

# ANALYSIS OF THE INFLUENCE OF FINANCIAL FACTORS ON CORPORATE SOCIAL RESPONSIBILITY: EVIDENCE FROM ROMANIA

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**Abstract:** The novelty element of this paper is given by the Corporate Social Responsibility (CSR) connected with the three financial factors: the economic entity's dimension, the rentability and the liquidity of the companies listed on Bucharest Stock Exchange (BSE). The sample consists of 83 companies listed on BSE on the regulated market during the year 2020. The data collected was processed using qualitative and quantitative research. A series of econometric models were used to analyze the data and determine the results, such as descriptive statistics, the Jarque-Bera test (J-B), the correlation between independent variables, the coefficient of determination, the F test and the T-test. The research results have shown that the size of the economic entity and profitability have had a significant influence on CSR elements, as demonstrated by the significance coefficient registered for the two independent variables. The testing of the issued hypotheses was through multiple regressions and significance coefficient (p-value). According to which the size of the economic entity and profitability influence the social responsibility of the companies listed on BSE, the hypotheses are validated, registering high correlations and, thus, significantly influencing CSR.

Key words: CSR, financial factors, the size of economic entity, profitability, liquidity.

DOI: 10.17512/pjms.2021.24.1.12

Article history:

Received September 01, 2021; Revised October 08, 2021; Accepted October 10, 2021

### Introduction

Corporate Social Responsibility (CSR) can be defined as a continuous commitment of the economic entities active in the business environment to contribute to sustainable development and, at the same time, to improve the quality of life of the local community, in particular, and of the society, in general (Aguinis and Glavas, 2012). CSR supports the idea that an economic entity has to be socially involved in the community where it operates. This may refer to the involvement of the entity in charity cases, to the support of the community, or the creation of a more pleasant work environment for employees by strengthening the relationships between them. The purpose of the CSR actions is to implement the mission and value that the entity

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promotes among employees. The role of CSR is intended for both employees and employers, although not all economic entities adopt CSR actions (Roblek et al., 2020).

Kol (2018) states that it is difficult to express the interests of the entity reflected in society only by using traditional accounting; therefore, they use the form of expression through CSR practices. The reason why economic entities voluntarily choose to involve CSR actions is mainly related to the ethics regarding the fulfilment of social and environmental responsibilities. Another reason for the involvement in CSR actions is represented by the commitment of the economic entities to contribute to sustainable economic development, strengthen the relationships between employees, and collaborate with third parties and the local community in order to improve the quality of life. These aspects represent a contribution both in business and in the long-term development of the entity (Man and Măcriş, 2015).

CSR information is generally provided by the entity through the non-financial report, which is part of the integrated report. CSR is a practice that combines the efforts of responsibility and performance measurement of the entity in order to achieve the objectives of sustainable development to all interested third parties. Thus, CSR reflects a balanced and reasonable image of the performance of an entity by mentioning both the positives and the weaknesses.

CSR aims to encourage entities to consciously act in business as they impact the environment, society, and even stakeholders. CSR is a way of approaching the business that contributes to sustainable development by providing economic, social and environmental benefits to all stakeholders (Gokten, Ozerhan and Gokten, 2020). CSR actions are understood and put into practice differ significantly from one entity to another and from one country to another. Furthermore, CSR is a vast concept that addresses various topics, such as human rights, corporate governance, health and safety, effects on the environment, working conditions and contribution to economic development. Irrespective of CSR's definition and goal, the main idea is about change and sustainability (Hategan, Curea-Pitorac and Hategan, 2020).

At the international level, one can note the efforts of large entities that have significant impact on real issues, such as health and global warming.

CSR actions can take many forms as even a small-sized entity can significantly impact society by involving in social cases with donations or by investing in its employees through professional training or personal motivation. Among the most common CSR actions, there they are:

-improving employees' relationships;

-volunteer actions;

-participation in charitable events;

-supporting societies through donations;

-supporting and encouraging education;

-actions to protect the environment;

-social and environmental investment;

-supporting the reduction of carbon emissions.

Conceptually, the presentation of CSR aspects is an integrated part of the nonfinancial reporting. The provisions on CSR activities at the national level are regulated by the EU Directive 95/2014, which requires the preparation of the nonfinancial statement of the entities that have an average number of 500 employees at balance sheet day. In this situation, it is mandatory for each entity to assume CSR practices.

