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## Article

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## **THE IMPACT OF CORPORATE SUSTAINABILITY STRATEGIES ON THE FINANCIAL PERFORMANCE OF ROMANIAN COMPANIES IN THE CONTEXT OF GREEN MARKETING**

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### **Abstract**

The current research paper aims at making a comprehensive analysis of the current green marketing initiatives adopted by the top performing Romanian companies, in order to understand the determinant factors that influence their green approach and to evaluate the impact of the sustainability strategies implemented on their financial performance. The research of business sustainability strategies in 31 top performing companies in Romania is conducted by analyzing their green marketing initiatives, the ability to communicate online current and past Corporate Sustainability (CS) actions (substantive action) and their future commitments towards green marketing (symbolic action). The authors also analyzed the impact of companies' dimensions on their green performance and commitment, substantiating that the size of a company is a significant influential factor. The analysis of the impact of substantive and symbolic action on the financial performance of the companies shows that there is not a significant correlation between these indicators.

**Keywords:** corporate sustainability, green marketing, green highlighting, green washing, sustainability strategy, eco-communication

**JEL Classification:** M30, M31

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### **Introduction**

In 1987, sustainability was defined by the World Commission for Development and Environment as "the economic development able to satisfy the current needs without compromising the ability for the future generations to satisfy their own needs", and since the sustainable development has become a concept of great interest across the economic world.

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The last 10-15 years, more significantly after Romania's European Union integration, have brought about an additional challenge for Romanian managers: the need to develop and implement a strategy aimed at balancing the social, environmental and economic needs of both the company and society (Epstein and Roy, 2001), more precisely a strategy that would lead to sustainable development.

Sustainable development has been and continues to be predominantly a macroeconomic concept. At microeconomic or organizational level it takes the form of „corporate sustainability” and is based on three interrelated dimensions: economic, environmental and social (Ebner and Baumgartner, 2006).

To develop a corporate sustainability strategy, it is necessary to consider not only the three dimensions mentioned above and their interdependency, but also a series of influences such as legislation, technological progress, the specific context of the market, social and cultural conditions, environment factors (Baumgartner and Ebner, 2010).

The paper aims at investigating the sustainability strategies implemented by some of the most important Romanian companies. The research focused on the relevant information provided by the companies' websites. The research identifies the economic and financial factors that contribute to the differentiation of corporate sustainability strategies, at least from the point of view of companies' voluntary communications.

The data concerning the sustainability strategies was accessed online, on the companies' websites, and was collected according to an evaluation framework which included five dimensions covering environmental and social issues: environmental conservation; b) recycling; c) eco-communication d) education; e) stakeholder engagement and initiatives for communities' sustainable development. Each dimension was analyzed from two perspectives: the substantial Corporate Sustainability (CS) projects implemented by the companies and the future symbolic commitments (projects which are in various phases of planning).

The research endeavour is not new in the scientific literature, as the research methodology has been adapted from Walker and Wan (2012). The novelty of the current approach consists in developing a relevant coding framework to analyze specific Romanian context and applying the evaluation model to the conditions of top performing Romanian companies. From this perspective the authors brought a valuable contribution to the existing level of knowledge, as there is a limited number of studies that approached the above mentioned CS issues in the Romanian context (Dumitru et al., 2011; Grundey and Zaharia, 2008).

The current research paper is briefly structured as follows: 1. the literature review and comparative analysis of previous studies that address the issues of sustainable development, green marketing, substantive action, symbolic action, green highlighting and green washing, 2. the description of the research framework, 3. the description of the research results, and 4. the interpretation of results and discussions concerning the current and future situations. The last section of the research paper objectively identifies the limitations of the research, synthesizes the conclusions and projects future development directions.

## 1. Literature review

The concept of “sustainability” has been for a long time associated with environmental sustainability. Only recently the concept has been extended to address economic and social issues too (Crane and Matten, 2010). From macroeconomic level, the term has been assimilated at microeconomic level. Consequently, as defined by the World Commission for Environment and Development, corporate sustainability is “meeting the needs of a firm’s direct and indirect stakeholders (such as shareholders, employees, clients, pressure groups, communities etc.) without compromising its ability to meet the needs of future stakeholders” (Dyllick and Hockerts, 2002).

Lo and Sheu (2007) define corporate sustainability as “a business approach that creates long-term shareholder value by embracing opportunities and managing risk from economic, environmental and social dimensions”. Analysing the relevant scientific literature, the two authors conclude that Corporate Sustainability (CS) has a final purpose, while Corporate Social Responsibility (CSR) represents an intermediary stage when the company attempts to reach equilibrium among the three pillars: profit, people and planet (Triple Bottom Line).

In this context, corporate sustainability management implies a wide range of instruments developed during the last two decades: environmental accounting, life cycle analysis, environmental reporting, sustainable product design, green marketing, social management standards, social audit, employee programs, corporate philanthropy (Hahn and Scheemesser, 2006).

A part of these instruments have evolved simultaneously with the concept of “corporate sustainability”. Relevant and correlated with the current research endeavour, the evolution of the “green marketing” concept is of great importance too. Peattie (2001) identifies three stages in the progressive framework: i) ecologic marketing – focused on reducing the dependency on harmful products; ii) environmental marketing – which means minimizing the negative impact on the environment by the exploitation of green consumption needs; iii) sustainable marketing – a more radical approach of markets and marketing which focuses on considering all environmental costs of production and consumption with the purpose of creating a sustainable economy.

