World Academy of Science, Engineering and Technology
International Journal of Economics and Management Engineering
Vol:6, No:6, 2012

CSR of top Portuguese Companies: Relation between Social Performance and Economic Performance

Afonso, S. C., Fernandes, P. O., Monte, A. P.

***Abstract*—**Modern times call organizations to have an active role in the social arena, through Corporate Social Responsibility (CSR). The objective of this research was to test the hypothesis that there is a positive relation between social performance and economic performance, and if there is a positive correlation between social performance and financial-economic performance. To test these theories a measure of social performance, based on the Green Book of Commission of the European Community, was used in a group of nineteen Portuguese top companies, listed on the PSI 20 index, through a period of five years, since 2005 to 2009. A clusters analysis was applied to group companies by their social performance and to compare and correlate their economic performance. Results indicate that companies that had a better social performance are not the ones who had a better economic performance, and suggest that the middle path might provide a good relation CSR-Economic performance, as a basis to a sustainable development.

***Keywords*—**Corporate Social Responsibility, Economic Performance, Win-Win relationship

I. INTRODUCTION

TODAY organizations have a power and influence that in some cases exceeds that of governments. But they also have challenges that emerge with that power and with the increasing impact of their activities— the responsibility to act in a way that considers not only economic goals, but that respond to the social and environmental demands, also raise through their past actuation. If organizations don’t promote the sustainable development of the communities where they operate, they will generate more imbalances that, probably, sooner or later, will have a negative impact on their economic performance. To act in a social and responsible way can be a path to a cycle, were social performance and economic performance influence, one each other, in a positive way, contributing to a sustainable development.

In the recent times, many are the negative examples involving corporation and theirs leaders, cases of corruption involving fraudulent accounting, the growing gap between the salaries of top managers and their employees, abusive practices, marketing of products harmful to public health, violation of human rights and environmental standards [1].

Afonso, S. C. is with the Polytechnic Institute of Bragança (phone: +351273303103; fax: +351273313051; e-mail: a24528@alunos.ipb.pt).

Fernandes, P.O. is with the Economics and Management Department, Polytechnic Institute of Bragança and NECE-Research Unit in Business Sciences (UBI) (corresponding author to provide phone: +351273303103; fax: +351273313051; e-mail: pof@ipb.pt).

Monte, A.P. is with the Economics and Management Department, Polytechnic Institute of Bragança and NECE-Research Unit in Business Sciences (UBI) (phone: +351273303102; fax: +351273313051; e-mail: apmonte@ ipb.pt).

Companies are under an increasing pressure, from civil institutions, activist’s campaign, to public regulations, demanding and imposing social and environmental standards [2]. Globalization also increased the interdependence and the awareness about the impact that actions can have between distant intervenient. “Social responsibility has become the hallmark of a mature, global civilization. It is necessary for an interdependent one world. Values have changed to require it” [3].

In a world that is characterized by increasing economic and social asymmetries, we need to find the way to promote a balance that can be sustained in a virtuous cycle. “We have to choose between a global market driven only by calculation of short-term profit, and one which has a human face (…).

Between a selfish free-for-all in which we ignore the fate of the losers, and a future in which the strong and successful accept their responsibilities, showing global vision and leadership” (Kofi Annan as cited in World Business Council for Sustainable Development [4]). CSR can be the way to a successful acceptance of responsibilities and to build a sustainable development.

Considering that today CSR is an inevitable question to many organizations, especially that one’s which activities have greater impact and are under more external pressure, join CSR can be important if they don’t want to stay being. But according to some CSR opposing [5], some good intentions about CSR, fall into practices that do not improve society’s well-being and also do not improve long-term profitability. The win-win strategy, which improves both, seems to be the right way. With the right vision CSR can be a path to a virtuous influence between social performance and economic performance.

This research intends to study the social performance of top Portuguese companies and the relation to economic performance. By grouping companies according to their social performance, it will be possible to compare and relate social performance and economic performance between companies groups. The purpose is to study if social performance and economic performance are positively related, and if the more responsible companies are, the better their economic performance.

II. THEORETICAL FRAMEWORK

Social business concerns exist for a long time, but the CSR debate began, in United Sates, 1953, when Howard R. Bowen, argue that businessman had the obligation to conduct business according to society’s goals and values [6]. For Wartick and Cochran the CSR concept as suggest by Bowen, as two main premises: (i) the business exist to serve society, and its behaviour must be ruled by society's guidelines, in this context business assumes a social contract with society, which is the vehicle which brings business behaviour to conformity with society patterns; (ii) the business acts as a moral agency in society, and should act consistently according to society's values, many concepts follow, but until now without any consensual definition [7].

