

**CORPORATE SOCIAL RESPONSIBILITY IN THE CONTEXT OF THE
CAPITALIST MODEL OF THE COUNTRY OF ORIGIN OF
MULTINATIONALS.
AN INTERNATIONAL COMPARATIVE ANALYSIS.**

Juan J. Durán (juanjose.duran@uam.es)

Nuria Bajo (nuria.bajo@uam.es)

Centro Internacional Carlos V
Universidad Autónoma de Madrid

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ABSTRACT

Presuming that company`s national context concerns to its corporate social and environmental responsibility (CSR), this paper aims to contribute to the knowledge of the relationship between synthetic indicators of international firm`s CRS, their market value and the capitalist (economic and institutional) model followed by the country of origin of such firms. The CSR indicators are picked out from performance oriented indexes that demand hard requirements to companies. To test this we carry out an empirical analysis over different variables of 342 international companies belonging to 30 different countries. We obtain four different groups of homogeneous countries based on to their individual CSR performance and their respective economic and institutional variables.

Key words: Corporate Social Responsibility (CSR), market value, economic and institutional system, capitalist model, multinational corporation (MCN).

JEL codes: F30, G15, M14, P50

1. INTRODUCTION

The legal and political systems and the economic and social structures of countries affect corporate strategies. The role and responsibilities of states, markets and civil society differ between models of contemporary capitalism followed by countries (Pauly and Reich, 1997; Whitley, 1998; Amable, 2006) where the corporate social and environmental responsibility (CSR), as a voluntary versus regulatory approaches, circulates on their boundaries. If it is so then nationality and institutional environment matters for understanding CSR; there exists a relationship between CSR and the national context of firms (Matten and Moon, 2008; Goldberg, 2009).

Recent studies set that companies that exhibit different performance magnitude in CSR it depends to a large extent on the regulatory environment. Also, it has been shown that there is a direct relationship between firm size and the budget for CSR programs (Hillman and Keim, 2001). Likewise it is suggested that future investigations might explain the differences among firm's investments (and performance) in CSR accordingly with their geopolitical location (Maignan and Ralston, 2002; Salzmänn et al., 2005).

Accepting that nationality matters and that there is a positive relationship between CSR and the national context we do not have a generally established method to be used for comparative studies. Some attempts have been made, although they cover very few countries (Lattemann et al., 2009; Alberden et al., 2006; Brammer and Pavelin, 2005; Maignan and Ralston, 2002). However, Goldberg (2009) has developed two indexes: one measuring CSR practices and one measuring CSR performance in 20 OECD nations, revealing striking differences between them.

In this sense we have to underline that while the CSR concept is globally accepted and understood, the launch of CSR program has to be strongly influenced by the economic, legal, social and political context where the firm is located. The analysis of the performance of companies - from different countries - that undertake rigorous CSR programs is the idea underlying the research question of this paper. Its contribution is to extend the analysis and the theoretical perspective to the relationship between CSR indicators of the multinational corporation (MNC) as a whole, its market value and the capitalist and institutional model of the country of origin. The CSR indicators are picked out from that performance oriented indexes that demand hard requirements to companies and to take active steps to be included in such indexes.

The rest of the paper is structured as follows. First we will review the literature concerning to the relationship between CSR and economic systems. Then we will formulate the hypothesis that we will test. And finally we will present results of the analysis and we will withdraw the conclusions.

2.ECONOMIC AND INSTITUTIONAL CONTEXT AND CSR PERFORMANCE

We consider that in order to undertake an international comparative analysis of CSR programs and it might become mandatory to deem the economic model framework of each individual country. To do so we differentiate between two main capitalist models (Hall and Soskice, 2001; Amable, 2006): liberal and regulated. While the liberal-capitalist relies more on free market rules and creditor rights, the regulated-capitalist model is widely based in relational transactions, with a broader outlook of networking interrelationships. Hence the liberal capitalist system is mostly based on the invisible

hand (of the market), and the regulated one adds certain dose of visible hand and rests more on relational capital networks.

Firms belonging to more liberal economies show more explicit form of CSR programs (and their accomplishments) than those companies belonging to more intervened and regulated economies, with less communication duties (transparency needs) with society (Matten and Moon, 2008) and with more embedded in CSR requirements.

Based on the characteristics of the two defined models of capitalism we find countries following the Anglo-Saxon tradition (common-law) and countries following the named French and German tradition of civil-codes. While the first ones exhibit less intervened financial systems with a developed capital market and a legal system strongly based on jurisprudence, the second ones, whose financial systems are more intervened, with a high weight of the credit (intermediated market) their legal system is based upon less influence of the jurisprudence, and more on codes of conduct.