In order to respond to the sustainability requirements, firms can address two types of initiatives: symbolic (public communication concerning various CS projects, commitments) and substantive (Berrone et al., 2009). It must be mentioned the fact that the authors describe the two types of actions as response to the environmental requirements of stakeholders, but considering the clarifications presented above, the authors ponder this association can be made also with corporate reactions to sustainability pressures. The substantive and symbolic CS actions must be in equilibrium in order to project a trustworthy corporate image. However, sometimes corporate management tends to emphasize the symbolic actions as opposed to the substantive CS actions, thus developing the green washing phenomenon, which can be defined as “poor environmental performance and positive communication about environmental performance” (Delmas and Burbano, 2011). Among this phenomenon’s causes there can be mentioned (Bansal and Kistruck, 2006): a) some stakeholders’ belief that ecological and social responsibility is incompatible with financial responsibility; b) various potential benefits (including financial) can be obtained only by communicating symbolic actions; c) if resolving by substantive actions

certain social or environmental problems the firm is confronting with raises the issue of high costs, managers refer to impressions' management instead.

The issue of correlation between social and environmental performance on one hand and financial performance on the other has been a subject of thorough analysis in the recent scientific literature, with a synthesis of the most relevant research papers developed by Salzmann, Ionescu-Somers and Steger (2005). The authors notice that there is a great variety of possible situations concerning the interdependency between social/environmental performance and financial performance as presented in the various theoretical and/or empirical research papers: a) the ecological and social performance lead to financial performance; b) financial performance leads to ecological and social performance; c) financial, ecological and social performance are synergic.

In these conditions of high uncertainty, an empirical research conducted on top Romanian companies is of great practical interest. The methodological framework is adapted from Walker and Wan (2012) and applied to Romanian context. After conducting their research on a sample of 100 Canadian companies, the authors concluded that: substantive environmental actions have a neutral influence on financial performance; symbolic actions are negatively correlated to financial performance; green washing (the discrepancy between symbolic and substantive actions) has a negative effect on financial performance; green highlighting (both substantive and symbolic actions) has no effect on financial performance.

## 2. Research methodology

The research sample consists of 31 top performing Romanian companies, selected from the A category companies listed on the Bucharest Stock Exchange website, [www.bvb.ro](http://www.bvb.ro). To the total number of 81 companies listed within this category, additional filters were applied. First, there were selected only the financially profitable companies according to their official reports for the financial year 2013. Furthermore, the companies which activate in industries with the highest potential environmental impact were selected: the *energy industry* (including petroleum industry, gas industry, electrical power industry, coal industry, nuclear power industry, and renewable energy industry), *manufacturing industry*, *automotive industry*, *telecom industry* and *retail*. A number of 22 companies listed on [www.bvb.ro](http://www.bvb.ro) complied with the sample selection criteria. In order to get a more representative sample dimension, it was further analyzed Top 50 most profitable companies in Romania, as listed on the [www.capital.ro](http://www.capital.ro) website. The companies that were not already included in the initial sample were selected, the filter criteria mentioned above was applied, and a new group of 8 companies, which complied with the necessary and sufficient research requirements, were selected and included in the sample.

*From the methodological point of view, the research questions and the development of research hypothesis have been approached separately.*

To achieve the research goals concerning the analysis of corporate sustainability strategies (with focus on green marketing and communication) and the relevant influential factors, the authors have categorized the research objectives in two sections.

The first section aims at acquiring an understanding of the current situation concerning the short and long term approach of the companies' corporate sustainability endeavours. In this respect, the authors have formulated three major research questions, as follows:

- *What specific environmental issues are the top firms in Romania addressing and how do these issues differ among industries (industrial activities)?*
- *What is the approach of top performing Romanian Companies towards substantive and symbolic actions?*
- *How do these issues differ between Romanian Companies and Subsidiaries of Multinational Companies?*

The second section of the research aims at providing an understanding of the causal relationships among companies' size, their financial performance and the substantive and symbolic actions they communicate online. The following research hypotheses were formulated, considering the findings of previous scientific studies in the field of Corporate Sustainability (CS) and green marketing literature:

*Hypothesis 1: Substantive CS actions will have a positive effect on financial performance.*

*Hypothesis 2: Symbolic CS actions will have a negative effect on financial performance.*

*Hypothesis 3: Green-washing will have a negative effect on financial performance.*

*Hypothesis 4: Green-highlighting will have a positive effect on financial performance.*

The first four research hypotheses were previously proposed for validation by Walker and Wen (2012) for the Canadian CS evaluation. The following four research hypotheses have been developed by the authors for the specific situation of Romanian companies:

*Hypothesis 5: The size of the company has a positive effect on the substantive CS actions.*

*Hypothesis 6: The size of the company has a positive effect on the symbolic CS actions.*

*Hypothesis 7: The size of the company has a positive effect on green highlighting.*

*Hypothesis 8: The size of the company has a negative effect on green washing.*

In the study, the unit of analysis was the website, while the coding unit was corporate social responsibility material related to the natural environment conservation, recycling, eco-communication, education and stakeholder's engagement and initiatives for communities' sustainable development.