In Europe, the CSR debate emerged later, in 1993, with the appeal made by Jacques Delors, at the time President of Comission of European Community (COM), to company's social intervention, which had a good acceptance [8]. In 2001 the COM launch the "Green Paper" with the purpose to promote an European framework for CSR and considering that CSR could contribute to the concretization of the goal set in the European Council of Lisbon 2000: European economy becoming the world most dynamic and competitive, based on knowledge, and setting the basis to a sustainable development [8].

Sustainable development and CSR are two dimensions many times related. According to COM "CSR is intrinsically linked to the concept of sustainable development: businesses need to integrate the economic, social and environmental impact in their operations" [9]. Also COM defines CSR as a "concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis [9].

The Brundtland Report (United Nations World Commission on Environment and Development [10]), defined sustainable development as the ability "to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs". This classic definition, emphasing environmental resources, was seen as ambiguous, and "it can be interpreted to mean almost anything that anyone wants" [11]. But despite the confusion raise, the concept of sustainable development is generally accepted as combining economic, social and environmental concerns, with the purpose to bring the three into a balance [11].

The WBCSD, an organization created in 1995, that addresses the commitment to a sustainable development, also considers that sustainable development is based on "three fundamental and inseparable pillars: the generation of economic wealth, environmental improvement and social responsibility" [4] and that "CSR is an integral part of sustainable development" [4].

Although there isn't a consensual definition to sustainable development as also there isn´t to a CSR definition, we can consider the three dimensions (economic, social and environmental) as common two both of the concepts. But if CSR emerge as a way to organization assume it's responsibilities an contribute to a sustainable development, it can also raise the question about how can CSR positively affect economic performance in a way that can generate resources to continually invest in social and environmental demands. According to Waddock and Graves high levels of financial performance can provide the resources necessary to invest in CSR practices [12].

Also Ullmann argued that in periods of low economic return, companies have other priorities than investment in CSR, which may suggest that a satisfactory financial performance can have a positive influence in future commitment with social responsibility practices [13]. But CSR can also improve the economic performance, providing greater availability of resources. Orlitzky, Schmidt and Rynes suggest that the social performance and financial and economic performance influence each other through a "virtuous cycle", since companies with good financial and economic performance invest more in social performance because they can do it, but at the same time the social performance also helps them to increase financial success [14].

However there are companies that invest in CSR despite that investment, in the short term, reduce the present value of their cash flows. According to Mackey and Mackey, that can be explained by the conditions of supply and demand for CSR investments opportunities [15]. When the demand is greater than supply even reducing the present value of cash-flows, the investments may generate economic value for companies [15].

In the attempt to relate CSR and economic and financial performance, many researchers have been done with different and opposing results (e.g. [12], [13], [16]-[21]). Waddock and Graves argue that difficulties in the measurement of social performance are the main reason for the uncertainty of the results obtained [12]. Some of the measurement criteria often used are the content analysis of annual reports, expert evaluations, the index developed by the rating agency Kinder, Lydenderg, Domini (KLD), or the indexes of Fortune and Moskowitz, based on reputation (e.g. [12]-[14], [16], [19]-[21]). Szekeley and Knirsch, analyzed the best metrics used by German companies to measure sustainable performance, and conclude that different methods were used, but many have adopted the guidelines of the Global Reporting Initiative (GRI) [22]. The authors considered to be a good start, and a tool that needs to be improved, but is not enough to the structural changes that companies need to undertake internally to become more sustainable, and that requires a "strong and visionary leadership" [22].

In Portugal, although many companies were using CSR practices in a informal way, the CSR systematic practices it only begun after the celebration of international agreements, and more specifically the European Lisbon Conference of 2000 (Centro de Formação Profissional para o Comércio e Afins [CECOA] [23]. Researches done in Portuguese context also refer to lack of information to study Portuguese reality, and also lack of formulas to CSR implementation [24].

In this investigation, to the measurement of CSR, it was follow a different frame from previous researches. The measurement of social performance was based on the COM guidelines, and namely the two dimensions of CSR, internal and external dimensions [8]: (1) The internal dimension includes the "Human Resources Management", "Health and Safety at Work", "Adapting to change", and "Management of environmental impacts and natural resources", (2) The external dimension includes "Local communities", "Business partners, suppliers and consumers", and "Human rights and Global environmental concerns".

