THE LINK BETWEEN CORPORATE SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE: A QUANTITATIVE ANALYSIS FOR COMPANIES IN ROMANIA

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ABSTRACT
The purpose of this article is to examine the relationship between CSR (Corporate Social Responsibility) and financial performance in companies in Romania. Outside the border, various methods have been explored and many models have been implemented which have demonstrated the link between the two. Conclusions of this analyze come to support the results presented by other authors. The research is based on accounting measures, ROA and ROE analysis the financial performance of companies. Based on the study we can say that between CSR and financial performance is a significant connection.

KEYWORDS: Corporate Social Responsibility, Financial Performance, Return on assets, Return on Equity.

JEL CLASSIFICATION: A10, F02, M14

1. INTRODUCTION

In an economy, whether it is a developed or less developed economy, an important role has companies that use their human and material resources to expand the company's opportunities to increase its welfare. In general, corporate social responsibility is linked to the economic development of society. Thus, there is a special attention in terms of corporate social responsibility, which is a term often used in national and international policy agendas.

Social responsibility has emerged as essential to the negative effects of the global economic development in the last half-century. Supporting a largely beneficial to create links between the state culture and corporate social responsibility, the more developed countries economically, promotes intense this concept and creates various means and methods to spread it to other states.

Regarded as a prerequisite for developing a competitive environment, corporate social responsibility aims to lead companies beyond the primary objective for which they were established, namely customer satisfaction in order to maximise profit.

Companies know they must also thank all stakeholders that should be involved in voluntary work to support the communities where they operate (McWilliams et al., 2005).

In Romania, the concept of corporate social responsibility of company support projects and integrated strategies and operations of key values of society. Environment, children's education, the arts and sport are among the sectors where social responsibility is felt in Romania in a greater proportion, not only through its community investment but also by engaging in relationships with customers, focusing on meeting their needs and welfare of employees.

The literature reveals that practices social responsibility creates additional costs for companies. Corporate financial performance is affected by these costs if following their generation will not result in positive elements that do not lead to a competitive disadvantage (Agarwal, 2008).
There are numerous studies that analysed the link between Corporate Social Responsibility and financial performance in developed countries but there is very little research into the emerging countries, the Romanian case.

This paper is to develop an econometric model to test the relationship between Corporate Social Responsibility and financial performance of companies. The model is based on accounting measures of assessment of financial performance or return on assets and return on equity. The values of variables were identified by a quantitative research of the various reports provided by specialised organisms. Data used for research are cross-section because this was collected at a time but for many companies.

Following the analysis using SPSS data collected was found that is a link between corporate social responsibility and corporate financial performance.

2. A BRIEF REVIEW OF CORPORATE SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE

2.1. Corporate social responsibility

Starting from the idea that there is an interdependence between society as a whole and businesses, we can say that the latter has an important role in helping society to ensure a better future in which responsible behavior and mutual understanding prevail.

The possibility of developing a concept of corporate social responsibility is ambiguous because there is an abundance of opinions expressed on this concept, leading to a difficult road in terms of developing a definition widely accepted about corporate social responsibility (Marrewijk, 2003).

But there are authors who have treated this subject and, as a result of deep research, concluded a possible definition of CSR. Corporate social responsibility can be understood as representing the kind of management that takes into account economic and social effects of its decisions (Boone & Kurtz, 1992).

Duty managers to carry out actions that protect and improve both the welfare of society, viewed as a whole and the interests of the organization"(Certo, 2002). An organization is socially responsible when it commits to contribute to the welfare of the community through business practices and through the company's resources "(Kotler & Lee, 2005).

“Corporate social responsibility” means those behaviors and actions that are beyond the simple realization of profits and serve their own organization "(Mahon & McGowan, 1991). Corporate social responsibility involves allocating part of the profit made in favor of social interest, firms must overcome its own initiative, which requires the law or contractual obligations (Reihardt et al., 2008). Corporate social responsibility means not only individual programs but also reflect the manner in which the affair affect stakeholders in the organization, namely: customers, suppliers, employees, communities, government, and the natural environment "(Rake & Grayson, 2009).