In addition, the authors also included other relevant reports, such as sustainability or corporate social responsibility reports which were available on the companies' websites. While other studies have examined only sustainability reports (Arevalo 2010; Castello and Lozano 2011; Habisch et al. 2011) the authors corroborated these information with the green marketing information available on the companies' websites, which reflect their commitment towards projecting a socially responsible corporate image.

Gathering and encoding the websites data was carried out in three steps, adapted from the research methodology developed by Walker and Wen (2012).

- First, the authors gathered within a document (averaging four pages per company and 124 pages in total) all websites information pertaining to the CS initiatives in order to

obtain reliable results across the sample. The authors conducted a series of meetings and training sessions to ensure proper encoding and a unitary approach across the sample. The authors randomly selected five companies from the sample and independently evaluated the websites. The results of the evaluation process were discussed; all discrepancies or problems with the encoding were identified and resolved before the actual encoding process began. To ensure reliability, 10 companies overlapped among the authors. The percentage of cross-encoded websites was over 30% of the entire sample and in all cases the information attained from the websites by the different encoders was the same.

- The second phase of the empirical research process consisted in a preliminary analysis of the raw data, conducted to identify CS issues addressed by the companies in the sample. The goal was to create a relevant coding framework which would include all environment issues firms were engaged in or were planning to develop in the future as well as the number of specific sustainability issues within each category. This enabled authors to initiate data quantification.

- The third phase of the website evaluation process consisted in scoring the companies' performance according to the coding framework previously developed (presented in table no. 1).

**Table no. 1 Coding framework for companies' websites**

Sustainability Indicator	Score (0- 25 points)
<b>Environmental conservation</b>	<b>0-5</b>
• ISO 14001 Standard	2
• Integrated Quality Management System	1
• Certification of green performance/ Environmental management system, Waste management policy	1
• Other standards adopted by the company/ Environmental audits/ Conservation and restoration strategies/ Carbon capture and recovery/ Selection of cleaner transportation systems	1
<b>Recycling</b>	<b>0-5</b>
• Eco Technology (Technology development)	0-2
• Use of ecological and clean materials (use of recycled or re-usable containers in logistics, use of recycled or re-usable materials in products, Lifecycle analysis, environmentally friendly product innovation)	0-2
• Use environmental considerations in distribution and reverse logistics systems	1
<b>Eco-communication</b>	<b>0-5</b>
• Launch of green positioned brands onto the market	0-2
• Employ green arguments in advertising and promotions	0-2
• Use eco-labels or environmental certification	1
<b>Education and Stakeholder engagement</b>	<b>0-5</b>
• Employee training	1
• Develop market research to detect green needs in the markets	1
• Green alliances or collaboration agreements with governmental agencies, business partners and NGOs	0-2
• Consumer awareness campaigns	1

Sustainability Indicator	Score (0- 25 points)
<b>Initiatives for communities’ sustainable development</b>	<b>0-5</b>
• Sponsorship or patronage of environmental groups or events	0-2
• Educational and Health initiatives for the local workforce	1
• Engineering specific solutions to solve communities’ social problems	1
• Social benefits for employees	1

The empirical research included collecting information for a series of relevant indicators that enabled authors to conduct the research according to the selected methodology.

In segmentation process focused on evaluating correlations’ intensity (carried out with the Eviews software) and on future modelling processes, the following variables have been examined: *dependent variables, independent variables and control variables.*

**Dependent variables:**

*Environmental categories* - The literature review process and the analysis of 5 randomly selected websites from the research sample enabled the development of a relevant encoding framework which includes 5 CS categories addressed by Romanian companies: environmental conservation, recycling, eco-communication, education and stakeholder’s engagement, and initiatives for communities’ sustainable development. For each category the authors considered a cumulative scoring which ranged from 0 to 5 points. For a more accurate website analysis, the specific activities within each category were further detailed and the appropriate scores were assigned, as described in table 1 above.

- *Financial Performance* - Financial performance was assessed using the indicator Return on Assets (ROA), which was calculated as the ratio between Net Profit and Current Assets. The data was collected from the official financial reports listed by the Bucharest Stock Exchange (www.bvb.ro).

- *Size* - Artiach et al. (2010) identifies size as an important influential factor for CS performance, and evaluates it as total assets. Galbreath (2011) also studies the influence of size on CS actions. The study shows that the value of total assets is correlated to the company’s ecological and social performance. In order to get a comprehensive result, the size of the companies was assessed from three perspectives: value of total assets, total number of employees and total net revenues (criterion suggested in Recommendation 2003/361/EC concerning the definition of SMEs).

**Independent variables:**

- *Substantive action* - This variable corresponds to the extent to which a firm provides concrete actions, or steps they have taken to implement the CS activities described in the encoding framework. The score assigned for substantive action ranges from 0 to 5 points for each category and the cumulative score ranges from 0 to 25 points for each company.

- *Symbolic action*- This variable corresponds to the extent to which a firm communicates online its commitment to the environment and their future plans. The scoring process for symbolic action is the same as for substantive action (0 to 5 points for each CS category), thus enabling us to make a relevant comparison between the commitment and future plans of the companies and substantive actions already



implemented. The cumulative score for symbolic action ranges from 0 to 25 points for each company.