CSR is one of the most important factors in establishing the image and reputation of the economic entity. In recent years, CSR has become an element of interest for many entities; their involvement in non-profit actions is increasingly important to third parties. According to Moyo, Duffett and Knott (2020), there is a series of arguments why economic entities should adopt CSR actions in their business model: -Strengthening customer relationships is a crucial aspect in any entity since CSR is considered a new method to stay in touch with customers. As the CSR motto is linked to the benefit for the community, this can be an easy method to maintain relationships with customers and business partners. Strengthening a positive relationship between entity – customers – partners - community is a method that can lead to increased financial benefits.

-Brand recognition is an important aspect of CSR as it improves both the image of the entity and the opinion of third parties. The image of an entity is important for customer trust because, by participating in CSR projects, the entity provides a positive image noted by ethical actions in business and social awareness of the environment. Offering employees the opportunity to interact with customers is an aspect that favors the image of the companies. The economic entities that regularly participate in CSR actions can make these efforts public through the media. The public presentation of CSR initiatives is a powerful image tool that can support advertising through traditional communication channels and online .

-Employee involvement is vital if we refer to the employees' tendency to recognize performance when they are involved in CSR actions. These CSR actions have proven, over time, to engage motivation and team spirit more than the professional training programs. Employees are also more motivated to work in an entity that participates in CSR actions through their effort, and they contribute to the good of society. CSR can help the entity build a great work team because better-recruiting skills are developed over time by engaging in this kind of action.

-Encouraging innovation and collaboration is an essential aspect among the employees who are involved in social activities as they become more innovative and creative. A lot of skills can be developed through involvement in CSR actions, among which: communication, leadership, personal development, aspects that develop the workforce while motivated and happy employees perform work at a higher quality.

By opting for CSR, the economic entity decides to add value not only for its financial results but also for the common good, which brings confidence to both employees and customers or partners and suppliers (Farlinno and Bernawati, 2020). Some

entities focus on community support actions; others support employees or perform both actions simultaneously. Generally, a well-established CSR program is essential not only for the image and reputation of the entity but also for motivating employees at their workplace (Pratama, Che Adam and Kamardin, 2019).

According to Valmohammadi (2014), CSR is associated with the concept of social accounting or socio-economic accounting. From the above statement, it can be understood that socio-economic accounting involves an economic system whose mechanism not only determines economic activity but also influences social relationships and welfare. This approach is intended to support the establishment of a harmonious, balanced and appropriate business relationship with the environment, the values and the national culture, in particular, and the European culture, in general. According to Lu et al. (2019), social accounting aims to identify, record, summarize, report and analyse the effects of corporate involvement in terms of benefits to the community and damages to the community, benefits and losses suffered by the community. This information is crucial for the entity in the decision-making process, both internally and externally.

Reported to society, the more socially responsible the company is, the greater supporters the community and the consumers become. They support the company's actions, contributing in their turn to the common good. Thus, CSR actions increase confidence and awareness and encourage social changes (Man and Bogeanu-Popa, 2020).

The purpose of this paper is represented by the analysis of the influence that the financial factors have on CSR in the BSE listed companies' case. This paper considers factors, such as the economic entity's dimension, the profitability and liquidity, the CSR reference model transposed through the 95/2014 EU Directive, as well as through CSR models used by companies at a European and international level.

The motivation of this choice is given by offering responses with the help of econometric analysis for Romanian companies with CSR according to international standards. By using these models, one can determine the analysis results in order to demonstrate whether the economic entity's dimension, the profitability and liquidity have an influence on the CSR elements or not.

## **Literature Review**

The definition of CSR is very diverse; thus, authors, Dvorský et al. (2020), consider that CSR is a commitment of the entities to contribute to sustainable economic development by working together with employees and their representatives, the local community and the society, in general, to improve the quality of life in ways that are good both for business and for development.

According to Meseguer-Sánchez et al. (2021), providing CSR information is a process of communicating the social, environmental and economic impact of an organization. CSR extends the responsibility of the economic entity beyond its traditional role to provide financial reports to equity owners. Gallego-Sosa et al.

