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## THE IMPACT OF ADOPTING CSR AND CORPORATE FINANCIAL PERFORMANCE. EVIDENCE FROM BSE

*The present paper aims at analysing the link between Corporate Social Responsibility (CSR) and Corporate Financial Performance (CFP) in the case of Romanian listed companies. For accomplishing this, we will start from the existing literature and we will use data for period 2007-2015 (panel data) to which will apply a simple regression model. From the total number of companies listed on Bucharest Stock Exchange (BSE), we selected 59 companies without being excluding from trading and for which financial data were available for the entire period. The results indicated increased financial performance for CSR companies (only 16 of 59 companies have CSR activities) compared with NON-CSR companies. This study has important implications for policy makers, managers, investors, stakeholders, in generally.*

**Keywords:** corporate social responsibility, corporate financial performance, Bucharest Stock Exchange.

**Introduction.** Over the last period, both, policy makers and investors emphasized the importance of corporate social responsibility (CSR). Through this, they are sure that the companies are more responsible regarding community, environment, employees and consumers.

According to the United Nations Global Compact, the economic setback from an area during a distress period is moving faster in other parts of the world. One prevention measure will be an increase level in business transparency and communication, regarding both aspects: financial and social responsibility.

In this context, on April 15, 2014 the European Parliament adopted the Directive 2014/95/EU [5] on disclosure of non-financial and diversity information by large companies and groups, which entered into force on December 6, 2014. According to this Directive, large companies must include in annual reports starting with 2018, also non-financial statements. The Directive has applied to big companies having over 500 employees, especially the public-interest ones, which are required to present information related to protection of environment, social responsibility and treatment of employees, but also regarding the anti-corruption, human rights and bribery issues. Moreover, these kind of companies must present their business model, outcomes and risks of the policies related to the topics presented above. Additionally they must pointed out the policy applied for management and supervisory bodies (referring to age, gender, educational but also to the management professional background).

Regarding the reporting techniques, even in June 2017 the European Commission [7] published its guidelines to support companies in the process of disclosure their environmental and social information. In order to achieve this, the companies may use either international, European or national guidelines (such as the Global Reporting Initiative, the United Nations Global Compact, the OECD Guidelines or International Organization for Standardization (ISO) 26000, among others).

At the time of speaking, approx. 2,500 large EU corporations (less than 10% of the total number of large companies), publish environmental and social information repeatedly. The Directive 2014/95/EU [5] affects around 6,000 large companies and groups across the EU. Regarding Romania, there are almost 700 companies that will be covered by the Directive and which in 2018 will have to disclose non-financial information regarding the year 2017.

The EU Members States had two years to transpose the Directive into their national legislation (the deadline was December 6, 2016). Regarding Romania, the requirements have been adapted or are the same as in the Directive (CSR Europe and GRI [4]) and are mentioned in Order no. 1.938 of August 17, 2016 [27] on the Amendment and Completion of Accounting Regulations. In Romania, the companies under the Directive are companies with more than 500 employees but also Public Interest Entities (NBF1 – non-banking financial institution, banks, insurance companies, reinsurance companies, payment institutions, and majority state owned companies).

By implementing this Directive, the EU aims is to increase the transparency and the performance of the companies, regarding the environmental and social aspects, which will lead to long-term economic growth and employment. As stated in the Directive 2014/95/EU, "disclosure of non-financial information is vital for managing change towards a sustainable global economy by combining long-term profitability with social justice and environmental protection. In this context, disclosure of non-financial information helps the measuring, monitoring and managing of undertakings' performance and their impact on society".

As mentioned in the literature, the companies will record important advantages over time, such as increased performance, decreasing the funding costs, but also much less business disruptions and improved relations with both, consumers and stakeholders. Nowadays, investors are more interested in social and environmental impact and they analyse this information in the investment-decision process in order to have a full picture of the company's development, but also of the company's performance, and its position.

According to the Global Sustainable Investment Review [12], global investments in performing companies in terms of sustainability reached \$22.89 trillion in early 2016, compared with \$18.28 trillion in 2014, which mean an increase of 25%. In Europe, in the same period the responsible investments have grown by 12% from \$10.775 trillion to \$12.040 trillion in 2016. Regarding Romania, in 2016, 47% from the companies increased CSR budgets by 20-30% (12% of companies), by 10-20% (9% of companies), by 5-10% (18% of companies and by 0-5% (8%). On the other hand, 47% of the companies reported constant CSR budgets and only 7% of companies recorded decreasing of the amount of money allocated to CSR activities [10].

The growth in sustainable investing demonstrates the increasing demand among investors for greater disclosure and consideration of environmental and social issues.

The paper is organized as follows: section 2 reviews the literature regarding the CSR concept and the relationship between CSR and CFP. Section 3 explains the methodology used in order to capture the impact of CSR on financial performance through Return on Assets (ROA) and market capitalization, describing the model and presenting the descriptive statistics of the main data used in our analysis. Sections 4 discuss the regression results and finally, section 5 summarizes and concludes.

