsibility, sociocultural responsibility, and environmental responsibility. Economic responsibility implies a responsible behaviour of the company from the economic point of view implies that it refers to the commitment to maximize the satisfaction of shareholders, clients, employees and suppliers, through a series of initiatives (adequate investment management, fair prices, optimum quality of products, adequate salaries, etc.). Sociocultural responsibility is about respecting the laws, the customs and cultural heritage, as well as involvement with political and cultural life. It covers those policies and programs that contribute to improving the cultural conditions and welfare of the society in which the enterprise is inserted (for example, patronage activities, promotion of aid to disadvantaged groups, promotion of culture at different educational levels with activities through sponsorship, etc.). Finally, environmental responsibility implies the company must seek to meet the current needs of its stakeholders without compromising the future generations. It implies an attitude of responsibility in the use of natural resources, adopting decisions that make the company sustainable. At the same time, this environmental responsibility must adhere to a scrupulous respect of legality, cooperating at all times

with the supervisors in respect to the natural environment and employment and efficient use of the different energy sources.

From another perspective, Vargas and Vaca (2005), following Carroll (1999), point four dimensions in CSR: (1) Economic: it is the responsibility of the company that is derived from the production of goods and services in order to obtain a benefit; (2) Legal: the activities that the companies develop are subject to a series of regulations that must be respected; (3) Ethics: It refers to the set of activities and practices of companies that although not required by law are judged as correct or incorrect by society and (4) Discretionary. Activities that are not a requirement of society but which are satisfactory, such as contributing financial resources to social works, supporting educational programs, etc.

Vives (2006) suggested three types of dimensions for CSR activities implemented by SMEs: (1) Internal responsibility (concern for the health and well-being of employees, their training, equal opportunities, among others); (2) External responsibility (development of links with the local community, social and cultural activities, community development and social integration) and (3) Environmental Responsibility (reduction of energy consumption, reduction of waste and recycling of waste).

Santos et al. (2006) considered that CSR activities are structured according to the economic, social (internal and external) and environmental dimensions, which in turn are broken down into several sub-dimensions.

Dahlsrud (2008), analyses 37 definitions of CSR through a content analysis, available in the literature, between 1980 and 2003, and thus groups them into five dimensions: (1) environmental, (2) social, (3) economic, (4) stakeholders and (5) volunteering.

## 2.2. CSR in SME

Although, it is difficult to identify a global pattern that exemplifies the factors that explain the development of CSR practices in SMEs or when opposed to large companies (Santos, 2011; Herrera et al., 2014; Herrera et al., 2016), there are however some characteristics that have been found to influence the approach SME have to CSR. The literature on the subject has found that some factors that promote CSR in SMEs such as: the age of the company (Santos et al., 2006), company size (Vives et al., 2005; Lepoutre & Heene, 2006, Santos et al., 2006, Santos et al., 2007, and Udayasankar, 2008, Russo & Tencati, 2009, Bass & Durán, 2009, Preuss & Porschke, 2010, Santos, 2011, Herrera et al., 2014; (2001), the location of the business (COM, 2002a), the activity sector (Santos et al., 2006, Spence, 2007, Santos, 2011, Herrera et al., 2016) (Webb, 2004), the structure of the property (Webb, 2004), the type of company (family/nonfamily business) (Herrera et al., 2014), level of education (Granitz, 2003, Fritzsche & Oz, 2007, Fitzgerald et al., 2010), among others.

According to Fassin (2008), SMEs make less use of CSR instruments than large firms, have fewer formal CSR strategies, are less likely to report CSR activity and have fewer resources to invest in CSR practices (Perrini et al., 2007). In general, it is more difficult to involve SMEs in CSR in relation to large companies (Lepoutre & Heene 2006; Davies & Crane, 2010), due in particular to problems of lack of time and resources (Tilley 2000, Spence & Rutherford 2001). Larger companies are often more able to absorb fixed costs, in addition to having greater access to resources (Kechiche & Soparnot, 2012).

According to Kechiche & Soparnot (2012), there are factors such as company size, location, and individual characteristics related to the personality of the SME director, commonly accepted as influencers of the decision to implement a responsible CSR policy.