- *Green washing*- The indicator is calculated by subtracting the value of substantive action from that of symbolic action. The higher the number, the greater the green-washing. Green-washing ranged from -20 to 1, and had a mean value of -5.16 (Standard Deviation = 5.85). The high level of the Standard deviation shows the inconsistency across the sample concerning companies CS approaches. This highlights the fact that top Romanian companies fail to enhance their future plans concerning own sustainable endeavours through online communication.

- *Green highlighting*- The indicator is calculated adding symbolic and substantive actions, where a high positive number indicates a high combination of the two types of actions, and the higher the number, the higher the green-highlighting. Green-highlighting ranged from 0 to 45 across the companies in the sample, and had a mean value of 14.7 (SD = 9.49). The high level of the Standard deviation also shows that there is not a unitary approach of Romanian companies concerning implementing and communicating their present and future CS initiatives.

#### **Control variables:**

- *Financial leverage* - Previous studies (Khan et al., 2015; Nakao et al., 2007) identify the financial leverage as potential influential factor of CS initiatives. In the current research, the financial leverage is expressed as total liabilities divided by shareholder's equity.

- *Current liabilities* - These liabilities were controlled, as debts that are due to be paid within one year or within an operating cycle, might affect the companies' decisions to invest in CS activities, or might reflect their current investments in their sustainable development.

- *Total liabilities* - These liabilities were controlled, representing the current value of all future cash payments that are reasonably expected to be liquidated at some date beyond one year or an operating cycle, and which are likely to influence the CS strategy of Romanian companies.

### **3. Results and discussions**

The results of the current research are structured in two sections, based on the research questions and hypothesis. The first section addresses the research questions, while the second section, based on descriptive statistics and correlations, addresses the research hypothesis.

- **Environmental issues addressed by Romanian companies**

Research question 1: "What specific environmental issues are the top firms in Romania addressing and how do these issues differ among industries?"

The evaluation process of companies' websites enabled the better understanding of their perception towards sustainability, by analyzing the scores assigned for each CS category. The research results are presented in table no. 2. The cumulative scores obtained by

companies for substantive and symbolic actions (green highlighting) were considered, for at this stage of research, the objective was to understand their current and future CS initiatives.

**Table no. 2: Elements of descriptive statistics related to environmental issues implemented by corporations and their future sustainable development plans (Green highlighting)**

<b>Environmental categories</b>	<b>Mean</b>	<b>Standard deviation (SD)</b>	<b>Range</b>
Environmental conservation	4.4194	2.0780	10
Recycling	2.9677	2.1982	10
Eco-communication	1.5484	2.1266	5
Education and Stakeholder engagement	2.6774	2.1508	10
Initiatives for communities' sustainable development	3.0323	2.5362	10

The most relevant initiatives addressed by Romanian companies are towards Environmental Conservation, with an average score of 4.4194 from a maximum of 10 points. An interesting fact to notice was that for “Eco-communication” category, despite the lowest score across the research sample it obtained, respectively 1.5484 (SD 2.1266), it refers to an amplitude of only 5 points. If the results are redeemed for amplitude or a score of 10 points, then the eco-communication can reach an average level in relation to the other variables. The relatively high level of the standard deviation shows there is no consistent approach across the sample towards the CS categories evaluated.

The authors detailed the analysis, trying to understand how the CS approaches differ among industries. The results of the analysis are presented in table no. 3.

The companies that activate in the energy industry have the highest average scores across the sample with a higher focus on Environmental conservation issues (mean 6.1250, SD 1.7269). However, the Eco-communication average score is very small (1.625, SD= 2.1998), which shows a low interest in launching green positioned brands on the market, employing green arguments in advertising and promotions or using eco-labels for their products. The lowest scores are obtained by companies that activate in the manufacturing sector, which have almost no present or future interest in Eco-communication.

**Table no. 3: Cross industry significant differences per environmental issue according to elements of descriptive statistics**

<b>Environmental categories</b>	<b>Energy Mean (SD)</b>	<b>Manufacturing Mean (SD)</b>	<b>Pharma Mean (SD)</b>	<b>Automotive Mean (SD)</b>	<b>Telecom Mean (SD)</b>	<b>Retail Mean (SD)</b>
<b>Environmental conservation</b>	6.1250 (1.7269)	3.4167 (2.2747)	4.0000 1.0000	5.0000 (0)	4.5000 (0.7071)	3.6667 (2.3094)
<b>Recycling</b>	3.7500 (2.8661)	1.9167 (1.5643)	2.0000 (2.6458)	4.0000 (1.0000)	5.0000 (0)	3.6667 (2.3094)
<b>Eco-communication</b>	1.6250 (2.1998)	0.5000 (1.4460)	1.6667 (2.8868)	2.6667 (2.5166)	3.0000 (1.4142)	3.3333 (2.8868)
<b>Education and Stakeholder engagement</b>	4.1250 (2.7484)	1.4167 (1.6765)	3.0000 (1.0000)	3.0000 (2.0000)	4.0000 (0)	2.3333 (1.5275)

Environmental categories	Energy Mean (SD)	Manufacturing Mean (SD)	Pharma Mean (SD)	Automotive Mean (SD)	Telecom Mean (SD)	Retail Mean (SD)
Initiatives for communities' sustainable development	4.7500 (3.0119)	1.3333 (1.6697)	2.6667 (2.5166)	4.6667 (0.5774)	4.5000 (0.7071)	3.0000 (2.6458)

Research question 2: "What is the approach of top performing Romanian companies towards substantive and symbolic actions?"