**Literature review. CSR concept.** There is no single definition of CSR. Many organizations, academics and researchers attempt to define the CSR concept.

Among organizations, we mention the approach of World Business Council for Sustainable Development: CSR is a business commitment to its contribution to sustainable economic development, by working with several groups of stakeholders as; employees, families, local community and society [14]. For our study, is also important the approach of European Commission (2001) [8]: CSR is "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis". In 2011, the European Commission proposed a new definition of CSR as "the responsibility of enterprises for their impacts on society". In this context, companies should have to incorporate into their business, aspects regarding social responsibility, environment, ethics and human rights. All these have done with the purpose to maximize the creation of shared value for their stakeholders but also for entire society.

Similar approach we can find in the research of Renneboog et al. [29], that consider that CSR is the aggregation of environmental protection of its stakeholders' interests, better corporate governance and good stakeholder relations (here we have to take into account also the interest of employees and local community). In this context, economic theory pointed out that companies must be "socially responsible" by helping maximizing of company's value. At this stage the most important empirical question is if investors are willing to pay or not for CSR. In other way, we may asked if CSR is incorporated or not in the market share price.

Some authors view CSR as strictly focused on non-shareholder stakeholder interests, irrespective of the impact on shareholder wealth or company value. Thus, we point out the definition of Hopkins [15]: "CSR is concerned with treating the stakeholders of the firm ethically or in a responsible manner. 'Ethically or responsible' means treating stakeholders in a manner deemed acceptable in civilized societies. Social includes economic responsibility. Stakeholders exist both within a firm and outside. The natural environment is a stakeholder. The wider aim of social responsibility is to create higher and higher standards of living, while preserving the profitability of the corporation, for peoples both within and outside the corporation". The same approach we found at McWilliams and Siegel [23] who extend this definition to include "actions that appear to further some social good, beyond the interests of the firm and that which is required by law."

According to Baron [1], only social performance is not sufficient to identify CSR because another mandatory component is the intent. In case the company engages in activities with the intent to maximize company value, but in the process creates spillovers, those benefit stakeholders, then the company has created a "social good," but has not taken a "socially responsible action." Instead, in case the company elects to expend resources over the level necessary to optimize its value with the intent of creating a

spillover, then this altruism refers to CSR. On the other hand, Beltratti [2] pointed out that CSR=altruism mandatory implies a negative relationship between CSR and companies value: "CSR is a concept apparently in contrast with profit maximization because it suggests a set of actions, which is beneficial to some external stakeholders and may conflict with the interest of the shareholders".

Others authors view the assumed separation between shareholders' interests and society's interests as not true. CSR in this case is a mandatory consideration in shareholder wealth maximization. Thus, Beltratti [2] in her paper states that there is no inconsistency between the welfare of some groups of stakeholders and the welfare of shareholders. The link between profit maximization and CSR is best revealed by discarding the classic view of the company as a shareholder value maximizer and embracing to the more recent view of the company as a stakeholder value maximizer. In the same direction, Baron [1] affirms that tracking activities related to CSR can increase a company's financial prospects. In his paper, Jensen [16] enlightened value maximization: firms should consider all stakeholders in order to optimize long-term value. He argued that managers "should attempt to balance the interests of all corporate stakeholders, including not only financial claimants, but employees, customers, communities, and governmental officials".

Based on the existing literature, we can conclude that there is no overall agreement, because we can find several types of definitions of CSR, but all these definitions have something in common: converge towards the "triple bottom line" model, which, as the name implies, analyses corporate responsibility from three perspectives: economic, environmental and social.

**Literature review. CSR and CFP.** The importance of agency theory in finance approaches to CSR means that financial literature tends to present CSR, without being directly related with shareholder value maximization, as either a misappropriation of resources by management, or a misallocation of resources to stakeholders or both. However, there are some studies in the finance literature which recognize that shareholder value is not the only value that firms create. Hennessy and Livdan [13], Jiao [17], and Edmans [6] found that investments in stakeholders including employees and suppliers, increase the intangible value of the firm, but short-term market valuations do not necessarily reflect this value.

There are a multitude of papers, which investigated the relationship between CSR and CFP. Investigating the CSR/CFP relationship may be problematic. In the case that social and financial performances are dependent, theoretical and methodological concerns plague these investigations. Trying to determine the total value created by companies may be more useful and interesting, than trying to measure social and financial performance individually and finding the causality between them. Attempting to measure social and financial performance separately buys into the separation thesis, and many scholars such as Margolis and Walsh [22] suggest moving beyond rehashing the CSR/CFP debate and onto new research into the relationship between business and society. After reviewing over 95 studies between 1971 and 2001, Margolis and Walsh [22] obtained mixed results: 55 studies with a positive relationship between CSR performance and financial performance; in 21 studies there was found no relationship, 7 studies pointed out a negative relationship and 18 studies had presented a combination of results. Thus, Margolis and Walsh [22] concluded: "A simple compilation of the findings suggests there is a positive association, and certainly very little evidence of a negative association between a company's social performance and its financial performance."