The size of a company is an organizational factor in the acceptance and implementation of CSR by SMEs (Labelle & Saint Pierre, 2010). Some studies suggest that there is a positive link between the size of a company and its commitment to CSR (Lepoutre & Heene, 2006; Perrini et al., 2007; Cabagnols & Le Bas, 2008). Larger SMEs are more sensitive to CSR issues than small or micro-enterprises particularly on the environmental front (Sharma, 2000).

Although size is a factor, there are other internal and external dynamics that explain their behavioural traits (Jenkins, 2004; Jenkins, 2006). The behaviour of SMEs is often associated with the psychological characteristics of the entrepreneur or the managing partner (Jenkins, 2004; Jenkins, 2006; Murillo & Lazano, 2006). As a rule, the management and control of SMEs is essentially carried out by the entrepreneur or managing partner of the company, which gives legitimacy to the personal decisions taken on how to use company resources, and allows a certain degree of autonomy in the approach to CSR (Spence & Rutherford, 2003; Jenkins, 2006).

As far as the interaction between society and business is concerned, SMEs mainly work in the communities in which they are inserted, since SMEs by definition comprise a single operational unit that operates with local workforce (Jenkins, 2004). Some authors believe that territorial cohesion and the local point of view of the company can affect the implementation of CSR initiatives. Most SMEs have strong local attachments and are generally identified with the region where they are based. In addition, the local area offers businesses the benefit of many resources, such as infrastructure, labour power, raw materials, and expects in return some economic and community benefits through reciprocity (Kechiche & Soparnot, 2012).

Lepoutre and Heene (2006) believe that SMEs are more sensitive to practices relating to internal stakeholders (e.g. their employees, clients and suppliers), who tend to be the three most influential stakeholders for SMEs (Murillo & Lozano, 2009; Perrini et al., 2007).

### **3. Methods**

#### *3.1. Research Goals*

The literature on CSR tends to favour major companies, often multinational. These companies face different constraints (economic, social, political, legal and environment), but also have different characteristics in terms of employees, corporate governance among others. Thus comparing big companies with SME's lacks rigour but is also unfruitful.

Despite the growth, the literature about CSR in SMEs is still scarce. Thus, the first goal of this research is to identify and map social responsibility practices in Portugal, focusing on the type and level of implementation.

Following the literature on CSR in SMEs the second goal of this research is to examine how far several companies' characteristics are relevant for the implementation of social responsible practices.

### 3.2. Measures

Taking into account that the research goal implies to survey companies on the CSR practices effectively implemented, the responses will take the form of qualitative and dichotomous variables (yes/no) (Escamilla et al., 2015; Navarro et al., 2010).

Figure 1: CSR dimensions and practices

Dimension		Sub-Dimension	Indicators	Variables	
Economic		Customers	Customer / Consumer Concern	Prospecting future needs Complaint Processing System Availability of the company to carry out social responsibility audits Post-Sales Assistance Adaptation of the product / service to the needs of the customers Availability of the company to carry out quality audits	
		Suppliers and Business Partners	Concern with Suppliers / Business Partners	In the selection process aspects of environmental preservation are considered Incorporation of mechanisms to ensure respect for human rights Guarantee of payment within the agreed period Training received from suppliers	
		Products and Services	Information	Information and labels on product/service use Aspects of safety, reliability and service in the use of the product Ethical, social and ecological information	
	Sensitization		Consumer education		
	Social	Internal	Human Resources Management	Equal opportunities	Equal opportunities for men and women (eg new admissions, wage policy) Recruitment of people from disadvantaged social groups (eg people with disabilities)
				Recruitment and selection	Recruitment carried out jointly with workers and family members Recruitment carried out in conjunction with the Public Employment Services, Schools and Universities
Performance management				Objectives and responsibilities definition in the scope of the job Performance evaluation system based on objective	

