Competitiveness and CSR in SME:
Results from a Study in the Madrid Region

Javier CAMACHO
Universidad Pontificia Comillas
23 Alberto Aguilera, 28015, Madrid, ES
jcamacho@comillas.edu

Jose Luis FERNANDEZ
Universidad Pontificia Comillas
23 Alberto Aguilera, 28015, Madrid, ES
jlfernandez@icad.comillas.edu

Abstract. *Research of Corporate Social Responsibility (CSR) in small and medium enterprises (SME) is a growing area of interest. The object of this study is to evaluate the impact of certain CSR practices put in place by a sample of 95 SME in the competitiveness of these companies. The study was developed in close cooperation with the Chamber of Commerce of Madrid, using questionnaires and PLS structural equation model as the analysis tool. The results point out that both management related CSR practices and HHRR related CSR practices has a positive effect on the competitiveness of the companies, reflected in the company's ability to attract and retain talent and on the company's customer orientation. The article provides some practical indications for managers, such as developing a set of rules of conduct and behavior for employees and partners, and procedures by which questionable practices for obtaining commercial advantages are banned.*

Keywords: competitiveness; CSR; ethical organization; PLS; SME.

Introduction

The object of this study is to evaluate the impact of certain practices regarding CSR put in place by a sample of small and medium enterprises (SMEs) in the competitiveness of these companies. This study was developed with the support of the Chamber of Commerce of Madrid, interested in assessing the direct and indirect effect of different formative and informative sessions, workshops and initiatives carried out in relation to aspects of Corporate Social responsibility (CSR), human resources (HR) and business management (Management).

The study of ethical and social responsibility in small and medium-sized enterprises, is an area that requires further research (Thompson et al., 1991; Hannafey, 2003; Harris et al., 2009), since their characteristics and strategies for implementing CSR differ from large enterprises (Zbuchea & Pînzaru, 2017). Several authors have examined the special characteristics of the SMEs, in relation to the research of business ethics (Spence, 1999) and the perception of these companies

about Ethics and CSR (Hornsby et al., 1994; Fassin, 2008; Fassin et al., 2011). However, more research is needed regarding the relationship between SME engagement in CSR and the SME profitability and competitiveness (Jamali et al., 2015) and some authors have explored into that matter for certain kind of enterprises (Camilleri, 2015). Recently, some studies have been conducted to assess the elements which may have influence in establishing an ethical infrastructure in SMEs (Fernandez & Camacho, 2016). Small and medium-sized enterprises have positive characteristics that would enable them to take advantage of the opportunities of CSR (Jenkins, 2009), and are better at implementing activities of CSR at the internal level, although it is more difficult to communicate these activities externally (Nielsen & Thomsen, 2009; Baumann-Pauly et al., 2013).

There is a growing interest in establishing a relationship between CSR and the performance of companies (Orlitzky et al., 2003; Henriques & Richardson, 2004; Dodd & Supa, 2014; Isaksson et al., 2014), in some cases supporting a positive relationship between CSR and financial performance (Bohlin & Wiebe, 2016). It seems that CSR and ethical responsibility may contribute to the competitive success of the SME, and may be a differentiating factor (Marín et al., 2008; Garcia-Marza et al., 2010). Therefore, it is relevant to investigate about these topics, especially when there are no relevant studies on this aspect in relation to companies in the region of Madrid.

This study has an exploratory purpose, and a questionnaire has been elaborated, to gather the presence of some practices carried out by companies and to assess their influence on a construct of competitiveness (Camacho et al., 2015). For the data analysis, PLS (Partial Least Squares) structural equations have been chosen, given the exploratory approach of the study. This analysis technique has already been used in several studies of related topics (Vitell et al., 2010; Godos-Díez et al., 2011) and specifically in research on CSR and SME (Soto-Acosta et al., 2016; Vătămănescu et al., 2017).

Methods

As indicated above, to carry out this study we have opted for questionnaires and techniques of quantitative analysis based on PLS (Partial Least Squares). PLS is a specific structural equation model, that allows to relate variables, which are difficult to measure directly, through several indicators (Haenlein & Kaplan, 2004). The versatility of structural equations models has made that its use has spread among Social Sciences (Chin, 1998; Hair et al., 2011). PLS analysis is appropriate if we aim to explore relationships that do not have a prior theoretical ground and when the data set is small (Hair et al., 2011; Fornell & Bookstein, 1982). It is also a recommended alternative, when there are formative constructs as part of the structural model (Hair et al., 2011).
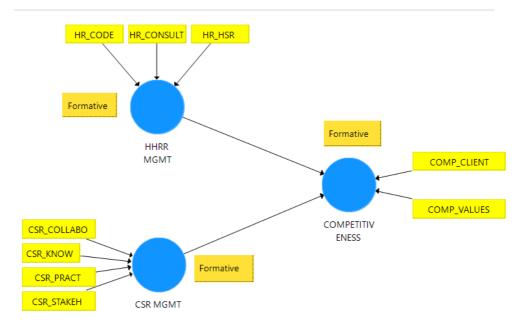
Figure 1. PLS Model used in the study (authors' elaboration)