According to Becker-Blease [3, p. 408], "a broad consensus exists within the literature of a positive link between CSR and firm value". His affirmation is supported by the analyses of economic literature reported in several studies to which make references: Orlitzky, Schmidt, and Rynes [28]; which reported varied but generally confirmatory evidence that CSR is positively associated with CFP.

One main argument in favour of implementing CSR activities by companies is that CSR is consistent with shareholder value-maximization (Renneboog et al., 2008).

A meta-analysis on the relationship between CSR and corporate financial performance conducted by Orlitzky et al. [28] summarizes 52 studies, while adjusting for sampling and measurement errors, and suggest that CSR is positively related to financial performance. However, the authors found that CSR is more correlated with accounting returns (financial performance) than with shareholder returns.

In their study, Nollet et al. [25] examined the relationship between Social Performance and Financial Performance of firms using different models with different results. Thus, the linear model reflects the significant negative link of CSP to Return on Capital; the nonlinear models offer evidence of a U-shaped link between CSP and the accounting-based measures of CFP, providing evidence that in the longer run CSP has a positive impact. The most important implication of their findings consists in that a long-run planning and significant resources must be allocated to CSR, taking into account that CSR expenditure pays off only after a threshold of CSP has been achieved.

Galant and Cadez [11] identified as commonly reason for the diverse and contradictory results the measurement issues pertaining to both concepts of interest: CSR and CFP. Another explanation for the discrepant results is offered by Wang et al. [35] and it consist in the period of CSR activities: expenditures for CSR are immediate, but most of its benefits are realizing over a period; therefore, investors with different timeframes value firms' CSR performance differently.

There are also researchers who have analysed the link of CSR – financial performance by countries. In this context, we mention the study of Lin et al. [20]. They examined 1000 Taiwanese cases during 2002 and 2004, in which firms incorporate their R&D costs as one of their business strategies for sustainable development and they considered their humanitarian expenditures as contributions to CSR. The authors identified a positive relationship between CSR and financial performance, but they found that this positive relationship can be observed especially on long-term, while on short-term financial performance CSR does not have much positive impact.

Johansson et al. [18] investigated the linkage between CSR and financial performance (in terms of ROA and Tobin's Q) for 167 Swedish publicly traded companies during the time period 2006–2009. According to their results they found that there is no significant relationship for the observed sample. Thus, they consider that there are other factors which influence financial performance to a larger extent than CSR.

Rodriguez-Fernandez [30] investigated the bidirectional relationship between CSR and Financial Performance for 121 companies listed on Madrid Stock Exchange in the year 2009. The results demonstrated a positive links in both directions: social is profitable and profitable is social, thereby originating a positive feedback virtuous circle.

In the United States, a study conducted by Lu et al. [21] analysed the relationship between CSR and corporate performance for US semiconductor industry during the period 2004–2008. Using dynamic data envelopment analysis and panel data regression, they found that social responsibility investment by US semiconductor firms has positive effects on their performance. Their results suggest

that if the US semiconductor companies wants to enhance their efficiency, they have to pay more attention to CSR's indicators (human rights, employee relationships but also environmental aspects).

To the same conclusion arrive also Oh and Park [26], who examined these relationships for the Korean companies during the period 2004–2010. Applying difference generalized method of moments (GMM) estimation on a dynamic panel model, they obtained a positive effect of CSR on CFP for the entire industry, but different results by each industry's characteristics.

The results of the research performed by Skare and Golja [33] have shown that CSR companies in the average enjoy better financial performance than non-CSR companies. Their research was divided in two parts: the first parts presented the analysis of a much better financial performances of 45 CSR companies listed on Dow Jones Sustainability World Index 2009/2010 compared to 45 non CSR companies (not listed on DJSWI) for the period 2006–2008. The second part of the paper demonstrated, through a regression model, the existence of strong positive nexus between financial performances and socially responsible behaviour. They obtained that for a unit change in CSR, the probability to achieve positive financial results is 6 times higher for CSR companies compared to the non-CSR companies.

For Romania, we found two studies analysing the companies listed on Bucharest Stock Exchange (BSE) in order to find if CSR activities are linked to companies' financial performance. In the first paper, the authors (Simionescu and Dumitrescu [32]) analyse 19 companies listed on BSE with CSR practices from a total of 81 companies, over the period 2006–2012. The results suggested a positive linkage between CSR and financial performance and highlighted the benefits of CSR practices as a strategy for long term business leading to competitive advantage and win-win opportunities. The second study (Simionescu and Gherghina, 2014) covered the period 2008–2011 and empirically investigated the relationship between CSR and corporate performance for a sample of 68 companies listed on the BSE during the period 2008–2011. In order to reach this purpose, they used both accounting-based performance measures (e.g. ROS, ROE and ROA), as well as market-based firm performance measures (e.g. PBV, EPS, and PER) and they found a negative link between CSR and ROS, as well as a positive one between CSR and EPS.

Summarizing, the results obtained, we conclude that the most of the studies revealed the positive effect of CSR on CFP and this information can be used by companies by taking a strategic approach to CSR which should improve their financial performance.