III. Corporate Social Responsibility of Top Portuguese Companies and Relations Between Social Performance and Economic Performance

The objective of this research is to test the hypothesis that there is a positive relation between social performance and economic and financial performance and if the more responsible companies are, the better their economical performance. To achieve the goal set, initially it was measured the social performance of Portuguese companies, and then companies were clustered according to their social performance, with the purpose to test if companies that have better social performance also have better economic and financial performance. The sample used was composed by nineteen Portuguese companies quoted in the Euronext Lisbon stock exchange, belonging to PSI 20 Index, considering a review period of five years, from 2005 to 2009. Companies listed on Euronext Lisbon are obliged, since 2005, to report their accounts according to International Accounting Standards - International Financial Reporting Standards (IAS-IFRS standard), and therefore should be more predisposed to adopt CSR practices. It was chosen a five years period of analysis, because a longer period of analysis can provide more reliable information about companies' commitment with CSR and also allows an evolution analysis of the adoption of CSR.

TABLE I
Variables of Research

Internal dimension variables	Responsible management Human resources management Health and safety at work Environmental and natural resources management Business ethics
External dimension variables	Local communities Stakeholders Human rights Environmental and philanthropic global concerns
Other variables	CSR instruments

The variables chosen to measure the multiple dimensions of social performance (see Table I), were based and adapted from Green Paper guidelines [8], considering as well diverse literature on the subject, also the GRI guidelines, used by several Portuguese companies that report their social performance. The analysis and measure of social performance, was done through content analyses from companies' sustainability and annual reports, available on companies' official websites. An index was built, with 239 items, considering the relevant aspects for each of the variables defined for measuring social performance. Also it was considered the fact that most of the Portuguese companies set their CSR goals according to the three dimension of the sustainable development: Economic, Environmental and Social. To each item was attributed a score: 0 (to a negative answer); 1 (to a positive answer); 0,5 (to an incomplete answer).

The final result, which is the total of all variables scores, was named CSR Index and allowed to positioning the companies according to their social performance.

To measure the economic and financial performance, three accounting based measures were used: Return on Equity (ROE), Return on Assets (ROA) and Return on Sales (ROS). This study followed previous research which found positive correlation between this measure and social performance measures, [12], [17], [18], [21]. The final data used to statistic analysis, either with social performance measures and economic and financial performance measures, were the average of the five years data.

Hierarchical cluster analysis was applied in order to identify homogeneous groups of companies based on the variables chosen to measure social performance. And was also applied a non hierarchical cluster analysis, with k-Means, to explain the clusters solution produced by hierarchical analysis. After companies being grouped according to their social performance, the analysis proceeds by comparing the CSR Index with the variables used to measure economic performance. Also a correlation analyze was done, using Spearman coefficient, to study the hypothesis of relation between the CSR Index and economic performance variables, for each of the clusters define.

IV. Results and Discussion

The hierarchical cluster analysis, using the method of average linkage between groups and the squared euclidean distance, produced three main clusters. This solution was confirmed using the r-square criterium and the graph of the relativized distance between clusters. A solution of three clusters was chosen, explaining 68% of the total variance. Each one of the clusters was named according with the social performance of the companies that composed each one: Cluster 1 - CSR Medium; Cluster 2 - CSR High; Cluster 3 - CSR Low (see Table II).

The variables more relevant to define and separate clusters, using K-Means method, were, by descending order of relevance: Human Rights, Environment and natural resources management, Human Resources Management, and Communities. The practices uses by companies in these areas were important to define their social performance.

TABLE II
Clusters Composition

Cluster	Companies	
Clusters 1 CSR Medium	BRISA CIMPOR REN PORTUCEL SONAE ALTRI	GALP JERONIMO MARTINS SONAECOM MOTA-ENGIL SEMAPA SONAE IND
Clusters 2 CSR High	EDP BES BCP PT	
Clusters 3 CSR Low	BPI TEIXEIRA DUARTE ZON	

Comparing the CSR Index with the variables used to measure economic and financial performance we conclude that companies with High CSR seems to not have an economic and financial performance better than the others (see Table III). The companies belonging to group of Medium CSR, were those which had better economic and financial performance in ROA and ROS. They were the worst only in ROE. Nevertheless results may indicate a good relation CSR-Economic performance in the medium CRS group. Low CSR companies had the better result of all in ROE that may indicate a focus in results that are important to shareholders, under valuating CSR.

The study of correlations between the CSR Index and economic and financial performance variables indicated only two correlations: (1) CSR Index with a significant positive correlation with ROA (r = 0,762, at a $p \leq 0.004$), for Medium CSR companies; (2) CSR Index with a total negative correlation with ROE (r = - 1, at a p < 0,001), for Low CSR companies.

Results also seem to indicate an evolution on the adoption of CSR, especially since 2006, when companies start to publish their sustainability reports.