The different latent variables or constructs, used in the model are the following:

• Management related CSR practices (MGMT CSR). This is a formative construct that contains aspects such as whether the company knows the meaning and scope of CSR (CSR_KNOW), understands what and who are the groups of interests (CSR_STAKE), collaborates with other entities in the field of CSR (CSR_COLLABO) or have procedures (written or not) by which questionable practices for obtaining commercial advantages (for example, bonuses to key staff on a client or a supplier, etc.) are banned (CSR_PRACT).

• Human Resources related CSR practices (CSR_HHRR). This is a formative construct that contains aspects such as whether the company has a set of rules of conduct and behavior for employees and partners (CSR_CODE), the company consults with employees on important issues (HR_CONSULT), and how is the company's performance in relation to the conditions of occupational safety and health at work (HR_HSR).

• COMPETITIVENESS. This is a simple formative construct, in relation to two main issues on how competitive a company is. On the one hand, if the company uses their CSR and ethical values, as a tool of motivation for employees and potential candidates, thus reflecting the company's ability to attract and retain talent (COMP_VALUES), and on the other hand, if they have clear procedures for managing the requests of customers, complaints, and claims, which reflects the company's customer orientation (COMP_CLIENT).

Two main hypotheses are proposed:

• H1. Management related CSR practices, have influence on the competitiveness of the company, seen from the point of view of the orientation to the customer and the attraction and retention of talent.

• H2. Human Resources related CSR practices, have influence on the competitiveness of the company, seen from the point of view of the orientation to the customer and the attraction and retention of talent.

The questionnaire was inspired by different models and existing self-assessment tools (refer to Annex I for the complete list of diagnostics and questionnaires that were consulted). The questionnaire aimed to identify different practices carried out by the companies in relation to aspects of Ethics and CSR, as well as to explore the possible impact of some of these practices on the competitiveness of the company. To validate the content of the questionnaire, it was developed and distributed within the Group of researchers, during the months of May to September 2013.

The questionnaire included several additional aspects, whose treatment and scope are beyond the target of this paper, as for example questions related to contact with ethics and CSR, demographic data of companies and other aspects related to business management, human resources, and the environment.

The questionnaire was sent to 1630 companies from various sectors, which had participated in informative or formative sessions organized by the Chamber of Commerce of Madrid. To facilitate the administration of the questionnaire, it was programmed on an online platform, and access to the questionnaire was sent via email. Data collection took place during the first quarter of 2014 (13 January to March 30, 2014).

Out of the 129 companies that began the questionnaire, a total of 115 companies completed it, i.e., a 7.05% of the total of 1630 the sample.
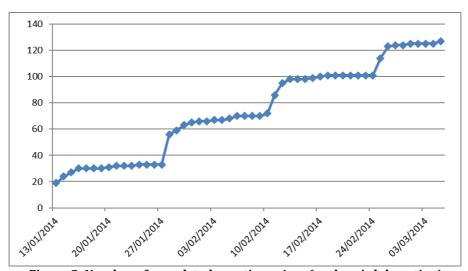

Figure 2. Number of completed questionnaires (authors' elaboration)

From the completed questionnaires, 20 had to be removed since they corresponded to bug corporations, so the resulting number of valid cases was 95 companies.

To validate the required sample size, the G*Power program has been used, which performs a power analysis and is recommended in cases of small samples (Faul et al., 2007; Mayr et al., 2007). Considering a medium effect, a priori power analysis is done, that is, to calculate the degree of probability of rejecting a null hypothesis when it is false, obtaining the results of Figure 3. For a power of 0.80 (80% probability of rejecting a null hypothesis when it is false) the number of cases should be above 85. In this work, we have used 95 valid cases.
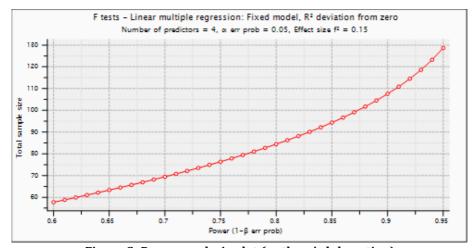

Figure 3. Power analysis plot (authors' elaboration)

With regards to the quality criteria, full confidentiality and anonymity were guaranteed to the respondents, and therefore the social desirability bias associated with this kind of self-questionnaires should be reduced. In the same way, we attempted to reduce the ambiguity of the questions, by doing a previous review, as noted above.