However it becomes important to underline that there are differences between countries following the same capitalist model. For instance, within the Anglo-Saxon tradition we can find countries like the United Kingdom (UK) and the United States of America, (USA), with one of the most developed financial systems, but also we can find UK ex-colonial overseas territories (like India) with less level of income and less institutional development and less developed financial systems. Therefore, if among countries belonging to the same economic environment or tradition, we can find different legal based system-codes and different economic performance, one question arises: why don't these less financial developed countries adopt the legal system of the most

developed countries like the UK or the USA? The answer is complex because it takes into account several aspects related to humanistic and scientific disciplines. For instance, History empirically demonstrates that legal coding adopted by a country is hard to change. This change is difficult in a time dimension and in a geographical dimension. There exists a heavy momentum of tradition, customs and usages influencing the law making process, and consequently these affect also the political scope of big corporations. Rajan and Zingales (2003) share this perspective when they analyse the basis of financial development. They observe that many countries have experienced changes in their status of development. Accordingly, countries that by the early XX century were among the most financial developed, they found out themselves loosing pace as result of some historic affairs that strongly influenced. Hence, before the I-World War, the economic system was pretty more opened: there existed no passports (more freedom), labour force international movement or flows with no protectionism barriers. With a long distance perspective, only in the second half of XX century the Anglo-Saxon countries surpass the rest, that in accordance to Rajan and Zingales (2003) it was due to a more open market oriented policies enabling a faster development of the financial systems.

There is a direct relationship between economic, financial and legal systems. La Porta et al. (1998) promote the movement that relates the grade of development of any financial system with the law system and specifically with the protection of minority shareholders' interests. Under this perspective they built a set of indexes taking account the protection of minority shareholders' and creditors' interests through laws and regulations open a new path of thinking based on the interrelationship between law and finance.

Common law countries have higher development of capital markets and a more dispersed ownership structure of firms (which brings strong agency questions) while in civil law nations the main agency problem is between big and minority shareholders. In civil law countries, very high ownership concentration permits large shareholders to use their voting power to extract private benefits from small shareholders (Morck et al., 2005; Ruia and Santana, 2009). At the same time, in these countries, banks (credit institutions) play a much broader role, acting simultaneously both as lenders and shareholders. In common law countries institutional investors can help to reduce the managerial discretionary problem¹ (Crutchley, et al., 1999)

Multinational companies from different countries listed in an index that demands hard requirement measures of CSR achievement could experience some type of determinism in their strategies. Also the need to make more explicit CSR strategies increases as demand for CSR increases worldwide. The international and multinational firms selected to be included in such index have audited their social and environmental performance, and given their geographical scope are more exposed to be watched by NGOs and the media (Bendell, 2000), can be taken as a homogenous group in terms of CSR strategies. The CSR index could be interpreted as a synthetic indicator of international firms independently of the multidomestic strategies any multinational could have adopted in specific countries.

The determinist factor encouraged by the economic model followed by country of origin can be compensated if any company struggles to comply with international CSR

¹ By the middle of the 1990s institutional investors (insurance companies, pension funds, investment funds) held more than 75% of the shares of the British non financial firms, while in France were 59% and 39% of the German firms (Gillan and Starks, 2002)

standards. If this is so it will facilitate geographical and sector analysis. Thus companies adopt models of CSR compelled by size, geopolitical location and the industrial sector where they operate.

Our empirical analysis is based upon the Dow Jones Sustainability Index (DJSI) and the FTSE4Good. We have selected 342 companies belonging to 30 different countries, and with this sample we will assess if there exists significant differences between the performance in CSR of countries and what it is expected according to their capitalist models. The CSR level of any country will be defined by the relative performance of its companies listed in the above indexes. The sample of multinational firms may enable to reach sound and valid results given that all of them homogeneously display big market capitalization, ease of access to information and a high representation of the main different economic models of the countries of origin. In order to test this idea we will run a cluster analysis with a number of selected variables of CSR from those 342 companies. This analysis will group countries with analogue features, enabling us to assess why some economic systems are more inclined and favourable to CSR, or given the characteristics of the sample, why big multinational firms showed high levels of compliance of rigorous CSR international standards

Within this context the article of Maignan and Ralston (2002) was able to clearly identify remarkable differences between USA and the European countries in their respective performance in CSR. Their empirical research concerning 400 companies belonging to the USA, UK, France and The Netherlands concludes that while a 66% of the USA chosen companies and the 53% of the British firms state their CSR programs in their web sites: while only 29% and 25% of the French and Netherlands companies

do so. Consequently this paper somehow points out the differences between Anglo-Saxon and French derived financial systems above-mentioned.

Additionally Kolk (2005) studies the development of CSR programs for the main corporation playing in the coffee industry. Among these fifteen corporations, only two were European while the rest twelve were come from the USA. In the same way Brammer and Pavelin (2005) studying the corporations' contribution to the society they found out that American corporations' contributions were more than ten times English corporations' contributions. Aguilera and Jackson (2003) developed a theoretical model centred on management, capital and labour to identify and explain countries' attitudes towards CSR.