Following a study by Alexander Dahlsrud "How Corporate Social Responsibility is Defined: an Analysis of 37 Definitions" which analyzed how frequently search and citation of a definition of CSR in the top five are those developed by bodies professional. "A concept whereby companies integrate social concerns and environmental concerns in their business actions and in their interaction with their stakeholders on a voluntary basis," (Commission of the European Communities, 2001). "The commitment of businesses that contribute to sustainable economic development, working with employees, their families, the local community and society at large to improve their quality of life. "(Word Business Council for Sustainable Development, 1999)," corporate social responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the
quality of life of the workforce and their families and the local community and society in general. "(Sustainable development, 2000)," corporate social responsibility is essentially a concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment. "(Commission of the European communities, 2001)," making business decisions related to ethical values, compliance with legal requirements and respect people, communities and the environment" (Business for Social Responsibility, 2000).

2.1. Corporate financial performance

Performance is present in all fields but has a special significance in the economic field. A special achievement in an industry can be considered a definition which can be applied in all spheres of activity (DEX, 1998).

The notion of performance has known many definitions over time in the economic field. Thus, to better understand them, they have outlined three guidelines defining performance against the level of achievement of strategic objectives, a level of value creation and enterprise productivity and effectiveness.

Although the definition of Corporate Financial Performance is not debated in the literature, there is disagreement with respect to the best way to measure CFP (Cochran & Wood, 1984). A survey of the literature reveals that CFP has been basically measured in three forms: market, accounting, and survey measurements. Further explain that the first approach reflects the degree of satisfaction of the shareholders; the second captures an idea of the internal efficiency of the company; and the last provides a subjective estimation of its financial performance (Orlitzky, Schmidt, and Rynes, 2003).

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm’s overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation.

3. SURVEY METHODOLOGY

3.1. Establishing working hypotheses and econometric model

Starting from the fact that in the literature have emerged many correlations between corporate social responsibility and financial performance of companies, most showing a positive link between the two, was shaped working hypothesis:

**H1: Good adopting CSR leads to an increase in financial performance.**

Based on the working hypothesis established in the research literature, it has been determined that to see if there is an influence between the two will use performance measurement of financial accounting measures ROA (Return on Assets) and ROE (Return on equity).

In numerous studies have established that a company’s financial performance measurement can be achieved through two types of measures: accounting or market-based. The literature review concluded that the most popular accounting measures are size, return on assets (ROA), return on equity (ROE), asset age and 5-year return on sales (ROS) (Griffin & Mahon, 1997). ROA, ROE and ROS were most frequently used in literature to demonstrate the link between CSR and financial performance. Stock return is the market-based measure is the most Used in many studies to establish the link Between CSR and Financial Performance (Bhagat & Bolton, 2008).
The model is based on two variables. The first is the industry in which the company operates because that and its characteristics may create problems in exploring CSR action (Waddock & Graves, 1997) and CSRscore because this is the only index, in Romania that can measure the social involvement of companies in society.

According to the above hypothesis and the selection of measures for dependent and independent variables, our econometric models are:

\[ ROA_i = \alpha_1 + \alpha_2 I_i + \alpha_3 CSR_{score_i} + u_i \]  
\[ ROE_i = \alpha_1 + \alpha_2 I_i + \alpha_3 CSR_{score_i} + u_i \]  

where:
- ROA is return on assets for the company i
- ROE is return on equity for the company i
- I is the industry domain for the company i
- CSRscore is the index for CSR for the company i

3.2. Data and Sample

To assess corporate social responsibility we used data from The Azores - Sustainability CSR and Services published in Romania CSR Index 2015. It aimed to analyse the social responsibility of the top 100 companies in our country to provide a benchmarking tool for companies and increase awareness of CSR in Romania. Of the 100 companies analysed by The Azores, our research has focused on the dates of the first 10 companies that registered the highest score RSC. CSR score was calculated following the grant of scores for certain indicators set by The Azores. Regarding the data that led to the calculation of ROA and ROE accounting measures of financial performance measurement, it resorted to an analysis of their financial statements published by the Ministry of Finance and the website Doing Business Romania.

Also in the construction of this study were analysed financial reports and CSR reports of companies studied.

For the calculation of ROA and ROE have extracted the data needed for calculating the formulas:

\[ ROA = \frac{Net\ income}{Total\ assets} \]  
\[ ROE = \frac{Net\ income}{Shareholders' equity} \]  

4. RESULTS

4.1. Descriptive statistics

The table below presents descriptive statistics for our measures of financial performance. The variable range is from -8% to 19.88% for ROA, from -45, 01% to 27.46% for ROE, from 1 to 8 for Industry and from 33% to 87.14 for CSR score.