Results

Since global measures of goodness of fit do not apply to PLS, Chin (1998) proposed a series of non-parametric criteria for validating partial structural models. The application of these criteria requires a process in two stages (Henseler et al., 2009). The first step is to check the validity and reliability of the measuring instrument (external model), i.e. the indicators that make up the constructs, and the second phase is the evaluation of the structural relationships between constructs (internal model).

In the case of formative constructs, possible problems of collinearity must be taken into account (Hair et al., 2011). A high collinearity increases the standard errors of the estimates. Tolerance (TOL) index must be greater than 0.20, or what is the

same, the VIF (Variance Inflation Factor, the inverse of the Tolerance) should be less than 5. This condition is met, as it is shown in the following table:

Table 1. Collinearity results for the formative constructs. Developed by author

VIF					
COMP_CLIENT	1.045	CSR_COLLABO	1.320	HR_CODE	1.113
COMP_VALUES	1.045	CSR_KNOW	1.340	HR_CONSULT	1.072
		CSR_PRACT	1.229	HR_HSR	1.044
		CSR_STAKEH	1.341		

In the following table, the weights for each indicator are included and represent an estimate of their relative contribution to the different constructs:

Table 2. Overview of the constructs validity. Indicators sorted by weight and significance

Construct	Indicator	Loading	Weight	T Value	CA	CR	AVE
CSR MGMT	CSR_PRACT		0.593***	3.377	N/A	N/A	N/A
	CSR_KNOW		0.300	1.960			
	CSR_STAKEH		0.290	1.582			
	CSR_COLLABO		0.191	1.153			
CSR HR	HR_CODE		0.740***	6.717	N/A	N/A	N/A
	HR_CONSULT		0.335**	2.467			
	HR_HSR		0.318**	2.531			
COMPETIT IVENESS	COMP_CLIENT		0.644***	6.126	N/A	N/A	N/A
	COMP_VALUES		0.643***	6.291			

Note: CA=Cronbach Alpha; CR=Compound Reliability; AVE=Average variance; N/A = Not applicable
*** p<0.01; ** p<0,05; *p<0,10. Source: developed by authors.

Once the assessment of the validity of the measuring instruments is complete, we proceed to the evaluation of the structural model, which uses the variance of the dependent latent variables, explained by the constructs that predict them (R^2) and the significance of the structural relations (bootstrapping). We also evaluate the predictive significance through the Q^2 criterion of Stone-Geisser established using a blindfolding procedure for calculating the redundancy of cross-validation (Henseler et al., 2009; Hair et al., 2014). As it is shown in Table 3, both hypothesis is positively contrasted.

Table 3. Contrast of hypothesis

Hypothesis	Standardized Beta	T Value (Bootstrap)
H1: CSR MGMT -> COMPETITIVENESS	0.374***	3.532
H2: HHRR MGMT -> COMPETITIVENESS	0.418***	4.001

*** p<0.01; ** p<0,05; *p<0,10
R^2 (COMPETITIVENESS) =0.487. Q^2 (COMPETITIVENESS) = 0.247

Annex II includes a graphic summary of the complete PLS model with indication of the resulting values.

Finally, an analysis of Importance-Performance has been made with the relations of the model PLS (Hair et al., 2014). This analysis allows for the identification of areas for improvement in which to act from the point of view of the managers of enterprises (Hock et al., 2010). The analysis uses estimates of the PLS model structural relationships (importance) and adds an extra dimension to the analysis that incorporates the values of the latent variables (performance). For an endogenous latent variable, this analysis provides a map of priorities that would allow to carry out actions in relation to areas that have a high relative importance and relative performance. This kind of analysis has practical implications for management. In this case the actionable items that would have more impact on the competitiveness would be to develop a set of rules of conduct and behavior for employees and partners (CSR_CODE), and to develop procedures (written or not) by which questionable practices for obtaining commercial advantages (for example, bonuses to key staff on a client or a supplier, etc.) are banned (CSR_PRACT).
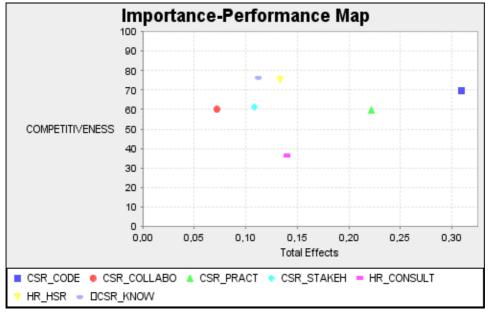

***Figure 2. Extended Importance-Performance Map
(authors' elaboration)***

Conclusions

This project, carried out for more than one year, from May 2013 until June 2014, has served to learn about CSR practices in relation to aspects of management and human resources, carried out by the SMEs of the community of Madrid.