In this context, in order to add more results in the field and to fill the gap in the literature, we conducted an analysis on companies listed on Romanian capital market over the period 2007–2015.

**Methodology. The model.** The main objective of our research is to identify the impact of CSR activities on financial performance of a firm. In order to quantify the financial performance of a firm we use two main indicators found in the economic literature, namely:

- Market capitalization – which incorporates the investors' opinion on the quality and profitability of that particular firm, reflected in the market stock price evolution. This proxy for financial performance of a firm was also used in other studies (Simionescu and Dumitrescu [32]; Servaes and Tamayo [31]).
- ROA (return on assets) – which incorporates the accounting performance of a firm, and the efficiency of using a firm assets in order to make profit, according to the methodology used in the literature for this issue (Johansson et al., [18], Moon et al. [24]).

Firstly, we start by applying a simple regression model based on panel data for period 2007–2015, and secondly we intent to highlight the impact of CSR on market capitalization and ROA for each year in the mentioned period.

The equation for entire period 2007–2015 can be described by relation (1) for market capitalization and relation (2) for ROA:

$$MCAP_{t,i} = \alpha_0 + \alpha_1 \cdot CSR_{t,i} + \varepsilon_{t,i}, \tag{1}$$

$$ROA_{t,i} = \alpha_0 + \alpha_1 \cdot CSR_{t,i} + \varepsilon_{t,i}, \tag{2}$$

where  $MCAP_{t,i}$  = the dependent variable in the first equation, is the market capitalization of company  $i$ , for year  $t$ ,  
 $ROA_{t,i}$  = the dependent variable in the second equation, is the return on assets for company  $i$ , and year  $t$ ,  
 $CSR_{t,i}$  = the proxy variable for CSR actions, is 1 if company has CSR activities and 0 if the company has not CSR activities,  
 $\alpha_0, \alpha_1$  = the discriminant coefficients,  
 $\varepsilon$  = error term

**Methodology. Data and descriptive statistics.** We have selected the companies listed at Bucharest Stock Exchange, by eliminating 26 firms, which were not available for trading in the period 2007–2015 or financial data were not available for entire period. The final sample contains 59 companies: only 16 of them have CSR activities clearly stated in the annual reports or websites.

For each year and firm, we computed the following indicators:

- Market capitalization – the product between the final price for each year and the number of shares. These values will be linearize by applying logarithmic function;

- ROA (return on assets) – ratio between the profit and assets value for each firm and each year.

In Table 1 we present the descriptive statistics for market capitalization and ROA for analysed period. At a first glance, we are able to identify a difference between companies having CSR activities compared with the one which do not have such activities. It seems that CSR companies are recording a higher level for financial performance (market capitalization and ROA) compared with NON-CSR companies.

**Table 1. Descriptive statistics for analysed variables (entire period)**

Variable	Mean	Median	Std. Dev.	Skewness	Kurtosis
<b>CSR companies</b>					
Ln_MCAP	18.8690	19.0390	3.6302	-3.7688	19.8077
ROA	7.71%	4.84%	0.1969	5.9317	15.0487
<b>NON-CSR companies</b>					
Ln_MCAP	16.2361	16.9606	4.2561	-3.0572	12.2073
ROA	2.82%	1.33%	0.2520	7.1302	16.5799
<b>ALL companies</b>					
Ln_MCAP	16.9501	17.4121	4.2569	-2.9333	12.5652
ROA	4.15%	1.95%	0.2392	6.9145	22.5005

Source: author's calculations.

Moreover, we can observe that CSR companies are recording a level of ROA 2.7 times higher than NON-CSR companies. Going further, by analysing the yearly

descriptive statistic presented in Table 2, we are able to see the impact of financial crisis in the evolution of both indicators: market capitalization and ROA.

**Table 2. Descriptive statistics for analysed variables for each year**

Variable	Mean	Median	Std. Dev.	Skewness	Kurtosis
<b>Ln_MCAP</b>					
2015	17.3194	17.5150	3.6970	-3.3963	14.9228
2014	17.6229	17.5428	2.8808	-3.6894	23.3624
2013	17.7832	17.5079	1.8012	0.8706	1.0849
2012	17.0700	17.2754	3.6646	-3.2874	14.6048
2011	16.5121	17.1488	4.7764	-2.7161	7.5703
2010	16.7793	17.2719	4.2965	-2.9462	9.9654
2009	16.1592	17.2741	5.2360	-2.4109	5.3714
2008	16.1860	16.8735	4.6644	-2.7732	7.7107
2007	17.1188	18.6254	5.5625	-2.4053	5.2557
<b>ROA</b>					
2015	4.49%	2.18%	0.4142	4.1649	35.2874
2014	1.91%	2.02%	0.1098	-1.2682	9.2097
2013	1.57%	1.27%	0.1273	-2.6915	15.8408
2012	1.94%	1.95%	0.0980	-0.5795	2.1067
2011	2.03%	2.00%	0.0965	0.2038	2.6097
2010	1.88%	1.45%	0.0760	-0.5211	2.3691
2009	2.55%	1.40%	0.0780	0.3013	1.0263
2008	3.38%	2.77%	0.1110	1.4568	7.7383
2007	7.56%	3.75%	0.4999	3.8235	15.8772

Source: author's calculations.