Recently Gjølberg (2009) has developed two different indexes for companies from OCDE countries. The first index ranks CSR programs, and the second one ranks the performance. By the combination of these two indexes it is possible to make a new ranking that reflects the higher commitment in CSR of companies belonging to certain countries. The results infer that while CSR concept is globally understood, however national, social, political and economic institutions play an important role when a company develops its own CSR program. These institutions push the companies beyond ethic concepts as might be considered beforehand. Therefore CSR indexes' indicators ought to be completed with other variables reflecting the actual links between CSR practices and economic and politic institutions.

With regards to the purpose of our study and aligned with our methodology there exist evidences in other empirical studies applying cluster and ANOVA analysis. Thus,

Henriques and Sadorsky (1999) and Buysse and Verbeke (2003) use the same methodology when they study the link between the commitment of firms for environmental protection and the stakeholders awareness. Also Bajo and Durán (2009) use this methodology to test the direct relationship between size and profitability with CSR performance of the Spanish Main companies listed in the stock exchange.

Hence, taking into account the different economic model the countries may follow and their relative institutional distance they may show, and the high and, to a certain extent, homogeneous CSR performance of multinational firms, we state the following hypothesis:

H: The CSR performance of the multinational firms that compliance rigorous international standards are not independent of the capitalist model of the country of origin.

3. METHODOLOGY AND DATA

Verifying H implies to identify each economic system with a cluster of nations (or geo-economic² world areas) generated by listed corporations featuring homogeneous performance with regards to CSR. To undertake this we will use cluster³ analysis running the minimum variance Ward's⁴ hierarchy algorithm for the standardized⁵ chosen variables.

2 A combination of different international economic and political factors relating to or influencing a nation or region.

3 The cluster analysis is a family of algorithms designed to identify and classify similar objects into homogeneous groups called clusters. Within each cluster, the objects are similar to each other, i.e. show high correlation (high internal homogeneity), being different from other objects of conglomerates, i.e. has low correlation (high external heterogeneity). In summary, the variance within the group is minimized and the variance between groups is maximized.

4 Ward Method forming clusters by minimizing the sum of squares (Mehra, 1996; Nath and Gruca, 1997; Lewis and Thomas, 1990; Fiegenbaum and Thomas, 1990; Veliyath and Ferris, 1997; Short, Palmer and Ketchen, 2002).

Occasionally this statistic analysis is criticized because it presumes beforehand that these clusters exist. However, in order to overcome this critic, two restraints are imposed for any valid number of clusters: (i) the number of groups found has to verify at least 65% of the total variance; and (ii) only a new group is valid if his addition verifies an improvement of at least another extra 5% the total variance.⁶

The sources of data to carry on the test are the CSR indexes DJSI and FTSE4Good. Both provide the market capitalization (by March 2009) and variables used to characterize different social responsible features of the companies listed. See table 4 for source dates of variables.

An important contribution to this work is made by Gompers, Ishii and Metrick (2003) who built another index that enabled them to consistently demonstrate the direct link between performing high standards of CSR and high market capitalization.

We also generate a new variable to interrelate *the contribution to the national GDP* and *the effort in CSR*; and we do this for every country, simply dividing the addition of the market capitalization of all the companies listed in CSR indexes of a given country into the country total GDP.

The first index we have used as a source of inputs for our analysis is the Dow Jones Sustainability Index (DJSI) which was created in 1999 as a result of the collaboration

5 The standardization of data definition is necessary to avoid those inconsistencies which occur when changing the scale of the variables. This process converts each score of the original data into a standardized value of an average 0 and standard deviation of 1 eliminating the bias introduced by differences in measurements of various variables used in the analysis.

6 Harrigan (1985), Lewis and Thomas (1990), Fiegenbaum and Thomas (1990), Más (1998).

among Dow Jones Indexes, STOXX Limited and SAM Group. The DJSI is a family of indexes itself, it lists companies belonging to different industrial sectors performing best practises in CSR. The DJSI family become a benchmark for sustainability criteria. We will use Dow Jones Sustainability World Index (DJSI World) as a source of inputs which only lists the best 10% performers in Corporate Social and Environmental Responsibility among more than 2,500 companies listed in the stock exchange Dow Jones Global Index.

The DJSI World is made upon the answers to a questionnaire designed specifically for each industrial sector. In order to attain comparable information all the questions are qualitative and the questionnaires have to be filled in by choosing among pre-defined answers. The answered questionnaire – filled in and signed by a top manager of every company– becomes the primary source of information to build the index ranking.

Other sources of information, apart from questionnaires are: sustainability reports, environmental reports, health and safety reports, corporate social climate enquires, annual reports, special reports (such as human capital management, corporate governance and R&D), corporate web page, other internal documents,... etc. Annalists of different indexes can contact any company for further clarification of the information gathered in order to attain the due comparable data.