A PLS structural equations model has been established to assess the influence of such practices of CSR in the competitiveness of the company, comprising two main aspects: ability to attract or retain talent, and orientation to the client. Thus, a quantitative study with 95 valid questionnaires from companies, all of them SMEs, was developed, with the participation of the Chamber of Commerce of Madrid.

Both Management related and HHRR related CSR practices, have positive influence on competitiveness, so that the two proposed hypotheses are contrasted affirmatively. The existence of a code of conduct is the individual aspect that has more influence, followed by the existence of procedures, written or not, to prevent questionable practices.

The results obtained may be valid from a descriptive point view. However, the limited number of data and the absence of a control group, does not allow the generalizability of the results. Therefore, a possible line of future research would be to expand the sample to companies from other regions, to thus reach more accurate statistical results. It would be of specific interest to compare results between Spain and other EU countries.

Not all the elements that may contribute to the competitiveness of the company were including in the questionnaire, nor all practices in relation to CSR, due to constraints in the number of questions. Similar studies with other samples of companies and with the inclusion of other topics could also be considered as future lines of research.

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ANNEX I

Some questionnaires and tools used as reference in the elaboration of the questionnaire

1. Corporate social responsibility for SMEs Guide www.guiarscPYMEs.org
2. Self-diagnostic RSE PYME of CECOT www.cecot.es
3. RSCAT self-diagnosis questionnaire. CSR program. PIME. Social responsibility Questionari - phase of diagnosis. Generalitat de Catalunya. Model indicators of CSR for SMEs rscat.gencat.cat
4. Instrument of self-diagnosis for companies, proposed by the FECHAC (Chihuahuan entrepreneurship Foundation, BC). www.fechac.org/pdf/instrumento_de_autodiagnostico_de_rse_para_las_empresas.pdf
5. Guide to effective communication. European Commission. Directorate-General for enterprise. www.ec.europa.eu/enterprise/policies/sustainable-business/index_en.htm
6. Introduction to the corporate social responsibility for SMEs. European Commission. Directorate-General for enterprise. www.ec.europa.eu/enterprise/policies/sustainable-business/index_en.htm
7. Responsible companies. Awareness questionnaire. European Commission. Directorate-General for enterprise. www.ec.europa.eu/enterprise/policies/sustainable-business/index_en.htm
8. Guide to improvement and the implementation of Corporate Social responsibility in SMEs. Chamber of Commerce of Madrid. www.camaramadrid.es
9. Guide to ethical management in SMEs. Confecamaras. Colombia www.probidad.org.co
10. CSR for SMEs implementation guide. Association of Christian entrepreneurs (ADEC). Paraguay. www.adec.org.py
11. Guide for the implementation of the RC in SMEs. Sustainability Excellence Club. PWC. www.responsabilidadimas.org/download/nuevaguiaPYME.pdf
12. Guide to Corporate Social responsibility for SMEs. Corporate Social Responsibility Observatory. www.fundibeq.org
13. Workbooks in CSR for SMEs. The previous diagnosis. www.camaravalencia.com
14. Self-diagnostic CSR SME. Foundation wing. www.fundacionalares.es/
15. Self-evaluation manual and form of self-assessment in CSR proposed by leaders in Uruguay. www.Deres.org.uy
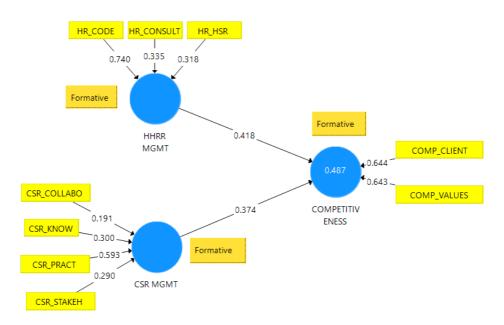16. The IARSE CSR indicators. Argentina. www.iarse.org

ANNEX II

PLS Model

Figure 3. PLS model, with indication of weights, structural relations and R²
(authors' elaboration)