			criteria
		Work-life balance	Concentration of normal working time in fewer days Flexibility of working hours
		Recognition and rewards	Shared results Variable remuneration (e.g. productivity and assiduity awards) Benefits (e.g. car, mobile, credit card)
		Career management	Career progression with vertical/horizontal mobility (access to a position of head/change of function)
		Senior employment	Mechanisms that allow older workers to pass on knowledge to the newest
	Social Support	Support systems	Meal room, recreation room Sports/cultural activities Transportation Schemes complementary to social security (e.g. life insurance, health insurance, pension supplements)
		Loans	Support systems for the payment of debts incurred Housing credit programs Advances and monetary loans
	Health, Hygiene and Safety at Work (HHSW)	Health services	Medicine at work Medical support office inside the company
		Safety	Professional risk prevention program HHSW Management System (OSHAS 18001 Certification or other) Lighting, ventilation, temperature and noise conditions Training related to safety, hygiene and health at work
External	Community	Sponsorship and donations	Donations of products / services Sponsorship of events (e.g. sports / cultural / environmental) Donation giving Support marketing campaigns for causes (e.g. advertising with social issues)
		Social cohesion	Use of products and services of local companies / organizations Allowing employees for volunteering

			Participates in local education, training and employment programs, environmental policies and urban renewal
		Solidary employment	Hire people from disadvantaged social groups (eg people with disabilities) Offers internships, awards study grants
		Partnerships and cooperation	Partnerships with other organizations (eg companies, NGOs, public entities, schools and universities) Invites organizations to visit the company Grant spaces and equipment
Environment	Environmental Impact Management	Environmental system	Environmental Management System (Certification 14000 and / or EMAS) Adhesion to Ecological Labels Orientation towards environmental performance along the production chain Investment in environment-friendly technologies Sensitization of workers Maintenance of the air conditioning system (filter cleaning regularly) Installation of accessories and devices to save water
		Pollution and waste	Use of non-toxic cleaning products Treatment of waters and discharges of tributaries Use of organic products Measurements of noise and air pollution Recycling (eg paper boxes, cardboard, computer consumables) Waste separation Decreased energy consumption (e.g. intelligent lighting,...)

In order to determine the level of implementation of social responsible practices, it was decided to elaborate an index based on companies' responses.

Thus, and for each group of CSR practices already catalogued, the following procedure was applied:

1. Sum of the number of response options (practices) for each group of CSR practices;
2. Identification/calculation of intervals using the value of the interquartile range for the sum of practices of each CSR group;

3. Categorization of sums obtained in three different levels of involvement with CSR practices: High CSR, Medium CSR and Low CSR.

Figure 2 presents the summary of the information that allowed classifying the implementation level of each company for each group of CSR practices.

Figure 2: Determination of CSR level of implementation

	Minimum value	Maximum value	Interquartile range	High CSR (3)	Medium CSR (2)	Low CSR (1)
Customers	7	14	2	7-9	10-11	12-14
Suppliers	8	14	2	7-9	10-11	12-14
Products and Services	5	10	1	5-6	7-8	9-10
HRM	14	28	4	14-18	19-23	24-28
Social Support	9	16	2	8-10	11-13	14-16
Health, Hygiene and Safety at Work	7	14	2	7-9	10-11	12-14
Community	15	26	4	13-17	18-21	22-26
Environment	16	30	5	15-20	21-24	25-30

Note: variables were coded as “yes” (1) and “no” (2)

### 3.3. Instruments

The data collection technique chosen was the questionnaire, since it makes possible to obtain information, in an accessible and fast way, allowing comparisons. The elaboration of the questionnaire script followed Santos et al. (2006), especially in the description of CSR practices.

The questionnaire consists of three parts. The first part requested the company cooperation, explaining what is intended with the collected data, and ensuring confidentiality. In order to captivate the respondent to complete the survey, it was asked if he would like to receive information on the main results of the research. The second part was made of eight questions aiming to describe the main company characteristics, namely year of foundation, number of employees, company’s main activity, turnover, and possible certifications. Although the questionnaire was anonymous, the respondent was asked to identify the name of the company, so that he/she was not contacted again, after completing and sending the questionnaire through the online platform. The third part consisted of the characterization of CSR practices implemented by the company. To identify each of the eight types of practices, a closed multiple question was asked, safeguarding all kinds of responses with a response category "Other".