Once any company is listed in an index a Corporate Sustainability Monitoring (CSM) Committee surveys it on a daily basis in order to identify and to assess any bad contingency that might impair its corporate reputation. Particularly the CSM Committee surveys:

- Commercial practices: fraud, money laundry, antitrust practices, balance sheet fraud, corruption.
- Human Resources violation: discrimination, forced reallocations, child labour.
- Lay-offs and labour conflicts: strikes, massive lay-offs.
- Accidents: labour accidents and deaths, technical failures, ecologic disasters, removed products, safety in the workplace.

An external consulting firm appraises the CSM Committee and annalist's job. The intention is a double check that may vouch for the quality, independence and objectivity of the surveillance.

All these steps, committees and appraisal and surveys allow to drop any company out of the index when its social image diminishes despite of the company itself receives a good global score. Before including any company in a ranking, the indexes take into several weighted criteria assigned in three dimensions: economic, social and environmental. See table 1.

Table 1: Assessment criteria for the Dow Jones Sustainability Index

The second index we have used as a source of data and information is the family FTSE4Good indexes, which derives from the stock exchange FTSE All-Share and FTSE Developed Index (Global).

The family FTSE4Good indexes ranks companies upon their compliance of CSR general standards. Table 2 shows the criteria – namely specific industry indicators - that

the companies listed in these indexes must comply with. These indicators gauge the management and the reporting in terms of CSR the corporate policies.

Table 2: Assessment criteria for the FTSE4Good index

The FTSE4Good index embraces 666 companies belonging to 23 different countries and the DJSI embraces 320 companies belonging to 26 different countries. However, the FTSE4Good excludes those like as tobacco industry corporations; weaponry manufactures (even spare parts suppliers); nuclear energy utilities; uranium mining companies. Table 3 shows the inclusion and assessment criteria for the FTSE4Good index.

Table 3: process of inclusion and assessment for companies listed in the FTSE4Good index.

Some preliminary tests have been conducted in order to prove the robustness of the data that will be used in the aforementioned methodology. One of these test has been the statistic correlation between the DJSI and the FTSE4Good index which cast a result of 0.95. Given this high correlation between indexes we have brought data from the FTSE4Good index to the to supplement the DJSI for those countries with no presence in this later one; and we did this using the inverse of the adjustment coefficient (quadratic minimums). Particularly this adjustment affects to Greece (for 8 companies), New Zealand (for 6 companies), Austria (for 4 companies) and Singapore (for another 4 companies). The Table A included in the appendix exhibits the information for each index of the countries and their companies.

As many reference studies points out (La Porta, 1998; Rajan and Zingales, 2003) in order to optimize the functionality of the results, and to make them easily comparable, the selection of the variables follows the recent trends. These recent trends pursue to minimize the dispersion of the number and nature of variables. Table 4 shows the definition of the chosen variables.

It is important to notice that in the early stages of this research we used the ratio GDP / Population (GDP per capita) as a variable for the study. But finally, it was dismissed because this ratio does not take into account inequality of rent distribution among the population. We overcame this using Gini's index as indicator in place of GDP / Population (GDP per capita).

Table 4: Variables selection

4. RESULTS

The cluster analysis is the statistic tool selected to validate hypothesis H: The CSR performance of the multinational firms that compliance rigorous international standards is not independent of the capitalist model of the country of origin. The importance of the CSR in a country is measured a weight (proportion) of the market capitalization of all the companies belonging to that country and listed in CSR indexes relatively to the GDP.

Table 5 shows the results reached after running this methodology and applying the validating constraints aforementioned.

The market capitalization DJSI / GDP variable is excluded from the analysis because it is the dependant variable.

Table 5: Variance Adjustment

The thirty countries of origin of our sample of firms generate five clusters of homogeneous geopolitical groups. This result verifies our hypothesis : The importance of the CSR in a country validated by international standard has a direct relationship with the economic system adopted. Furthermore these results are valid because they meet simultaneously the two constraints of the methodology.

However, in order to validate the structure of the five clusters the differences between them have to be relevant. To prove the consistency of the results we run one-way ANOVA test, which examines the variance for every single variable. Besides we run the F-test which checks up relevant differences between the average values. If the p-value of the F-test is less than 0.05 then it does show a statistic relevant difference between the average values of every single variable – with a 95 percent confidence level-

Table 6 summarizes the information that validates the structure of five clusters. All the tests have been conducted systematically for N=1, 2, 3, 4, 5, 6 (when N: number of clusters) until finding a full compliance of the restraints. Only for N=5 we find relevance for all the variables, because only then the p-value of the ANOVA's test-F is less than 0.05.

Table 6: Descriptive statistics: means, standard deviation and ANOVA test for 5 clusters

Consequently we can conclude that the results of our analysis, in compliance with the constraints and the entire validating test support our hypothesis statement: The CSR performance of the multinational firms that compliance rigorous international standards are not independent of the capitalist model of the country of origin.

Table 7 describes the composition of every clusters or homogeneous geopolitical groups in regards to their respective CSR behavior.