The higher impact is reflected on ROA, which decreased from 7.56% in 2007 to 1.88% in 2010, this is due to the

increased number of companies which recorded losses during financial crisis period.

**Table 3. Unit root test for panel data – Levin, Lin & Chu (2002)**

Variables	t-test	p-value
LN_MCAP	-26.61***	0.0000
ROA	-16.85***	0.0000

\*, \*\*, \*\*\* – Indicates significant at the 0.1 level, 0.05 level and 0.01 level.

Source: author's calculations.

Our regression models will capture the impact of CSR activities of the listed companies on Bucharest Stock Exchange in period 2007–2015, over the financial performance of them. By testing the stationarity of market capitalization and ROA using Unit root Levin, Lin & Chu [19]

test for panel data presented in table 3, we obtain that all series are stationary.

**Results.** First step is to estimate the regression equation for entire period 2007-2015, in order to see if CSR affects financial performance of listed companies. The estimated coefficients for the regressions model are presented in table 4.

**Table 4. Full period regression models estimation**

Year	ROA	Ln_MCAP
constant	0.0281** (0.0121) <sup>a</sup>	16.2360*** (0.2082)
CSR	0.0489** (0.0232)	2.6328*** (0.3998)
R-squared	0.0082	0.0757

<sup>a</sup> – (standard errors in parentheses).

\*, \*\*, \*\*\* – Indicates significant at the 0.1 level, 0.05 level and 0.01 level.

Source: author's calculations.

We can see that the CSR activities have a significant impact on both proxies for financial performance, but the higher impact is recorded for market capitalization. This result

is logic and we expected it, because CSR activities made by a companies are seen by the investors as a positive factor in the profitability and sustainability of that company.

**Table 5. Yearly regression models estimation for ROA**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015
constant	0.1502* (0.0772) <sup>a</sup>	0.0235 (0.0170)	0.0157 (0.0118)	0.0051 (0.0112)	-0.0009 (0.0139)	0.0053 (0.0147)	-0.0032 (0.0191)	0.0106 (0.0169)	0.0471 (0.0642)
CSR	0.0934 (0.1484)	0.0375 (0.0326)	0.0358 (0.0227)	0.0503** (0.0216)	0.0784*** (0.0268)	0.0517* (0.0283)	0.0700* (0.0367)	0.0310 (0.0324)	-0.0082 (0.1233)
R-squared	0.0069	0.0225	0.0416	0.0866	0.1305	0.0552	0.0598	0.0157	0.0001

<sup>a</sup> – (standard errors in parentheses).

\*, \*\*, \*\*\* – Indicates significant at the 0.1 level, 0.05 level and 0.01 level.

Source: author's calculations.

Furthermore, we want to see if this impact on financial performance differed from year to year, especial during the financial crisis and the period after that. For this purpose, we estimate the yearly regression equation for both variables: ROA and market capitalization.

In table 5 are presented the result for the impact of CSR on ROA. Based on it, we are able to notice that there is a

significant impact for period 2010–2013. Moreover, regarding the impact of CSR activities on market capitalization, we are able to highlight, based on table 6, that the impact is highly significant for period 2010–2015.

So it is clear the fact that in both cases, during the financial crisis, CSR activities do not influence at all the financial performance of the companies.

**Table 6. Yearly regression models estimation for Ln\_MCAP**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015
constant	16.4250*** (0.8448) <sup>a</sup>	15.6217*** (0.7093)	15.8461*** (0.8084)	15.8412*** (0.6224)	15.4848*** (0.6934)	16.2380*** (0.5277)	17.1863*** (0.2346)	16.9551*** (0.4134)	16.5263*** (0.5369)
CSR	2.5581 (1.5581)	2.0806 (1.3620)	1.1541 (1.5524)	3.4593*** (1.1952)	3.7880*** (1.3316)	3.0676*** (1.0133)	2.2012*** (0.4505)	2.4613*** (0.7939)	2.9246*** (1.0310)
R-squared	0.0418	0.0393	0.0096	0.1281	0.1243	0.1384	0.2951	0.1443	0.1236

<sup>a</sup> – (standard errors in parentheses).

\*, \*\*, \*\*\* – Indicates significant at the 0.1 level, 0.05 level and 0.01 level.

Source: author's calculations.

In the same time, the higher impact of CSR activities on market capitalization can be explained based on the investors' expectation from the companies which are performing such activities. Usually, such companies are

highly rated among investors who confer them trust and invest in their stocks.

We obtained similar results with the previous literature, (Simionescu and Dumitrescu, [32]; Servaes and Tamayo

[31]; Johansson et al. [18]; Moon et al. [24]), which also highlighted the positive impact of CSR activity on firm financial performance.

**Conclusion & Discussion.** Theoretical and empirical research studies have analysed CSR and its effects on financial performance, but their results vary widely. This may result from different approaches of CSR, different measures of CSR and financial performance, different models of analysis.