After the elaboration of the questionnaire and before its final use, a pre-test was applied to ten managers. The pre-test served to verify the respondents' reaction to the vocabulary used, the ease or difficulty in

answering the questions and possible doubts regarding the information that was intended to be obtained. Subsequently, the questionnaire was restructured, taking into account the comments of the respondents. There were minor alterations in the vocabulary and the elimination of some questions because they were extensive.

### *3.4. Sampling procedures*

According to Portuguese law (Decree-Law no. 372/2007, 6 November), the category of micro, small and medium-sized enterprises (SMEs) is made up of companies with less than 250 employees and an annual turnover not exceeding 50 million euros or whose total annual balance does not exceed 43 million euros. According to the most recent data from the National Institute of Statistics, there was 1.016.894 SME operating in Portugal in 2012.

A sample of 1948 SME was selected, assuring that all activity sectors were represented. The questionnaire was sent by email to the main responsible of the company (director or CEO). One week later a follow-up phone call was made. The email was resent every two weeks after deleting the contacts that had already responded. After completing this process 421 were received and validated, corresponding to a 21.61% response rate. The sample obtained corresponds to a 95% confidence interval and a sampling error of 4.46%.

### *3.5. Data Analysis*

In order to elaborate a classification of the companies according to the similarities and differences with respect to the levels of CSR practices, a cluster analysis has been applied. The application of a clusters analysis methodology has been used in similar research, such as Navarro et al. (2014) and Dopico et al. (2012).

Hierarchical cluster analysis is applied to cases and to variables and non-hierarchical K-Means analysis applies only to cases and when the optimal number of homogeneous groups is already known. This research follows Hair's (2010) suggestion and uses the hierarchical methods as an exploratory technique to be purified later with the application of non-hierarchical methods.

The first step was to develop the exploratory analysis of clusters. This analysis uses Ward's method to group the clusters in order to minimize the loss of information associated with each group and to quantify that loss so that it is easy to interpret. The Euclidean distance was used as a measure of dissimilarity. In order to determine the number of clusters that will be extracted, the agglomeration table and the square of the Euclidean distance were used.

The difference of the coefficients between two adjacent stages can help to determine the number of clusters, i.e. if there is a rapid drop in the size of the differences, the additional cluster can be considered not to guarantee internal homogeneity and sufficient external heterogeneity to consider its inclusion. Thus, the decision is to go for the solution of four groups, since the difference between the coefficients to four and five clusters is small (see Changes in the Agglomeration Schedule in the Appendix).

The next step consisted in the elaboration of the clusters analysis, this time using the non-hierarchical cluster method, which calls for the definition of the number of clusters. The cluster analysis using the K-Means method was performed with the extraction of four clusters. The results show that the differences are small or even non-existent in some cases, allowing concluding that the clusters formation process did not significantly alter their characteristics. The non-hierarchical method K-Means allowed to validate the solution obtained by the hierarchical method presented above as an exploratory technique and to identify the variables that contributed to the separation of the four clusters. The cluster with the largest number of companies is cluster 2 (193 companies, 45.8%) followed by clusters 1 (111 companies, 26.4%) and 3 (61 companies, 14.5%) and, finally, by cluster 4 (56 companies, 13.3%).

In order to examine the differences between CSR practice levels and the clusters formed, the one-way ANOVA was calculated. The analysis of the differences will allow perceiving in what type of CSR practices the clusters are distinct. The differences in means found between the groups are all statistically significant. The post-hoc Tukey test was used to identify the means that differed from each other. Overall, the differences between clusters for each of the types of CSR practices are significant, but there are exceptions:

- Clusters 1 and 3 do not present significant differences regarding Clients CSR practices ( $p > 0.05$ );
- Clusters 2 and 3 do not present significant differences regarding Suppliers CSR practices ( $p > 0.05$ );
- Clusters 1 and 4 do not present significant differences regarding Products and Services CSR practices ( $p > 0.05$ );
- Clusters 1 and 2 do not present significant differences regarding Social Support CSR practices ( $p > 0.05$ );
- Clusters 3 and 4 do not present significant differences regarding Health, Hygiene and Safety at work CSR practices ( $p > 0.05$ ).