Table 7: Clusters

Table 8 shows the six variables means for every cluster; also it shows the global mean for the thirty countries

Table 8: Summary for 5 clusters

5. DISCUSSION OF RESULTS

We have sorted out these five clusters or homogeneous geopolitical groups in regards to their respective CSR behavior from the most liberal geopolitical group of nations to the most intervened or “related” one.

Cluster 1

This group embraces in a single country: Switzerland. This might look weird, because it could be hard to admit that a single element is considered “a group of one”. However one-member group could be accepted when the features of this group are remarkably different than the rest of the clusters. This is supported by Porter (1980).

In this particular case we find a relevant difference explained by the fact that the sum of market capitalization of Swiss corporations listed in the DJSI surpasses its GDP. When we review this variable for Switzerland its value is 1.08. The explanation for this peculiarity comes from what we call ‘Nestle effect or concentration effect’. This ‘Nestle effect’ means that a single company (Nestle) becomes the 25% of the total capitalization of the twelve Swiss DJSI listed firms.

We repeated all the analysis dimming the effect of this single company by giving different weights to the twelve Swiss companies. Then we found out that Switzerland becomes included in Cluster 2.

Hence according to the results of the analysis when dimming the ‘Nestle effect’ we have four cluster or four homogeneous geopolitical groups in accordance to their respective CSR behavior.

For the rest variables their results are found at mean level or slightly above the mean. This goes except for creditor rights variable, which scores 51.7% below the average. A close review of these results says:

- Economic freedom index scores 79.40 (+ 10.71% above the average);
- Human development index scores 0.96 (+5.49% above the average);
- Accounting transparency index scores 68.00 which means the highest along with Cluster 3 (+ 6.97% above the average);
- Gini’s index scores 0.34, slightly better the average.

Cluster 2

This group embraces 4 countries: Hong Kong, New Zealand, Singapore and United Kingdom. This group exhibits the best results for three variables:

- Economic freedom index scores 84.53 (+17.85% above the average);
- Accounting transparency index scores 73.75 (+16.01% above the average);
- Creditor rights index scores 3.75 far above the average value (+ 81.16% above the average).

However while for Human development index scores 0.94 (slightly above the average) for Gini's Index scores 0.40 (- 14.29% worst the average)

Cluster 2 results for market capitalization DJSI / GDP scores 0.11 which makes the third position of the five groups (-21.43% below the average) and becomes its worst result.

Cluster 3

This group includes five countries: Australia, Canada, USA, Finland and Ireland. All of its variables score are above the average except creditor rights, which scores the lowest along with Cluster 1.

- Economic freedom index scores 80.10 (+11.68% above the average);
- Human development index scores 0.96 (+ 5.49% above the average), which becomes the best score;
- Gini's Index scores slightly better the average value;
- For market capitalization DJSI / GDP scores 0.17; which is +21.43% above the average.

For Clusters 2 and 3, taking into consideration their countries' profile, the presence of Finland may result odd because in fact it is included in the Anglo-Saxon model geo-economic clusters.

Again the high market capitalization of its six CSR Finish listed companies versus the GDP –specially Nokia which means the 78% - explains to a certain extend the distortion in our analysis. While the average is 0.1411 for the rest of the countries within Cluster 3, Finland scores double (0.2812). Beside these six companies listed in the DJSI score remarkable results in CSR at international level forcing the inclusion of Finland within Cluster 3 (thus distorting).

Following what we did with the 'Nestle effect' we conducted again the whole process of analysis dimming this variable. We found out that Finland becomes then included in Cluster 4, which resembles more sound as it was expected.

Cluster 4

This group is the most crowded one as it includes fifteen countries: Austria, Belgium, Denmark, France, Germany, Greece, Italy, Japan, Netherlands, Norway, Portugal, South Korea, Spain, Sweden and Taiwan.

These countries exhibit a more intervened capitalism system following strongly oriented social security policies or following other paths derived from those admitted by old planned economies regimes.

Generally the variables showed worse scores than those exhibited by the preceding three clusters.

- Economic freedom index scores 69.49 (just -3.11% below the average);
- Human development index scores 0.95 (+4.40% above the average);
- Accounting transparency index scores 62.53 (-1.64% below the average);
- Creditor rights scores 2.00 (-3.38% below the average);
- On the contrary for the Gini's index Cluster 4 reaches the top score of the five groups (0.31, which means +11.43% better the average). This is fairly consistent with the definition and their nations' features.

However the variable market capitalization DJSI / GDP scores 0.09, very much below the average (-35.71%), which is lower than score of the three preceding clusters.

Cluster 5

This group includes five countries, those with most intervened or regulated economies. Their companies exhibit less CSR performance: Brazil, China, India, South Africa and Thailand. The analysis casts the worst results for all the variables except for creditor rights which scores +6.28% above the average of all the countries. Some comments regarding the rest variables and their results:

- Economic freedom index scores 58.22 (-18.82% below the average);
- Human development index scores 0.73 (-19.78% below the average);
- Gini's index scores 0.48, (-37.14% worst the average);
- Accounting transparency index scores 49.00 (-22.92% below the average);

- The variable market capitalization DJSI / GDP scores 0.06 (-57.14% below the average).