The research findings show that Romanian companies tend to highlight the current and past green marketing endeavours more than they communicate about their future CS initiatives. The environmental categories addressed symbolically and substantively by companies and their cumulative scores across the sample are presented in figure no. 1. The environmental categories represented are: 1. environmental conservation, 2. recycling, 3. eco-communication, 4. education and stakeholder engagement and 5. initiatives for communities' sustainable development. The score obtained by top performing Romanian companies for environmental conservation is significantly higher for substantive action (approx. 100 points out of the maximum score of 155 points) than for symbolic action (less than 40 points).

For the Education and Stakeholder Engagement category, the green washing value is slightly positive (less than 5 points), which demonstrates an equilibrium between the communication of the actual green accomplishments (green walk) and the highlighting of future commitments (green talk).

For the other three environmental categories addressed by Romanian companies, the significant difference between green walk and green talk suggests a negative value for green washing. Although the higher the value of green washing, the lower will be the stakeholders' trust, the authors considered that a significant negative value for this indicator suggests top Romanian companies inefficiency to reassure their stakeholders of their continuous commitment towards accomplishing the current CS objectives and towards permanently improving their green capabilities.

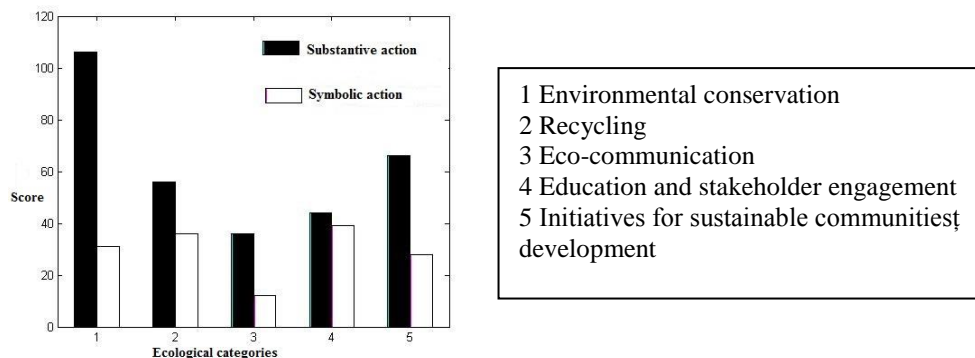


Figure no. 1: Substantive and symbolic actions across the environmental categories addressed by Romanian companies

Research question 3: “How do these issues differ between Romanian companies and Subsidiaries of Multinational Companies?”

The research results, presented in table no. 4, show a significant difference between the approach multinational companies subsidiaries in Romania and Romanian companies, the latter showing a much lower green highlighting performance than the former.

**Table no. 4: Significant differences in the corporate sustainability approach across Romanian companies and Romanian subsidiaries of multinational companies**

Environmental categories	Multinational Subsidiaries		Romanian Companies	
	Mean	SD	Mean	SD
Environmental conservation	5.1	2.0248	4.0952	2.0713
Recycling	4.9	1.9692	2.0476	1.6576
Eco-communication	3.6	1.7764	0.5714	1.5024
Education and Stakeholder engagement	4.2	2.3944	1.9524	1.6272
Initiatives for communities’ sustainable development	4.5	2.5055	2.3333	2.2876
No of companies	10		21	

- The second part of the research investigates the current situation by employing descriptive statistics and correlations with the aim to validate the Research Hypothesis.

The interpretation of the collected data is presented in table no. 5. The calculation of Pearson correlation coefficient for the 11 analyzed variables is presented in table no. 5, indicating the correlation matrix of the financial indicators with the green marketing scores. The interpretation of results is further detailed for each research hypothesis.

**Table no. 5: The correlation matrix of financial indicators and green marketing scores**

	SER01 Return on assets	SER02 Financial leverage	SER03 Number of employees	SER04 Total assets	SER05 Total net revenue	SER06 Total liabilities	SER07 Current liabilities	SER08 Substantive actions	SER09 Symbolic actions	SER10 Green highlight	SER11 Green washing
SER01	1.00000	-0.20388	0.08448	0.09435	0.09981	0.04707	0.09283	0.39255	0.15535	0.34184	0.31696
SER02	-0.20388	1.00000	-0.03268	-0.11018	0.02198	0.09357	0.17266	-0.17546	-0.05873	-0.14775	-0.14985
SER03	0.08448	-0.03268	1.00000	0.78777	0.91935	0.86331	0.88271	0.57109	0.68827	0.71502	0.10815
SER04	0.09435	-0.11018	0.78777	1.00000	0.76728	0.86158	0.72747	0.44284	0.83552	0.69659	-0.14659
SER05	0.09981	0.02198	0.91935	0.76728	1.00000	0.90128	0.93667	0.58242	0.619387	0.69033	0.17331
SER06	0.04707	0.09357	0.86331	0.86158	0.90128	1.00000	0.94389	0.52617	0.73646	0.70697	0.02152
SER07	0.09283	0.17266	0.88272	0.72747	0.93667	0.94389	1.00000	0.56607	0.62758	0.68300	0.14893
SER08	0.39255	-0.17546	0.57109	0.44284	0.58242	0.52617	0.56607	1.00000	0.48049	0.91071	0.74271