According to the chosen solution, companies were grouped in four clusters. The characteristic that most distinguishes the clusters is the general average level of CSR practices implementation. For example, cluster 2 groups companies that present an average of CSR practices implementation of 1.15 (according to the levels of involvement with CSR practices previously calculated), while cluster 4 groups companies with an average level of CSR practices implementation of 2.21 (being 3.00 the maximum). Thus, each cluster was named according to the level of CSR practices implementation: Medium-Low CSR (cluster 1); Low CSR (cluster 2); Medium-High CSR (cluster 3); and High CSR (cluster 4).

Figure 3: CSR practices implementation level by group

Clusters		Customers	Suppliers	Products and Services	HRM	Social Support	Health, Hygiene and Safety at Work	Community	Environment
1	Mean	1,91	1,23	2,06	1,50	1,00	1,90	1,30	1,45
	Std. Deviation	,668	,420	,473	,570	,000	,587	,497	,568
2	Mean	1,24	1,01	1,26	1,15	1,00	1,32	1,12	1,09
	Std. Deviation	,430	,102	,462	,358	,000	,558	,370	,325
3	Mean	2,03	1,00	1,69	1,79	1,89	2,25	1,64	1,97
	Std. Deviation	,515	,000	,593	,551	,370	,623	,606	,795
4	Mean	2,54	2,02	2,23	2,07	1,66	2,52	2,16	2,48
	Std. Deviation	,538	,134	,539	,657	,549	,603	,682	,632
Total	Mean	1,71	1,20	1,66	1,46	1,22	1,76	1,38	1,50
	Std. Deviation	,703	,406	,636	,594	,429	,736	,604	,716

Note: 1=Low level of implementation; 2=Medium level of implementation; 3=High level of implementation

The most common aspect to all the clusters is the importance given to CSR practices related with “customers” and “health, hygiene and safety at work”. In all the four clusters these groups of practices are systematically among the three most valued. On the other hand, CSR practices related with the “environment” are more relevant for the “Medium-high CSR” and the “High CSR” clusters, while for the lower CSR practices implementation clusters “products and services” CSR practices are more salient when compared with the value given to other CSR groups of practices.

#### 4. Findings

Another goal of this research was to examine how some characteristics of companies could be related with the level of CSR practices implementation. Size is considered to be one important factor conditioning the adoption of CSR practices. The number of employees is one indicator of size. As shown in figure XX, the largest companies (between 50 and 249 employees) tend to show higher levels of CSR practices. Among the Low CSR cluster, 95.3% are between 10 and 49 employees, while in the High CSR cluster this value drops to 50%.

Figure 4: CSR clusters by companies' number of employees

	CSR clusters				Total
	Low CSR	Medium-Low	Medium-High	High CSR	

			CSR	CSR			
Number of employees	Between 10 and 49	Count	184	99	37	28	348
		% within CSR Clusters	95,3%	89,2%	60,7%	50,0%	82,7%
	Between 50 and 249	Count	9	12	24	28	73
		% within CSR Clusters	4,7%	10,8%	39,3%	50,0%	17,3%
Total		Count	193	111	61	56	421
		% within CSR Clusters	100%	100%	100%	100%	100%

The other criterion to determine companies' size is turnover. The next figure presents companies' CSR practice levels, which reported a turnover of up to 50 million euros. The companies with lower turnover values are characterized by being also the companies with lower levels of CSR practices. The large majority of companies from the Low and the Medium-Low CSR clusters had a turnover of less than 2 million euros (86% and 64.9%, respectively), while companies with higher turnover figures had higher levels of CSR practices.