One could expect that India could be included in an Anglo-Saxon cluster (Lattemann, Fetscherin, Alon, Li and Schneider, 2009) but as we said in the theoretical part of this paper, the history and the socio-economic development (institutional distance) explained its inclusion in a more heterogeneous cluster from a capitalist model but not from the institutional distance perspective. Also China is clearly much “related” economy and it does not belong to Cluster 3 for similar reasons than the ones given for India. This cluster includes basically the more dynamic emergent economies that are part of our study of thirty countries.

6. CONCLUSIONS

The number of countries included in our study is determined by the nationalities of the companies listed in the Dow Jones Sustainability (DJSI) and the FTSE4Good indexes. These CSR indexes are the two most reliable and selective in terms of assessing the CSR performance of all the companies listed.

The empirical analysis is based on 342 international companies belonging to 30 different countries enables us to conclude that the importance of their CSR performance is not independent of the capitalist (economic) model of the country of origin of multinational firms.

The main contribution of this paper is to show empirically and justify theoretically that big multinationals CRS performance indicators are determine by the economic and

institutional context of the firm's country of origin. MNCs from developed countries are grouped together according to the economic capitalist system of its country of origin. However this does not apply when the MNCs comes from emergent countries where the grouping variables are the relative level of economic and institutional development.

The results of this research encourage future investigations to overcome not only its limitations but to answer some questions which can be arising. It should be tested if there is a relationship between industrial sectors of activity, the corporate social and environmental strategies of MNCs and the economic and institutional model of the host country. Another research question to answer is: does the similarity of capitalist systems between the parent companies economies and their subsidiaries economies in MNCs reduce the transaction costs of implementing and formulating CSR strategies.

REFERENCES

- Aguilera, R.V. and Jackson, T. (2003). The cross-national diversity of corporate governance: Dimensions and determinants, *Academy of Management Review*, 28, 447-466.
- Albareda, L., Tencati, A. Losano, J.M. and Perrini, F. (2006). The government's role in promoting corporate responsibility: A comparative analysis of Italy and UK from the relational state perspective, *Corporate Governance*, 6 (4), 386-400.
- Amable, B. (2006) *The diversity of modern capitalism*. Oxford University Press, Oxford.
- Bajo, N. and Durán, J.J.: (2009). Responsabilidad social y variables estratégicas en las grandes empresas españolas, *Revista de Responsabilidad Social de la Empresa*, 2, 49-74.
- Bendell, J.(Ed.) (2000) *Terms for endearment. Business, NGOs and sustainable development*. Greenleaf Publishing, Sheffield.
- Crutchley, C.E., Jensen, M.R., Jahera, J.S. and Raymond, J.E.(1999), "Agency problem and the simultaneity of financial decision making: The role of institutional ownership", *International Review of Financial Analysis*, 8, 177-197
- Dow Jones Sustainability World Indexes Guide*. Retrieved July 13, 2009, from http://www.sustainability-index.com/djsi_pdf/publications/Guidebooks/DJSI_World_Guidebook_10_2.pdf
- Fiegenbaum, A. and Thomas, H. (1990). Strategic groups and performance: the U.S. insurance industry, 1970-84, *Strategic Management Journal*, 11, 197-215.
- FTSE4Good Index Series*. Retrieved July 13, 2009, from http://www.ftse.com/Indices/FTSE4Good_Index_Series/Downloads/FTSE4Good_Inclusion_Criteria.pdf
- Gillan, S.L. and Starks, L.T. (2002), "Institutional Investor, corporate ownership and corporate governance", United Nations University Discussion Paper no. 2002/9
- Gjølberg, M. (2009). Measuring the immeasurable? Constructing an index of CRS practices and CRS performance in 20 countries, *Scandinavian Journal of Management*, 25, 10-22.
- Gompers, P., Ishii, J and Metrick, A. (2003). Corporate governance and equity prices, *Quarterly Journal of Economics*, 118, 107-155.
- Hall, P.A. and Soskice, D. (2001) *Varieties of capitalisms*. Oxford: Oxford University Press.
- Harrigan, K.R. (1985). An application of clustering for strategic group analysis, *Strategic Management Journal*, 6, 55-73.