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(2021) explained that economic entities have greater responsibilities and interests than making a profit for stakeholders.

Nasution and Tamizi (2018) consider that an economic entity has to consider all stakeholders in its work. The authors explained that this requires the entity to pursue its economic interest and provide benefits to third parties. Starting from this, in the opinion of Karácsony and Czibula (20), the activity of an economic entity is strongly influenced by the support provided by third parties. Wang et al. (2016) define stakeholders as parties or groups that have an interest, a direct or indirect one, in the existence or activities of the economic entity and, consequently, the group influences and is influenced by the entity. Branco and Schönbohm (2012) state that each group from inside or outside the entity has a role in determining success. Thus, stakeholders can be represented by suppliers, customers, Government, local communities, investors, employees, political groups, trade associations, etc.

Encouraging economic entities to provide CSR information to external parties is caused by the asymmetry between management and stakeholders (Schönbohm, 2012). In order to reduce this asymmetry, the economic entity provides both financial information and non-financial information in an integrated report (Carroll, 2017).

One of the non-financial information that the entity has to disclose is related to social responsibility and may be part of the integrated annual or social reports. According to Mory, Wirtz and Göttel (2015), the economic entity provides CSR information to increase the reputation and market value of the economic entity. The CSR information provided is a benefit of the economic entity in the process of communicating the long-term performance of the economic entity. This is due to the fact that CSR is based on ethical and sustainable principles, which means that the entity will sustainably conduct its business in the long run. Turker (2009) considers that sustainability is also an issue to which the investment risk stakeholders relate. The entity is responsible for the social and environmental impact, including responsibility for labor security and product safety for consumers. Providing CSR information reduces the risk of social and environmental conflicts compared to the economic entities that do not adopt or provide CSR information (Soule, 2009).

The third parties are interested in a company's performance depending on their interest; therefore, the investors follow the performance through profitability, the employees follow the performance through the entity's dimension and the creditors follow the performance through liquidity. With all that in mind, no matter how one defines the concept of performance, appreciating it must be done in close relation with the factors, which influence it taking into account the CSR elements (Mura, Kajzar, 2019).

The study conducted by Stojanovic et al. (2020) has analyzed the relation between the financial factors and the CSR elements. The results have demonstrated a significant positive connection among the companies' dimension, liquidity and profitability. Therefore, these factors interconnect because once the companies' dimension increases, and implicitly the current liquidity, there is a profitability increase quickly. Also, the study of Lizińska, Marks-Bielska and Serocka (2015) claims that a higher liquidity rate is considered a positive indicator in highlighting a company's performance because it can accomplish its short-term payment obligations.

Over time, within the speciality literature, there have been numerous studies regarding the correlation between CSR and financial performance. An intensely researched CSR mechanism about performance is the management-investor duality. According to Slusarczyk and Ul Haque (2019), separating the management from the investors will reduce agent costs and improve performance.

When it comes to international companies, Simionescu and Gherghina (2014) have analyzed the correlation between CSR and financial performance of the stock market listed companies, using as measures of financial performance the economic rentability, financial rentability and the invested capital rentability. Thus, CSR's impact on financial performance was analyzed using some CSR variables, such as the administration council characteristic, the shareholding structure, the management characteristics and the management remuneration. The results have shown a positive influence of the share of women within the administration council on the performance measured through rentability, considering that they are more balanced, they have a higher risk aversion compared to men, and they take financial decisions that carry less risk (Simionescu, Gherghina, 2014).

In this paper, the authors have considered that the size of the economic entity, profitability and liquidity represent factors, which influence CSR actions, as follows: -The size of the economic entity is a widely used element to explain the adopted CSR practices. In general, there is a tendency for large economic entities to adopt responsible practices compared to small entities. This may result from the fact that large entities primarily comply with legal aspects. They also consider how to mitigate the impact from the activities carried out, which may negatively affect the environment or the society (Sprinks et al., 2021). The adoption of CSR is not only a charitable activity, but in doing so, the entity has to make decisions not to affect the interests of third parties, including those of the employees. Within economic entities, the most common CSR practices are implemented among employees in activities that can bring community benefits, such as volunteering or fundraising (Ceesay, Shubita, Robertson, 2021).