Figure 5: CSR clusters by companies' turnover

			<i>CSR clusters</i>				
			Low CSR	Medium-Low CSR	Medium-High CSR	High CSR	Total
Turnover	Less than 2 million Euros	Count	166	72	21	19	278
		% within CSR Clusters	86,0%	64,9%	34,4%	33,9%	66,0%
	Between 2 and 10 million Euros	Count	24	32	31	19	106
		% within CSR Clusters	12,4%	28,8%	50,8%	33,9%	25,2%
	Between 10 and 50 million Euros	Count	3	7	9	18	37
		% within CSR Clusters	1,6%	6,3%	14,8%	32,1%	8,8%
Total		Count	193	111	61	56	421
		% within CSR Clusters	100,0%	100,0%	100,0%	100,0%	100,0%

Age is another attribute that might have some impact on companies' ... to adopt CSR practices. Figure XX presents the number of companies of each cluster according to their age. Newer companies tend to present lower levels of CSR practices. Within the 193 companies of the Low CSR cluster, 79 companies have less than 10 years (40.9%), while from the 56 companies of the High CSR cluster only 7 have less than 10 years.

Figure 6: CSR clusters by companies' age

			CSR clusters				Total
			Low CSR	Medium-Low CSR	Medium-High CSR	High CSR	
Company's Age	Less than 10 years	Count	79	34	18	7	138
		% within CSR Clusters	40,9%	30,6%	29,5%	12,5%	32,8%
	10 to 19 years	Count	55	30	16	11	112
		% within CSR Clusters	28,5%	27,0%	26,2%	19,6%	26,6%
	20 to 29 years	Count	29	17	8	13	67
		% within CSR Clusters	15,0%	15,3%	13,1%	23,2%	15,9%
	30 to 39 years	Count	12	10	9	12	43
		% within CSR Clusters	6,2%	9,0%	14,8%	21,4%	10,2%
	40 years and more	Count	18	20	10	13	61
		% within CSR Clusters	9,4%	18,0%	16,4%	23,4%	14,4%
Total		Count	193	111	61	56	421
		% within CSR Clusters	100,0%	100,0%	100,0%	100,0%	100,0%

Finally, figure XX presents the distribution of companies, taking into account the levels of CSR practices and the existence or not of some type of certification. The 56 companies that present high CSR practices, 78.6% are certified. On the other hand, of the 193 companies that are characterized by low levels of CSR practices, 65.3% are not certified.

Figure 7: CSR clusters by companies' certification

			<i>CSR clusters</i>				Total
			Low CSR	Medium-Low CSR	Medium-High CSR	High CSR	
Certification Yes	Count	67	56	43	44	210	
	% within CSR Clusters	34,7%	50,5%	70,5%	78,6%	49,9%	
No	Count	126	55	18	12	211	
	% within CSR Clusters	65,3%	49,5%	29,5%	21,4%	50,1%	
Total	Count	193	111	61	56	421	
	% within CSR Clusters	100,0%	100,0%	100,0%	100,0%	100,0%	

## 6. Conclusions

Portuguese SMEs develop multiple CSR practices based on three fundamental aspects: social, economic and environmental (De la Cuesta and Valor, 2003; Dahlsrud, 2008). The areas that most stand out are CSR practices involving customers and health, hygiene and safety at work. The environmental dimension also presents high values (90%) and about 87% of SMEs identify at least one CSR practice in the external dimension oriented towards the community. The companies that have a socially responsible behaviour outline their strategies and establish internal management procedures taking into account not only the economic dimension of their actions but also the social and the environmental dimensions (Fernández & Nieto, 2004).

Following the findings of the cluster analysis, it can be said that Portuguese SMEs still have a long way to go, since the large majority of companies have low or medium-low CSR practices.

The companies that have the highest levels of CSR practices tend to be older (Santos et al., 2006, Santos, 2011) as well as larger (Santos et al., 2006, Santos, 2011 and Herrera, 2016). According to the size of the company, it has been shown that as it increases, the link with CSR practices is also greater (Vives, 2006, Perrini et al., 2007, Guibert Ucin, 2009 and Herrera, 2016).

## References

- Cabagnols, A., & Le Bas, C. (2006). Les déterminants du comportement de responsabilité sociale de l'entreprise. Une analyse économétrique à partir de nouvelles données d'enquête. Premier Congrès du RIODD, Créteil, France, 7-8 décembre.
- Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business & Society*, 38(3), 268-295.
- Comisión de las Comunidades Europeas: Libro verde. Fomentar un marco europeo para la responsabilidad social de las empresas. Bruselas COM (2001) 366 final.