The objective of the present paper was to analyse the impact of CSR activities on financial performance of companies listed on Bucharest Stock Exchange over the period 2007–2015. In order to achieve this, and following the economic literature, we selected two indicators for measuring financial performance: ROA and market capitalization.

Despite the fact that there are clear regulation and rules introduced by Bucharest Stock Exchange regarding the corporate social responsibility, from 85 listed companies, only 16 of them made CSR activities during the period 2007–2015.

Based on descriptive statistics, we highlighted the fact that companies having CSR activities are recording a higher financial performance compared with those which do not have CSR activities. Going further it seems that the average ROA for CSR companies is 2.7 times higher than the level recorded by NON-CSR companies.

On overall, for entire period 2007–2015, we found a clear impact of CSR over the financial performance of the companies, with a higher impact of CSR on market capitalization, when we are analysing this relationship on yearly basis, there are some differences. Firstly, we pointed out that financial crisis had a significant impact on linear relation between CSR and financial performance, and we are able to see that during period 2007–2009, there is no significant impact of CSR on ROA or market capitalization. Secondly, we highlighted the highest impact of CSR on market capitalization over period 2010–2015, which is a clue for investor expectation from financial performance and stability of companies which have CSR activities.

Our results are similar with the results obtained by other researchers (Simionescu and Dumitrescu, [32]; Servaes and Tamayo [31]) and we highlighted that CSR activities have a significant positive impact on financial performance, which is an expected result. CSR activities affect also the company's good reputation and differentiate the company from competitors through their goods and service which make these companies more valuable in the investors' eyes. Thus, our results encourages the companies to develop a responsible approach to business.

This study contributes on CSR and financial performance relationship research field in several ways: first, improvement of the existing literature and secondly, our results may be used by policy makers in order to adopt the introduction of appropriate policies or incentives for CSR programs. This is according also to the recommendation of United Nations Global Compact, who in its Report [34] recommend the introduction of sustainability initiatives related to listed companies by market regulators and securities exchanges in respective markets.

Our study has two limitations: first, the analysis is based only on large companies listed on BSE with available financial data over the period 2007–2015 and secondly, CSR is included in our model as a dummy variable. It would be interesting also to analyse in further research the relationship between CSR and financial performance for SMEs in order to see if we obtain the positive relationship also in the case of SMEs. Also, future research can extend the analysis by including a CSR index for analysed companies.