- Henriques, I. and Sadorsky P. (1999). The relationship between environmental commitment and managerial perceptions of stakeholder importance, *Academy of Management Journal*, 42/1, 87-99.
- Hillman, A.J. and Keim, G.D. (2001). Shareholder value, stakeholder management, and social issues: what's the bottom line?. *Strategic Management Journal*, 22, 125-139.
- Kolk, A. (2005). Corporate social responsibility in the coffee sector: The dynamics of MCN responses and code development, *European Management Journal*, 23, 228-236.
- Lamberti, L., and Letteri, E. (2009). CSR practices and corporate strategy: evidence from a longitudinal case study, *Journal of Business Ethics*, 87: 153-168.
- La Porta, R., López de Silanes, F., Shleifer A. and VISHNY, R. (1998). Law and Finance, *Journal of Political Economy*, 106/6, 1113-1155.
- Lattemann, C., Fetscherin, M., Alon, I., Li, S. and Schneider, A. (2009). CSR communication intensity in Chinese and Indian multinational companies, *Corporate Governance: An international review*, 17(4), 426-442.
- Levy, M. (2009), "Control in pyramid structures", *Corporate Governance: An International Review*, 17: 77-89
- Lewis, P. and Thomas, H. (1990). The linkage between strategy, strategic groups, and performance in the U.K. retail grocery industry, *Strategic Management Journal*, 11, 385-397.
- Maignan, I. and Ralston, D. (2002). Corporate social responsibility in Europe and the U.S.: Insights from businesses self-presentations, *Journal Of International Business Studies*, 33, 497-515.
- Más, F.J. (1998). Strategic group analysis in strategic marketing: an application to Spanish savings banks, *Marketing Intelligence & Planning*, 16, 277-292.
- Morck, R., Wolfenzon, D. And Yeung, B. (2005), "Corporate Governance, economic entrenchment, and growth," *Journal of Economic Literature*, 43: 655-720
- Matten, D. and Moon, J. (2008). "Implicit" and "Explicit" CSR. A conceptual framework for comparative understanding of corporate social responsibility, *Academy of Management Review*, 33/2, 404-424.
- Mehra, A. (1996). Resource and market based determinants of performance in the U.S. banking industry, *Strategic Management Journal*, 17, 307-322.
- Nath, D. and Gruca, T.S. (1997). Convergence across alternative methods for forming strategic groups, *Strategic Management Journal*, 18, 745-760.
- Porter, M. E. (1980) *Competitive strategy*. Nueva York: Free Press.

Rajan, R. and Zingales, L.(2003). The great reversals: The politics of financial development in the Tweentieth Century, *Journal of Financial Economics*, 69, 5-50.

The Heritage Foundation. 2009 Index of Economic Freedom. Retrieved July 13, 2009, from http://www.heritage.org/index/PDF/Index09_ExecSum.pdf

Ruiz, M.V. and Santana, D.J. (2009) “Ultimate institutional owner and takeover defenses in the controlling versus minority shareholders context”, *Corporate Governance: An International Review*, 17: 238-254

Salzmann, O., Ionescu-Somers, A. and Steger, U. (2005). The Business case for corporate sustainability: Literature review and research options, *European Management Journal*, 23/1, 27-36.

Short, J.C., Palmer, T.B. and Ketchen JR., D.J. (2002). Resource-based and strategic group influences on hospital performance, *Health Care Management Review*, 27, 7-17.

United Nations Development Programme (UNDP) Human Development Indices. Retrieved July 13, 2009, from http://hdr.undp.org/en/media/HDI_2008_EN_Complete.pdf

Veliyath, R. and Ferris, S.P. (1997). Agency influences on risk reduction and operating performance: an empirical investigation among strategic groups, *Journal of Business Research*, 39, 219-230.

WORLD BANK (2007) *Human Development Report. World Development Indicators 2007.*

Table 1: Assessment criteria for the Dow Jones Sustainability Index

Dimension	Criteria	Weight (%)
Economic	Compliance with regulation / Corruption / Bribery	5.5
	Corporate Governance	6.0
	Risk and Crisis Management	6.0
	Industry specific criteria	According to industry
Environmental	Eco-Efficiency	7.0
	Environmental report (based only upon company's public information)	3.0
	Industry specific criteria	According to industry
Social	Corporate cooperation with citizenship / Philanthropy initiatives	3.5
	Good labor practices indicators	5.0
	Human capital development	5.5
	Social Report(based only upon company's public information)	3.0
	Attract and retain of talent	5.5
	Industry specific criteria	According to industry

Table 2: Assessment criteria for the FTSE4Good index

Criteria
Environmental sustainability
Relationship with stakeholders
Human Rights Observance
Supply Chain Quality Assurance
Anti-bribery practices

Table 3: process of inclusion and assessment for companies listed in the FTSE4Good index.