- Dahlsrud, A. (2008). How corporate social responsibility is defined: an analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1), 1-13.
- Davies, I. A., & Crane, A. (2010). Corporate social responsibility in small-and medium-size enterprises: investigating employee engagement in fair trade companies. *Business Ethics: A European Review*, 19(2), 126-139.
- De La Cuesta, M., & Valor, C. (2003). Responsabilidad social de la empresa. Concepto, medición y desarrollo en España. *Boletín Económico del ICE*, 2755, 7-19.
- Dopico, A., Rodríguez, R. & Gonzáles, E. (2012). La Responsabilidad Social Empresarial y Los Stakeholders: Un Análisis Clúster. *Revista Galega de Economía*, 21(1) 1-17.
- Elkington, J. (1998). *Cannibals with forks: the triple bottom line of 21st century business*. Gabriola Island: New Society Publishers.
- Escamilla, S., Plaza, P., & Flores, S. (2015). Análisis de la divulgación de la información sobre la responsabilidad social corporativa en las empresas de transporte público urbano en España. *Revista de Contabilidad – Spanish Accounting Review*.
- Fassin, Y. (2008). SMEs and the fallacy of formalising CSR. *Business Ethics: A European Review*, 17(4), 364-379.
- Fisher, K., Geenen, J., Jurcevic, M., Mcclintock, K., & Davis, G. (2009). Applying assetbased community development as a strategy for CSR: A Canadian perspective on a win-win for stakeholders and SMEs. *Business Ethics: A European Review*, 18(1), 66–82.
- Fitzgerald, M., Haynes, G., Schrank, H., & Danes, S. (2010). Socially responsible processes of small family business owners: Exploratory evidence from the national family business survey. *Journal of Small Business Management*, 48 (4), 524–551.
- Freeman, R. E. (1984). *Strategic Management: A stakeholder approach*. Boston: Pitman Publishing.
- Fritzsche, D., & Oz, E. (2007). Personal values influence on the ethical dimension of decision making. *Journal of Business Ethics*, 75 (4), 335-343.
- Garriga, E., & Melé, D. (2004). Corporate Social Responsibility Theories: Mapping the Territory. *Journal of Business Ethics*, 53(1), 51-71.
- Granitz, N.A., (2003). Individual, social y organizational sources of sharing y variation in the ethical reasoning of managers. *Journal of Business Ethics*, 42 (2), 101-125.
- Hair, Jr. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis (7th ed.)*. Upper Saddle River, New Jersey: Prentice Hall.

- Herrera, J., Larrán, M., Lechuga, M. P. & Martínez, D. (2014). Motivaciones hacia la Responsabilidad Social en las Pymes familiares. *Revista de Empresa Familiar*, 4(1), 21–44.
- Herrera, J., Larrán, M., Lechuga, M. P. & Martínez, D. (2016). Responsabilidad social en las pymes: análisis exploratorio de factores explicativos. *Revista de Contabilidad – Spanish Accounting Review*, 19(1), 31–44.
- Jamali, D., Zanhour, M., & Keshishian, T. (2009). Peculiar Strengths and Relational Attributes of SMEs in the Context of CSR. *Journal of Business Ethics*, 87(3), 355– 377.
- Jenkins, H. (2004). A critique of conventional CSR theory: An SME perspective. *Journal of General Management*, 29(4), 37-57.
- Jenkins, H. (2006). Small Business Champions for Corporate Social Responsibility. *Journal of Business Ethics*, 67, 241–256.
- Kechiche, A., & Soparnot, R. (2012). CSR within SMEs : Literature Review. *International Business Research*, 5(7), 97–104.
- Labelle, F., & Saint Pierre, J., (2010). Lesdéterminants institutionnels,organisationnels et individuels dela sensibilité des PME au sujet du développement durable. 10ème Congrès International Francophone en Entrepreneuriat et PME, 27-29 Octobre, Bordeaux, France. 15p.
- Lepoutre, J., & Heene, A. (2006). Investigating the Impact of Firm Size on Small Business Social Responsibility: A Critical Review. *Journal of Business Ethics*, 67(3), 257-273.
- Melé, D. (2007). Responsabilidad social de la empresa: una revisión crítica a las principales teorías. *Revista Ekonomiaz*, 65, 50-67.
- Murillo, D., & Lozano, J. M. (2006). SMEs and CSR: an approach to CSR in their own words. *Journal of Business Ethics*, 67(3), 227–240.
- Murillo, D., & Lozano, J. M. (2009). Pushing forward SME CSR through a network: an account from the Catalan model. *Business Ethics: A European Review*, 18(1), 7–20
- Navarro, A., Alcaraz, F. J., & Ortiz, D. (2010). La divulgación de la información sobre responsabilidad corporativa en administraciones públicas: un estudio empírico en gobiernos locales. *Revista de Contabilidad – Spanish Accounting Review*, 13(2), 285-314.
- Navarro, A., Ruiz, M., de los Ríos, A., & Tirado, P. (2014). La responsabilidad social corporativa en los gobiernos locales: el caso del Reino Unido e Irlanda. *Innovar*, 24(54), 89-105.
- Perrini, F., Russo, A., & Tencati, A. (2007). CSR strategies of SMEs and large firms: evidence from Italy. *Journal of Business Ethics*, 74(3), 285-300.
- Preuss, L., & Porschke, J. (2010). Slipstreaming the larger boats: Social responsibility in medium-sized businesses. *Journal of Business Ethics*, 92(4), 531-551.