TABLE III
CSR INDEX AND ECONOMIC PERFORMANCE MEASURES: CLUSTERS COMPARISON (N=19)

Cluster	CSR Index	ROA	ROE	ROS
1 - CSR Medium	81,7	0,06358	0,13433	0,11700
2 - CSR High	112,6	0,03375	0,18150	0,11650
3 - CSR Low	32,2	0,04767	0,19767	0,10267

V. CONCLUSIONS AND FURTHER RESEARCH

The objectives of this research were to test the hypothesis (1) that there is a positive relation between social performance and economic and financial performance and (2) if the more responsible companies are, the better their economical and financial performance.

Results indicate that companies that had a better social performance are not the ones who had a better economic and financial performance, and suggest that the middle path - companies that had a CSR medium and a better economic and financial performance in two of the three economic and financial measures of performance – might provide a good relation CSR-Economic performance, as a basis to a sustainable development. The positive and significant correlations found, in the group of medium CSR companies, between CSR Index and ROA suggests that social performance may have positive influence on sales, perhaps because consumers are more predisposed to by products and services from CSR companies. The total negative correlation between CSR Index and ROE, in the Low CSR companies, that had the better result in ROE and the worst in ROA, may also indicate that a focus in results to shareholders, neglecting social performance, may have a negative impact in other dimensions, like sales. Although the aims of this study were not completely reached, the results give some clues about the right way to achieve a good relation CSR-Economic and financial performance, providing a frame to a sustainable development. Perhaps an important path to future research it will be, grouping companies by CSR strategies and to analyze which ones have a better relation CSR-Economic and financial performance.

We also suggest that a CSR Index based on the guidelines of COM, like it was done in this research, should be an European guide to organizations.

REFERENCES

[1] D. Lama, and L. Muyzenberg, *O caminho para a liderança, Transl. S. Oliveira*. Ed. Alfragide: Publicações Dom Quixote, 2008.

[2] S. Zadek, "Stalking Sustainabilit*",* 1999. Retrieved July 31, 2011, from http://www.zadek.net/wp-content/uploads/2011/04/Zadek_Stalking-Sustainability_1999.pdf.

[3] K. Davis, "The case for and Against Business Assumption of Social Responsibilities", *Academy of Management Journal*, vol. 16, no. 2, pp. 312–322, Jun. 1973. Retrieved July 17, 2011, from http://uweb.txstate.edu/~ek10/socialresponsibility.pdf.

[4] World Business Council for Sustainable Development, "Corporate Social Responsibility: making good business sense*", 2000*. Retrieved July 31, 2011, from http://www.wbcsd.org/DocRoot/IunSPdIKvmYH5HjbN4XC/csr2000.pdf.

[5] The Economist, "*The union of concern executives",* Jan. 2005. Retrieved July 17, 2011, from http://www.economist.com/node/3555194.

[6] A. Carroll, A, "Corporate social responsibility: Evolution of a definitional construct", *Business Horizons*, vol. 38, no. 3, pp. 268–295, Sep. 1999. Retrieved July 17, 2011, from http://bas.sagepub.com/content/38/3/268.full.pdf+html.

[7] S. Wartick, and P. Cochran, "The evolution of the corporate social performance model", *Academy of Management Review*, vol.10, no. 4, pp. 758–769, Oct. 1985.

[8] Commission of the European Community, "Green Paper: Promoting a European framework for Corporate Social Responsibility", COM 366, Brussels, 2001. Retrieved October 15, 2010, from http://eur-lex.europa.eu/LexUriServ/site/en/com/2001/com2001_0366en01.pdf.

[9] Commission of the European Community, "*Corporate Social Responsibility: A business contribution to Sustainable Development",* COM 347, Brussels, 2002. Retrieved October 15, 2010, from http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2002:0347:FIN:en:PDF.

[10] World Commission on Environment and Development, "Our common future: Report of the World Commission on Environment and Development", 1987. Retrieved July 31, 2011, from http://www.un-documents.net/ocf-ov.htm#1.2.

[11] B. Giddings, B. Hopwood, and G. O'Brien, "Environment, Economy and Society: Fitting them together into Sustainable Development", *Sustainable Development*, no. 10, pp. 187-196, 2002. Retrieved June 12, 2011, from http://mpra.ub.uni-muenchen.de/8609/1/137.pdf.

[12] S.A. Waddock, and S.B. Graves, "The corporate social performance – Financial performance link", *Strategic Management Journal*, vol.18, no. 4, pp. 303–319, 1997. Retrieved October 8, 2011, from http://onlinelibrary.wiley.com/doi/10.1002/(SICI)1097-0266(199704)18:4%3C303:AID-SMJ869%3E3.0.CO;2-G/pd.