We also can observe that the mean for ROA is 2.569% and for ROE is 1.878%. The wide range for ROE indicates that the return on equity varies in biggest extent.
Table 1. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>10</td>
<td>-8,00%</td>
<td>19,88%</td>
<td>2,5690%</td>
<td>7,70846%</td>
</tr>
<tr>
<td>ROE</td>
<td>10</td>
<td>-45,01%</td>
<td>27,46%</td>
<td>1,8780%</td>
<td>19,12936%</td>
</tr>
<tr>
<td>Industry</td>
<td>10</td>
<td>1</td>
<td>8</td>
<td>4,40</td>
<td>2,221</td>
</tr>
<tr>
<td>CSR score</td>
<td>10</td>
<td>33,00%</td>
<td>87,14%</td>
<td>56,2510%</td>
<td>19,61115%</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: author results in SPSS

4.2. Correlation matrix and bivariate results

In the second table, it is described the Pearson correlation matrix for the dependent and independent variables. As we can see, between ROA and Industry is a weak and negative relation (-0.631) at p<0.05 one-tailed. Is the same time, Industry is in the negative relation with ROE (-0.560) at p<0.05 one-tailed.

The interesting thing is the fact that between Industry and CSR score is also a weak and negative relation (-0.938) at p<0.05. According to our result, we can say that between CSR score and ROA is a significant and positive relation (0.588) at p<0.01, but on the other hand, we can't approve a strong and a significant relation between CSR score and ROE. By the other way, we can confirm that between ROA and ROE is a strong relation (0.829) at p<0.05.

In this case, we will continuous our study only for ROA (return on assets) as an accounting measure for financial performance.

Table 2. Pearson correlations

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>ROE</th>
<th>Industry</th>
<th>CSR score</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1</td>
<td>.829**</td>
<td>-.631*</td>
<td>.588*</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>.002</td>
<td>.025</td>
<td>.025</td>
<td>.037</td>
</tr>
<tr>
<td>N</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>ROE</td>
<td>.829**</td>
<td>1</td>
<td>-.560*</td>
<td>.514</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>.002</td>
<td>.046</td>
<td>.046</td>
<td>.064</td>
</tr>
<tr>
<td>N</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Industry</td>
<td>-.631*</td>
<td>-.560*</td>
<td>1</td>
<td>-.938**</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>.025</td>
<td>.046</td>
<td>.046</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>CSR score</td>
<td>.588*</td>
<td>.514</td>
<td>-.938**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td>.037</td>
<td>.064</td>
<td>.064</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (1-tailed).
*. Correlation is significant at the 0.05 level (1-tailed).

Source: author results in SPSS

4.3. Regression results

In table 3 and table 4, using regression analysis, we test the multivariate relation between the company performance and corporate social responsibility. The multiple correlation coefficients (R) is 0.631 and the R² explain that exist 39 return on assets ranking. We can also observe that
Standard Error of the Estimate (6.77%) is less than Standard deviation (7.70%). Unfortunately, the model it seems to be insignificant one (p=0.169).

### Table 3. Model Summary

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.631a</td>
<td>.398</td>
<td>.227</td>
<td>6.77926%</td>
<td>1.570</td>
</tr>
</tbody>
</table>

*Source: author results in SPSS*

### Table 4. ANOVAa

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>213,074</td>
<td>2</td>
<td>106,537</td>
<td>2,318</td>
</tr>
<tr>
<td>Residual</td>
<td>321,709</td>
<td>7</td>
<td>45,958</td>
<td>.169b</td>
</tr>
<tr>
<td>Total</td>
<td>534,783</td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROA  
b. Predictors: (Constant), CSR score, Industry  

*Source: author results in SPSS*

### 5. CONCLUSIONS

This study is an attempt to analyse the link between CSR Financial performance in top 10 of Romanian companies that have a CSR strategy. We try to find if any CSR implication returns a high score for assets and shareholder’s equity. We establish that CSR score it will be our independent variable. We also consider the industry where the company activated as a control variable. Data are obtained for one year period (2015) from CSR Index 2015 published by The Azores, The Ministry of Finance and from Doing Business website. We found a positive and significant relation between CSR and ROA but at the same time, we found also a positive relation between CSR and ROE but insignificant. Unfortunately, our econometric model appears to be statistically insignificant so we can't check with it that a company which adopt CSR strategy will have a higher performance. We think that a larger sample and a wider time period of analysis could provide more secure results. We suggest also choose other independent controlled variables instead the industry.  
The research can be adopted as an effort to set some relations between CSR and Financial performance in a field so large.

### REFERENCES