- Russo, A., & Tencati, A. (2009). Formal vs. informal CSR strategies: Evidence from Italian micro, small, medium sized, and large firms. *Journal of Business Ethics*, 85, 339–353.
- Santos, A. M., Pereira, E. N., & Silva, J. L. A. (2006). *Responsabilidade social nas PME: casos em Portugal*. Lisboa: Rh Editora.
- Santos, A. M., Pereira, E. N., & Silva, J. L. A. (2006). *Responsabilidade social nas PME: casos em Portugal*. Lisboa: Rh Editora.
- Santos, M. (2011). CSR in SMEs: strategies, practices, motivations and obstacles. *Social Responsibility Journal*, 7(3), 490-508.
- Sharma, S. (2000). Managerial Interpretations and Organizational Context as Predictors of Corporate Choice of Environmental Strategy. *Academy of Management journal*, 43(4), 681-697.
- Spence, L. (2007). CSR and small business in a European policy context: The five ‘C’s of CSR and small business research agenda 2007. *Business and Society Review*, 112, 533-552.
- Spence, L., & Rutherford, R. (2003). Small business and empirical perspectives in business ethics: editorial, *Journal of Business Ethics*, 47(1), 1-5.
- Tilley, F. (2000). Small firm environmental ethics: how deep do they go?. *Business Ethics: A European Review*, 9(1), 31–41.
- Udayasankar, K. (2008). Corporate social responsibility and firm size. *Journal of Business Ethics*, 83 (2), 167-175.
- Vargas, A., & Vaca, R. M. (2005). Responsabilidad social corporativa y cooperativismo: vínculos e potencialidades. CIRIEC – España, *Revista de Economía Pública, Social y Cooperativa*, 53, 261-283.
- Vives, A. (2006). Social and Environmental Responsibility in Small and medium enterprises in Latin America. *The Journal of Corporate Citizenship*, 21, 39-50.
- Vives, A., Corral, A., & Isasi, I. (2005). *Responsabilidad Social de la Empresa en las Pymes de Latinoamérica* (Interamerican Development Bank, Washington, DC).
- Webb, E. (2004). An examination of Socially Responsible Firms’ Board Structure. *Journal of Management and Governance*, 8 (3), 255-277.
- Wickert C. (2014). “Political” corporate social responsibility in small- and medium-sized enterprises: A conceptual framework. *Business & Society*, 55, 792-824.

## Appendix

### Changes in the Agglomeration schedule

N°. of clusters	Agglomeration last step	Coefficient this step	Change
2	1268,751	869,330	399,421
3	869,330	738,218	131,111
4	738,218	653,954	84,265
5	653,954	614,548	39,406
6	614,548	576,866	37,682