[13] G. Balabanis, H. Phillips, and J. Lyall, "Corporate social responsibility and economic performance in the top British companies: are they linked?", *European Business Review*, vol. 98, no.1, pp. 25-44, 1998. Retrieved October 25, 2011, from http://scholar.google.com.br/scholar?start=20&q=corporate+social+responsibility+performance&hl=pt-PT&as_sdt=0.

[14] M. Orlitzky, F.L. Schmidt, and S.L. Rynes, "Corporate social and financial performance: A meta-analysis", *Organization Studies*, vol. 24, no. 3, pp. 403–441, 2003. Retrieved October 8, 2011, from http://www.finanzasostenibile.it/finanza/moskowitz2004.pdf.

[15] A. Mackey, and T. Mackey, "Corporate social responsibility and firms performance: investor preferences and corporate strategies", *Academy of Management Review*, vol. 32, no. 3, pp. 817–835, Jul. 2007. Retrieved October 8, 2011, from

http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=e9c0cc39-9447-4a62-805a-dc5771f0fe16%40sessionmgr111&vid=2&hid=113.

[16] J. J. Griffin, and J. F. Mahon, "The corporate social performance and corporate financial performance debate", *Business and Society*, vol. 36, no. 1, pp. 5–31, Mar. 1997. Retrieved October 8, 2011, from http://business.gwu.edu/smpp/articles/griffin_mahon_1997_b_and_s.pdf

[17] M.L. Pava, and J. Krausz, "The association between corporate social responsibility and financial performance: The paradox of social cost", *Journal of Business Ethics*, vol. 15, pp. 321–357, Mar. 1996. Retrieved October 8, 2011, from http://folders.nottingham.edu.cn/staff/zalzae1/ATP/articles/Pava1996.pdf.

[18] L. Poddi, and S. Vergalli, "Does corporate social responsibility affect the performance of firms?", *Fondazione Enri Enrico Mattei in 14th Coalition Theory Network Workshop*, Masstricht, Netherlands, 2009, pp.1–43. Retrieved October 8, 2011, from http://ageconsearch.umn.edu/bitstream/52531/2/52-09.pdf.

[19] D. Wood, and R. Jones, "Stakeholders mismatching: A theoretical problem in empirical research on corporate social performance", *International Journal of Organizational Analysis*, vol. 3, no. 3, pp. 229–267, July 1995. Retrieved July 17, 2011, from http://www.kantakji.com/fiqh/Files/Companies/l148.pdf.

[20] A. McWilliams, and D. Siegel, "Corporate social responsibility and financial performance: correlation or misspecification", *Strategic Management Journal*, no. 21, pp. 603–609, 2000. Retrieved October 8, 2011, from http://onlinelibrary.wiley.com/doi/10.1002/(SICI)1097-0266(200005)21:5%3C603::AID-SMJ101%3E3.0.CO;2-3/pdf

[21] P. A. Stanwick, and S. D. Stanwick, "The relationship between corporate social performance, and organizational size, financial performance and environmental performance: An empirical examination", *Journal of Business Ethics,* vol. 17, pp. 195–204, 1998. Retrieved October 8, 2011, from http://www.springerlink.com/content/l6366530525221v0/fulltext.pdf.

[22] F. Szekeley, and M. Knirsch, "Responsible leadership and corporate social responsibility metrics for sustainable performance", *European Management Journal*, vol. 23, no. 6, pp. 628–647, Dec. 2005. Retrieved October 8, 2011, from http://www.sciencedirect.com/science?_ob=MiamiImageURL&_cid=271956&_user=2460258&_pii=S0263237305001131&_check=y&_origin=&_coverDate=31-Dec 2005&view=c&wchp=dGLzVlVzSkWb&md5=3c03a5d5dd2d98fc4185660977acec00/1-s2.0 S0263237305001131-main.pdf

[23] Centro de Formação Profissional para o Comércio e Afins, "*Responsabilidade social das empresas – Estado de arte em Portugal"*, 2004. Retrieved November 11, 2011, from http://www.sairdacasca.com/recursos/docs/CECOA.pdf.

[24] C. Leite, and T. Rebelo, "Explorando, caracterizando e promovendo a responsabilidade social das empresas em Portugal", in *Proc. of the Eighth National Symposium on Research in Psychology*, Universidade do Minho, Portugal, 2010, pp. 2209–2225. Retrieved October 8, 2011, from http://actassnip2010.com/conteudos/actas/PsiTrab_15.pdf.