Questionnaires and direct communications	EIRIS and its network of consultants assess this information based upon adopted criteria	FTSE4Good reviewing committee	Approval of changes (admissions/exclusions)
Company reports			
Company web site			
FTSE direct assessment of new criteria			
April-June/October-December	July & August/Jan & February	September/March	

Table 4: Variables selection

Variable	Definition
IEF (<i>Index Economic Freedom</i>)	Embraces 50 economic variables characterized in 10 different categories: commercial policy, taxation, governmental intervention in the economy, monetary policy, capital flows and foreign investments, bank and financial system, wages and prices, creditor rights, regulatory affairs, and smuggling and black market. Each category ranges between 1 and 5, then each one is equally weighted and finally every country gets a global score reviewed yearly. The highest score means the less intervened. Source: The Heritage Foundation. Annual report: 2009
HDI (<i>Human Development Index</i>)	Comparative measure among world countries for live expectation, analphabetism, education and living standard. The scale ranges from 0 to 1; so the higher a country scores the more developed it is. Source: United Nations Development Programme (UNDP) – 2006 data published in 2008.
Gini's Index	Measures inequality of income distribution. The scale ranges from 0 to 100. The closer to 0 a country qualifies, the less inequality. Source: World Bank, 2007
RAS (<i>Rating on Accounting Standards</i>)	This index reflects the inclusion or exclusion of 90 different variables in a country's annual accounting report. The higher the score for a given country, the higher reliability of its accounting information Source: La Porta et al. (1998).
CR (<i>Creditor Rights</i>)	This index embraces four kinds of legal coverage to creditors: ban to “ <i>automatic stay</i> ”; preference for backed credits; need for creditors consent in a reorganization process and dismissal of managers doing a reorganization. For every kind of coverage, the scale ranges from 1 (the law protects the creditor) to 0 (otherwise). Therefore the global score ranges from 0 to 4. Source: La Porta et al. (1998)
Market Capitalization DJSI /GDP (<i>MC DJSI /GDP</i>)	For a given country the sum of the market capitalization of its companies listed in CSR index. It shows the contribution of CSR oriented companies to the national GDP.

Table 5: Variance Adjustment

	2C	3C	4C	5C	6C
IEF	69.14	72.61	71.65	80.16	80.24
IDH	98.18	91.4	90.97	88.15	88.1
I Gini	75.56	70.38	69.86	63.96	62.02
RAS	40.26	28.21	23.83	42.43	44.82
CR	0.00	26.24	43.95	55.98	61.45
Average	56.63	57.77	60.05	66.14	67.33
% variation		2.01	3.95	10.13	1.80

Table 6: Descriptive statistics: means, standard deviation and ANOVA test for 5 clusters

Variables	C1 (n=1)	C2 (n=4)	C3 (n=5)	C4 (n=15)	C5 (n=5)	F (ANOVA)	p-value
IEF	79.40 0.00	84.53 4.95	80.10 3.16	69.49 5.25	58.22 4.90	21.47	0.0000
IDH	0.96 0.00	0.94 0.01	0.96 0.01	0.95 0.02	0.73 0.08	38.67	0.0000
I. Gini	0.34 0.00	0.40 0.04	0.34 0.05	0.31 0.04	0.48 0.09	9.99	0.0001
RAS	68.00 0.00	73.75 4.92	72.20 5.07	62.53 10.16	49.00 28.09	2.46	0.0411
CR	1.00 0.00	3.75 0.50	1.00 0.00	2.00 0.85	2.20 1.64	5.31	0.0031
MC DJSI /GDP	1.08 0.00	0.11 0.21	0.17 0.11	0.09 0.06	0.06 0.07	22.45	0.0000

Table 7: Clusters

Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
SWIT	HK	AU	BELG	BRA
	NZ	CAN	DEN	CHI
	SI	FIN	FRA	IND
	UK	IRE	GER	S. AFRI
		USA	GRC	THAI
			ITA	
			JA	
			NETH	
			NOR	
			OEST	
			PTL	
			S. KOR	
			SP	
			SWED	
			TAIW	

Table 8: Summary for 5 clusters

Cluster	01. IEF	02. IDH	03. I Gini	04. RAS	05. CR	06. MC DJSI /GDP
1	79.40	0.96	0.34	68.00	1.00	1.08
2	84.53	0.94	0.40	73.75	3.75	0.11
3	80.10	0.96	0.34	72.20	1.00	0.17
4	69.49	0.95	0.31	62.53	2.00	0.09
5	58.22	0.73	0.48	49.00	2.20	0.06
Total	71.72	0.91	0.35	63.57	2.07	0.14

APPENDIX

Table A: Countries, tickers and number of companies listed in each CSR index

Country	Ticker	Number of companies	
		FTSE4Good	DJSI
Germany	GER	24	23
Australia	AU	34	19
Austria	OEST	4	
Belgium	BELG	7	1
Brazil	BRA		8
Canada	CAN	19	10
China	CHI		1
South Korea	S. KOR		3
Denmark	DEN	7	4
Spain	SP	16	20
United States	USA	138	49
Finland	FIN	6	6
France	FR	37	22
Greece	GRE	8	
Netherlands	NETH	15	14
Honk Kong	HK	6	1
India	IND		2
Ireland	IRE	3	1
Italy	ITA	12	7
Japan	JA	189	36
Norway	NOR	6	4
New Zealand	NZ	6	
Portugal	PTL	4	1
United Kingdom	UK	85	64
Singapore	SI	4	
South Africa	S. AFRI		3
Sweden	SWED	20	6
Switzerland	SWIT	16	12
Thailand	THAI		1
Taiwan	TAIW		2
Total		666	320