	SER01 Return on assets	SER02 Financial leverage	SER03 Number of employees	SER04 Total assets	SER05 Total net revenue	SER06 Total liabilities	SER07 Current liabilities	SER08 Substantive actions	SER09 Symbolic actions	SER10 Green highlight	SER11 Green washing
SER09	0.15535	-0.05873	0.68827	0.83552	0.61939	0.73646	0.62758	0.48049	1.00000	0.79983	-0.23039
SER10	0.34184	-0.14774	0.71502	0.69659	0.69033	0.70697	0.68300	0.91071	0.79983	1.00000	0.39981
SER11	0.31696	-0.14985	0.10815	0.14659	0.17331	0.02152	0.14893	0.74271	-0.23039	0.39981	1.00000

The first four research hypotheses, which aim to validate the findings of other research studies concerning the causal relationship between financial performance and the substantive and symbolic CS initiatives for Romanian companies are reiterated in table no. 6.

**Table no. 6: The validation/invalidation of the research hypothesis derived from scientific studies concerning corporate sustainability (Walker and Wen, 2012) and from the scientific literature on green marketing**

Hypothesis statement	Correlated variables	R Value	Observations
H1: <i>Substantive actions will have a positive effect on financial performance.</i>	SER08 SER01	R=0,39255	<i>Correlation invalidated</i>
H2: <i>Symbolic actions will have a negative effect on financial performance.</i>	SER09 SER01	R= 0,15535	<i>Correlation invalidated</i>
H3: <i>Green-washing will have a negative effect on financial performance.</i>	SER10 SER01	R= 0.34184	<i>Correlation invalidated</i>
H4: <i>Green-highlighting will have a positive effect on financial performance.</i>	SER11 SER01	R= 0,31696	<i>Correlation invalidated</i>

Note: The correlations were validated for values of Pearson Correlation Coefficient (R) higher than 0.5 and the financial performance was substituted by the indicator Return on Assets (ROA or SER01).

The first four research hypotheses are not validated as intensity for Romanian companies included in the representative research sample. It is, however, interesting to notice the correlation of these variables (SER08-SER11) with the profit (SER12) for both Symbolic Actions (SER09 with R=0,819199) and Green highlight (SER10 with R= 0,8192). (Table no. 7)

**Table no. 7: Correlation matrix of profit with green marketing scores**

	SER08 Substantive (CS) actions	SER09 Symbolic (SC) actions	SER10 Green highlight	SER11 Green washing	SER12 Profit
SER08	1,000000	0,480491	0,910713	0,742705	0,444708
SER09	0,480491	1,000000	0,799825	-0,230391	<b>0,819200</b>
SER10	0,910713	0,799825	1,000000	0,399813	<b>0,690183</b>
SER11	0,742705	-0,230391	0,399813	1,000000	-0,132047
SER12	0,444708	0,819199	0,690183	-0,132047	1,000000

The last four hypotheses were formulated by the authors in order to confirm the general perception of researchers according to which the size of a company influences the CS strategic approach. For a consistent result the authors have considered the size of the company from three perspectives: the net revenue (SER05), the total assets of a company (SER04), and the number of employees (SER03). (Table no. 8)

**Table no. 8: The validation/invalidation of the hypothesis derived from the general research hypothesis of the correlation between the company’s size and its corporate sustainability strategy**

Hypothesis statement and its endogenous variable	Exogenous correlated variables (R Value)			Observations
	SER03	SER04	SER05	
H5: The size of the company has a positive effect on the substantive actions. (SER08)	R=0,57109	R=0,44284	R= 0,58242	Correlation predominantly validated
H6: The size of the company has a positive effect on the symbolic actions of CS. (SER09)	R=0,68827	R=0,83552	R=0,619387	Correlation integrally validated
H7: The size of the company has a positive effect on green highlighting. (SER10)	R=0,71502	R=0,69659	R= 0,69033	Correlation integrally validated
H8: The size of the company has a negative effect on green washing. (SER11)	R=0,10815	R=-0,1466	R=0,17331	Correlation integrally invalidated

Note: The correlations were validated for Pearson’s correlation coefficient values greater than 0.5.

In a correct statistical interpretation the Hypothesis H5 is not integrally validated and H8 is not integrally invalidated, according to which in the end, their alternatives become available, respectively the size of the company does not have a positive effect on the substantive CS actions, nor does the size of the company have a positive or negative effect on green washing, according to the research findings.

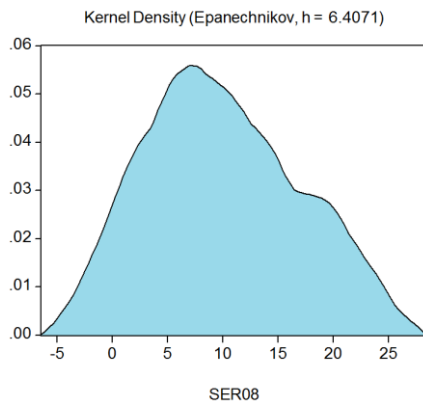
The hypothesis H6 and H7 are integrally validated, thus demonstrating that the size of the company has a positive effect on the symbolic CS actions and on the green highlighting strategy, thus identifying distinctive features of Romanian companies.