#### References:

1. Baron, D., 2001. Private Politics, Corporate Social Responsibility and Integrated Strategy. *Journal of Economics and Management Strategy*, 10(1), pp.7-45. DOI: <https://doi.org/10.1111/j.1430-9134.2001.00007.x>.
2. Beltratti, A., 2005. The Complementarity between Corporate Governance and Corporate Social Responsibility. *The Geneva Papers*, 30(3), pp.373-386. DOI: <https://doi.org/10.1057/palgrave.gpp.2510035>.
3. Becker-Blease, J.R., 2012. Corporate Socially Responsible Investments. In Baker, K., Nofsinger, J., *Socially Responsible Finance and Investing: Financial Institutions, Corporations, Investors, and Activists*, John Wiley&Sons, Inc., New Jersey: Hoboken, 515 p.
4. CSR Europe and GRI, 2017. Member State Implementation of Directive 2014/95/EU – A comprehensive overview of how Member States are implementing the EU Directive on Non-financial and Diversity Information.
5. Directive 2014/95/EU of The European Parliament and of The Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups, *Official Journal of the European Union*. URL : <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32014L0095&from=EN>, last accessed 2018/01/15.
6. Edmans, A., 2011. Does the Stock Market Fully Value Intangibles? Employee Satisfaction and Equity Prices. *Journal of Financial Economics*, 101(3), pp.621-640. DOI: <https://doi.org/10.1016/j.jfineco.2011.03.021>.
7. European Commission, 2018. Non-financial reporting. URL : [https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting\\_en](https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting_en), last accessed 2018/01/15.
8. European Commission, 2001. Green Paper- Promoting a European framework for Corporate Social Responsibility, COM (2001) 366. URL : <http://ec.europa.eu/transparency/regdoc/rep/1/2001/EN/1-2001-366-EN-1-0.Pdf>, last accessed 2018/02/02.
9. European Commission, 2011. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A renewed EU strategy 2011-14 for Corporate Social Responsibility. COM/2011/0681 final. URL : <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52011DC0681>, last accessed 2018/02/02.
10. EY Romania and CSRmedia.ro, 2016. Tendinte si Realitati CSR in Romania. URL : <https://www.csrmedia.ro/exclusiv-studiu-companiile-care-fac-csr-si-au-majorat-bugetul-dedicat-acestor-actiuni/>, last accessed at 2018/01/16.
11. Galant, A., Cadez, S., 2017. Corporate social responsibility and financial performance relationship: a review of measurement approaches. *Economic Research – Ekonomska Istraživanja*, 30(1), pp.676-693. DOI: <https://doi.org/10.1080/1331677X.2017.1313122>.
12. Global Sustainable Investment Alliance, 2016. Global Sustainable Investment Review 2016. URL : [http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR\\_Review2016.F.pdf](http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR_Review2016.F.pdf), last accessed 2018/01/15.
13. Hennessy, C.A., Livdan, D., 2009. Debt, Bargaining, and Credibility in Firm-Supplier Relationships. *Journal of Financial Economics*, 93(3), pp.382-399. DOI: <https://doi.org/10.1016/j.jfineco.2008.05.006>.
14. Holme, R., Watts, P., 2000. Corporate social responsibility: making good business sense. *World Business Council for Sustainable Development Report*. URL : <http://www.wbcsd.org/pages/edocument/edocumentdetails.aspx?id=83>, last accessed 2018/01/10.
15. Hopkins, M., 2004. Corporate Social Responsibility: An Issues Paper. Working Paper no. 27. International Labor Organization, Geneva. DOI: <http://dx.doi.org/10.2139/ssrn.908181>.
16. Jensen, M.C., 2010. Value Maximization, Stakeholder Theory, and the Corporate Objective Function. *Journal of Applied Corporate Finance*, 22(1), pp.32-42. DOI: <https://doi.org/10.1111/j.1745-6622.2010.00259.x>.
17. Jiao, Y., 2010. Stakeholder Welfare and Firm Value. *Journal of Banking & Finance*, 34(10), pp.2549-2561. DOI: <https://doi.org/10.1016/j.jbankfin.2010.04.013>.
18. Johansson, S., Karlsson, A., Hagberg, C., 2015. The relationship between CSR and financial performance – A quantitative study examining Swedish publicly traded companies. *Linnaeus University, Sweden*.
19. Levin, A., Lin, C.F., Chu, C.S.J., 2002. Unit root tests in panel data: asymptotic and finite-sample properties. *Journal of Econometrics*, 108(1), pp.1-24. DOI: [https://doi.org/10.1016/S0304-4076\(01\)00098-7](https://doi.org/10.1016/S0304-4076(01)00098-7).
20. Lin, C.H., Yang, H.L., Liou, D.L., 2009. The impact of corporate social responsibility on financial performance: Evidence from business in Taiwan. *Technology in Society*, 31(1), pp.56-63. DOI: <https://doi.org/10.1016/j.techsoc.2008.10.004>.
21. Lu, W.M., Wang, W.K., Lee, H.L., 2013. The relationship between corporate social responsibility and corporate performance: evidence from the US semiconductor industry. *International Journal of Production Research*, 51(19). DOI: <https://doi.org/10.1080/00207543.2013.776186>.
22. Margolis, J.D., Walsh, J.P., 2003. Misery Loves Companies: Rethinking Social Initiatives by Business. *Administrative Science Quarterly*, 48(2), pp.268-305. DOI: <https://doi.org/10.2307/3556659>.
23. McWilliams, A., Siegel, D.S., 2001. Corporate Social Responsibility: A Theory of the Firm Perspective. *Academy of Management Review*, 26(1), pp.117-127. DOI: <https://doi.org/10.5465/amr.2001.4011987>.
24. Moon, S.G., Bae, S., Jeong, M.G., 2014. Corporate Sustainability and Economic Performance: an Empirical Analysis of a Voluntary Environmental Program in the USA. *Business Strategy and the Environment*, 23(8), pp.534-546. DOI: <https://doi.org/10.1002/bse.1800>.

25. Nollet, J., Filis, G., Mitrocostas, E., 2016. Corporate social responsibility and financial performance: A non-linear and disaggregated approach. *Economic Modelling*, 52(B), pp.400-440. DOI: <https://doi.org/10.1016/j.econmod.2015.09.019>.

26. Oh, W., Park, S., 2015. The Relationship Between Corporate Social Responsibility and Corporate Financial Performance in Korea. *Emerging Markets Finance and Trade*, 51(sup3), pp.85-94. DOI: <https://doi.org/10.1080/1540496X.2015.1039903>.

27. Order no. 1.938 of 17 August 2016 on the Amendment and Completion of Accounting Regulations, published in Official Monitor no. 680 of 2 September 2016.

28. Orlićky, M., Schmidt, F.L., Rynes, S.L., 2003. Corporate Social and Financial Performance: A Meta-analysis. *Organization Studies*, 24(3), pp.403-441. DOI: <https://doi.org/10.1177/0170840603024003910>.

29. Renneboog, L., Horst, J. Ter, Zhang, C., 2008. Socially responsible investments: Institutional aspects, performance, and investor behaviour. *Journal of Banking and Finance*, 32, pp.1723-1742. DOI: <https://doi.org/10.1016/j.jbankfin.2007.12.039>.

30. Rodríguez-Fernández, M., 2016. Social responsibility and financial performance: The role of good corporate governance. *Business Research Quarterly*, 19(2), pp.137-151. DOI: <https://doi.org/10.1016/j.brq.2015.08.001>.

31. Servaes, H., Tamayo, A., 2013. The impact of corporate social responsibility on firm value: The role of customer awareness. *Management Science*, 59(5), pp.1045-1061. DOI: <https://doi.org/10.1287/mnsc.1120.1630>.