From the complex analysis of the correlation matrix detailed in table 5, another aspect of the comparative evaluation of the correlative or associative intensity of symbolic actions in parallel with substantive actions can be identified, with a significant impact in defining the specific features of Romanian companies. Thus, the intensity of the correlation between symbolic actions and total liabilities or current liabilities (R= 0,61939 and R= 0,73646) is much higher than the intensity of the correlation between symbolic action and the same variables (R= 0,58242 and R= 0,52617) across the research sample.

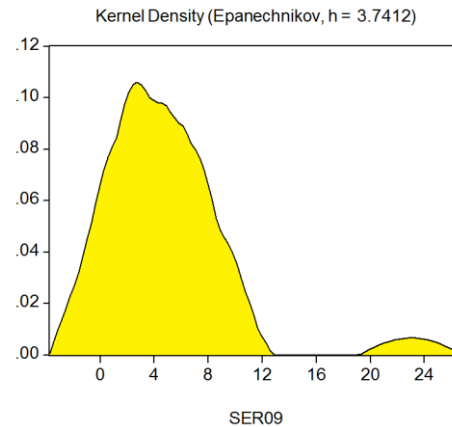
Also, it can be derived from the distribution of data across the two variables that the symbolic actions (figure no. 3) have a slightly polarized position of the Kemel frequency distributions, compared to the distribution of substantive actions (figure no. 2).

Another research finding refers to the fact that the value of the total assets and net income has a positive effect on the implementation of corporate sustainability actions by Romanian companies.

The results of the current research show that the most relevant initiatives addressed by Romanian companies are towards Environmental Conservation, as most of the companies included in the research sample have implemented ISO 14001 Standard, have an Integrated Quality Management System while some of them made even more steps towards improving their environmental performance by adopting additional standards and internal regulations.



**Figure no. 2: The distribution of the repartition density for substantive (CS) actions**



**Figure no. 3: The distribution of the repartition density for symbolic (CS) actions**

The category “Eco-communication” assessed as both symbolic and substantive communication (green highlighting), has the lowest average score across the research sample, reaching only 15% of the maximum communicational potential. The substantive eco-communication is prevailing, while 64% of the companies were assigned 0 points for their symbolic commitment to launch green positioned brands onto the market, to use eco-labels or environmental certification or to employ green arguments in advertising and promotions.

The cross industry analysis has shown that the companies that activate in the energy industry have the highest average scores across the sample, with a strong emphasis on Environmental conservation issues. This can be a reactive approach to stakeholders’ pressures, which are considerably higher in this industry due to the significant negative environmental impact of specific value chain activities. Also, the companies in the energy industry enhance their role in raising stakeholders’ awareness of environmental issues by supporting their employees and consumers to improve own “green knowledge” and by establishing green alliances or collaboration agreements with governmental agencies, business partners and NGOs. These emphases on the responsible behavior can be considered a proactive strategy to enhance stakeholders’ goodwill towards the companies and compensate for the negative public perception. However, the Eco-communication average score is very small, slightly above the average across the sample, which demonstrates that more efforts should be directed towards projecting a green corporate image.

The lowest score across the sample for all the environmental categories evaluated was assigned to the companies that activate in the manufacturing industry, which have almost no interest in developing an Eco-communication strategy. This result might be explained by the fact that these companies conduct mainly B2B operations, and the lifecycle analysis of the environmental impact across the partners in the value chain is still not common for Romanian business environment. However, the authors expect to see an increase in the interest of the most socially responsible companies in collaborating with business partners

that share their green principles, thus forcing the manufacturing companies to improve their CS strategies and Eco-communication efficiency in order to gain competitive advantage.

### **Conclusions**

From the perspective of substantive and symbolic CS actions communicated online by the Romanian companies comparative analysis the authors can conclude that the value of Green washing is low, which demonstrates the fact that Romanian companies rely on promoting concrete CS accomplishments rather than on projecting a desired green image which is to be developed in the future. This can be interpreted as a positive aspect if one considers it as an ethical approach of the companies, but a more efficient communication concerning the desired green image doubled by relevant information on the green agenda accomplished so far, can raise stakeholders' trust and improve its corporate image positioning.

Another result of the current research refers to the green performance of Romanian companies compared to Romanian subsidiaries of multinational companies. The research results show that multinational companies prove a higher commitment towards substantive and symbolic CS actions compared to Romanian companies, while the transfer of experience and know-how towards their Romanian subsidiaries provide them with a significant competitive advantage. The largest differences between the two types of Romanian corporations were registered with regard to Eco-communication and Education and Stakeholders' engagement initiatives. These results are relevant for Romanian business environment and underline the fact that Romanian companies need to keep up with their global competitors and improve their CS performance in order to remain competitive on the long term.

As far as the impact of CS strategies on the financial performance is concerned, the results of the current research do not confirm the existence of a significant correlation between the two indicators for Romanian companies.

The determinant factor with a high impact on the CS strategies is organization's size. The authors have demonstrated that the value of net income, total assets and the number of employees have a positive impact on the performance of substantive and symbolic CS strategy in Romania. This result can be further analyzed and developed in order to construct a probable scenario for future developments of CS initiatives in Romanian business environment.