32. Simionescu, L., Dumitrescu, D., 2014. Corporate social responsibility and financial crisis. *Monetary, Banking and Financial Issues in Central Eastern EU Members Countries: How can Central and Eastern EU Members overcome the current economic crisis* 2, pp.281-289. DOI: [https://doi.org/10.1007/978-3-319-27573-4\\_41](https://doi.org/10.1007/978-3-319-27573-4_41).

33. Skare, M., Golja, T., 2015. Corporate Social Responsibility and Corporate Financial Performance – Is There A Link?. *Economic Research-Ekonomska Istraživanja*, 25(sup 1), pp.215-242. DOI: <https://doi.org/10.1080/1331677X.2012.11517563>.

34. United Nations Global Compact, 2012. Sustainable Stock Exchanges. A Report on Progress. URL : [https://www.unglobalcompact.org/docs/issues\\_doc/Financial\\_markets/Sustainable\\_Stock\\_Exchanges.pdf](https://www.unglobalcompact.org/docs/issues_doc/Financial_markets/Sustainable_Stock_Exchanges.pdf), las accessed 2018/02/22.

35. Wang, M., Qiu, C., Kong, D., 2011. Corporate Social Responsibility, Investor Behaviors, and Stock Market Returns: Evidence from a Natural Experiment in China. *Journal of Business Ethics*, 101, pp.127-141. DOI: <https://doi.org/10.1007/s10551-010-0713-9>.

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### ВПЛИВ ПРИЙНЯТТЯ КСВ НА ФІНАНСОВІ РЕЗУЛЬТАТИ КОРПОРАЦІЙ. НА ОСНОВІ ДАНИХ БФБ

*Аналізується зв'язок між корпоративною соціальною відповідальністю (КСВ) і корпоративними фінансовими показниками (КФП) на прикладі компаній, зареєстрованих на румунському ринку. Для цього спочатку розглядається існуюча література, а далі використано дані за період із 2007 по 2015 рік (панельні дані), до яких застосовано просту модель регресії. Із загальної кількості компаній, що котируються на Бухарестській фондовій біржі (БФБ), ми вибрали 59 компаній, які не виключали з торгів і за якими були доступні фінансові результати за весь досліджуваний період. Ці дані свідчать про зростання фінансових показників у компаній, що виконують КСВ (тільки 16 із 59 компаній здійснюють діяльність відповідно до КСВ), порівняно з компаніями, що не мають КСВ. Це дослідження має важливе практичне значення для політиків, менеджерів, інвесторів та інших зацікавлених сторін.*

*Ключові слова: корпоративна соціальна відповідальність, корпоративні фінансові показники, Бухарестська фондова біржа.*

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### ВЛИЯНИЕ ПРИНЯТИЯ КСО НА ФИНАНСОВЫЕ РЕЗУЛЬТАТЫ КОРПОРАЦИЙ. НА ОСНОВЕ ДАННЫХ БФБ

*Анализируется связь между корпоративной социальной ответственностью (КСО) и корпоративными финансовыми показателями (КФП) на примере компаний, зарегистрированных на румынском рынке. Для этого вначале рассматривается существующая литература, а далее используются данные за период с 2007 по 2015 год (панельные данные), к которым применена простая модель регрессии. Из общего числа компаний, котирующихся на Бухарестской фондовой бирже (БФБ), мы выбрали 59 компаний, которые не исключали из торгов и по которым были доступны финансовые результаты за весь исследуемый период. Эти данные свидетельствуют о возрастании финансовых показателей у компаний, выполняющих КСО (только 16 из 59 компаний осуществляют деятельность в соответствии с КСО), по сравнению с компаниями, не имеющими КСО. Данное исследование имеет важное практическое значение для политиков, менеджеров, инвесторов и других заинтересованных сторон.*

*Ключевые слова: корпоративная социальная ответственность, корпоративные финансовые показатели, Бухарестская фондовая биржа.*

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## AN AGGREGATE EXAMINATION OF THE INVESTMENT BEHAVIOUR

*As individuals we are egocentric, consistently intending to enhance our self-interests by satisfying our most demanding needs and accomplishing our targets. After assembling all the missing information and estimating the probabilities that will ease our directions without being too excessive, the decision is being made. Individuals are perceived to be rational investors. Although the theory is teaching us that we all choose based on calculated possibilities and desired outcomes, the observed conduct disproves it. The aim of this paper is to discern how humans behave, react and invest, with the help of an aggregate research based on historical economic contexts and models. By evaluating as well the strategic conduct in uncertain situations will definitely lead to the identification of some patterns in the decision-making process. Because in the end, humans are being distinguished by their pragmatic way of deciding.*

*Keywords: bounded rationality, ambiguity aversion, adaptive expectations, behavioural biases.*

**Introduction.** "An aggregate examination of the investment behaviour" intends to outline a clearer and more detailed picture regarding individuals' preferences and the

resources that guide personal behaviour. Through this article, we will be able to understand how people shape their expectations, the methods that are used in building