Despite the worldwide increasing relevance of corporate sustainability concept, the subject is not sufficiently approached by Romanian experts. The objective of the paper was to develop a relevant evaluation framework for the performance of CS strategies implemented by Romanian companies, to apply this evaluation model on the representative research sample of top performing Romanian companies and to create a new perspective for researchers and practitioners on influential factors and the impact of CS strategies on financial performance of Romanian companies.

The current research paper delivers an insight on the CS context in Romania through the results of the comparative analysis of the issues addressed by companies in various industries as well as by the analysis of Romanian companies CS performance compared to the subsidiaries of multinational companies that activate in Romania.



The relevance and significant contribution of the current research consists of the encoding framework which can serve as a research model to be used in future endeavours by Romanian researchers, in order to deepen the understanding of CS context in Romania.

The results of the current research paper will be verified and studied by expanding the research sample to include a greater number of top performing companies. Also, the authors intend to develop a specific encoding framework for Small and Medium Sized enterprises in Romania. A limitation of the study is represented by the information collected only from the companies' websites, limitation which will be addressed in future studies by expanding the communicational sources analyzed.

## References

- Artiach, T., Lee, D., Nelson, D. and Walker, J., 2010. The determinants of corporate sustainability performance. *Accounting & Finance*, 50(1), pp. 31-51.
- Bansal, P. and Kistruck, G., 2006. Seeing is (not) believing: Managing the impressions of the firm's commitment to the natural environment. *Journal of Business Ethics*, 67(2), pp. 165-180.
- Baumgartner, R. J. and Ebner, D., 2010. Corporate sustainability strategies: sustainability profiles and maturity levels. *Sustainable Development*, 18(2), pp. 76-89.
- Berrone, P., Gelabert, L. and Fosfuri, A., 2009. The impact of symbolic and substantive actions on environmental legitimacy. *Working paper 778, IESE Business School, University of Navarra*, [online] Available at: <<http://ssrn.com/abstract=1349063>> [Accessed 22 March 2015].
- Delmas, M. A. and Cuere Burbano, V., 2011. The drivers of greenwashing. *California Management Review*, [online] Available at: <<http://ssrn.com/abstract=1966721>> [Accessed 22 March 2015].
- Dumitru, V., Ionescu, I., Calu, A. and Oancea, M., 2011. An Investigation Regarding the Disclosure of Corporate Social Responsibility Information for Listed Companies from Romania. *Amfiteatru Economic*, 13(29), pp. 146-161.
- Dyllick, T. and Hockerts, K., 2002. Beyond the business case for corporate sustainability. *Business strategy and the environment*, 11(2), pp. 130-141.
- Ebner, D. and Baumgartner, R. J., 2006. *The Relationship Between Sustainable Development and Corporate Social Responsibility*. [online] Available at: <[www.crrconference.org](http://www.crrconference.org)> [Accessed 23 March 2015].
- Epstein, M. J. and Roy, M. J., 2001. Sustainability in action: Identifying and measuring the key performance drivers. *Long Range Planning*, 34(5), pp. 585-604.
- European Commission, 2003. Recommendation of the European Commission 2003/361/EC. *Official Journal of the European Union*, 124, p.36.
- Galbreath, J., 2011. Are there gender-related influences on corporate sustainability? A study of women on boards of directors. *Journal of Management & Organization*, 17(1), pp. 17-38.
- Grundey, D. and Zaharia, R. M., 2008. Sustainable incentives in marketing and strategic greening: the cases of Lithuania and Romania. *Technological and Economic Development of Economy*, 14(2), pp. 130-143.

- Hahn, T. and Scheermesser, M., 2006. Approaches to corporate sustainability among German companies. *Corporate Social Responsibility and Environmental Management*, 13(3), pp. 150-165.
- Khan, M., Serafeim, G. and Yoon, A., 2015. Corporate Sustainability: First Evidence on Materiality. *Working Paper 15-073, Harvard Business School*, [online] Available at: <[http://www.hbs.edu/faculty/Publication%20Files/15-073\\_8a7e13e5-68c5-4cc3-a9a0-a132bbef3bc7.pdf](http://www.hbs.edu/faculty/Publication%20Files/15-073_8a7e13e5-68c5-4cc3-a9a0-a132bbef3bc7.pdf)> [Accessed 22 March 2015]
- Lo, S. F. and Sheu, H. J., 2007. Is Corporate Sustainability a Value-Increasing Strategy for Business?. *Corporate Governance: An International Review*, 15(2), pp. 345-358.
- Nakao, Y., Amano, A., Matsumura, K., Genba, K., and Nakano, M., 2007. Relationship between environmental performance and financial performance: an empirical analysis of Japanese corporations. *Business Strategy and the Environment*, 16(2), pp. 106-118.
- Peattie, K., 2001. Towards sustainability: the third age of green marketing. *The Marketing Review*, 2(2), pp. 129-146.
- 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), pp. 27-36.
- Walker, K. and Wan, F., 2012. The Harm of Symbolic Actions and Green-Washing: Corporate Actions and Communications on Environmental Performance and Their Financial Implications. *Journal of business ethics*, 109(2), pp. 227-242.
- World Commission on Environment and Development, 1987. *Our Common Future*. Oxford: Oxford University Press.