-According to Barnett (2007), Profitability is the report used to measure the ability of the economic entity to generate profit. Vashchenko (2018) believes that there is a relationship between profitability and CSR practices, so it is considered that only good management can adapt and manage CSR measures. Consequently, according to Hegyes and Fekete-Farkas (2019), the higher the level of profitability of an entity, the higher the provision of CSR information.

-Liquidity is an indicator of the capacity of an economic entity to pay all short-term financial liabilities, at maturity, by using available current assets. According to Abbas (2020), liquidity is the ability of an entity to meet all its financial obligations. Entities can meet their financial obligations if they have a current asset greater than

the current debt; on the contrary, they cannot immediately meet the financial obligations. Thekdi (2016) describes liquidity as the ability of the entity to meet its short-term obligations. Liquidity can be calculated by means of current assets and current liabilities. The measurement of the used liquidity is performed using reports: current, fast, cash (current assets), current debt liquidity, current assets, total assets, current assets and total debt (Thekdi, 2016).

### **Research Methodology**

Both qualitative and quantitative types of research are used as a research method. Using qualitative research, reference is made to the literature in order to present and understand the topic discussed and the elements analysed. By means of quantitative research, reference is made to content analyses and the elements obtained are interpreted by utilizing the econometric models used. Judging by the volume of data presented, the processing of results was relevant. The analysis of the data in the study was made by means of the multiple regression models using Microsoft Excel and the Econometric Views software (EViews).

Thus, this calls for the use of causative research to determine the relationship between two variables or how a dependent variable is influenced by independent variables. This research is intended to determine the impact that the independent variables: the size of the economic entity  $(X_1)$ , profitability  $(X_2)$  and liquidity  $(X_3)$  have on the dependent variable: the social responsibility of the economic entity (Y). The sample of this research is composed of 83 companies listed on Bucharest Stock Exchange (BSE), whose data was collected at the level of 2020. The data collection method was performed in two stages: the study of the published reports and financial statements and the collection of the data necessary for the research, data available at the web address (https://bvb.ro/).

Based on these considerations, the following hypotheses have been framed:

Hypothesis<sub>1</sub>: Size of economic entity (X1) influences the social responsibility of the companies listed on BSE.

Hypothesis<sub>2</sub>: Profitability (X2) influences the social responsibility of the companies listed on BSE.

Hypothesis<sub>3</sub>: Liquidity (X3) influences the social responsibility of the companies listed on BSE.

#### Formation of variables

In this study, both a dependent variable and three independent variables were established. The dependent variable is the main element of the sample, this being a reporting criterion. The dependent variable is presented, in this study, by the reporting of social responsibility of economic entities (Y).

For CSR reporting, the authors aim to identify four dimensions within the economic entity, dimensions, which contain 20 elements that provide information such as:

-dimensions of employee relationships (health, training, satisfaction remuneration, employee motivation, security)

-dimensions of community engagement (donations, gifts, scholarships, sponsorship for sports activities, national support and promotion, public projects)

-product dimensions (product development, product security, product quality, customer service)

-environmental dimensions (pollution management, repair and prevention programs, recycling programs, environmental achievements)

These elements within the dimensions of employee relationships, community engagement, product dimension, and environmental dimensions are analysed at the level of an economic entity, using binary variables (1, 0). Thus, if the elements are present in the reports prepared by the entity, then score 1 is awarded, otherwise score 0 is awarded. After assigning the scores of the CSR elements for each dimension within the entity, each entity's performance index is calculated by dividing the number of elements reported by the entity by the total number of elements that should have been reported (1).

CSR size=(number of reported elements)/(number of elements to be reported) (1)

The independent variables presented in this study are the following: size of economic entity  $(X_1)$ , profitability  $(X_2)$  and liquidity  $(X_3)$ , according to Table 1.

Independent	Description of independent variables		
variables			
Size of economic	The size of the economic entity is measured by the total assets held		
entity (X <sub>1</sub> )	by the entity in 2020. Total assets will be converted into logarithms		
-	to be equivalent to other variables as the total assets of an entity		
	are relatively large compared to the variables used in this research;		
	thus, the following formula is used:		
	Size of economic entity=log10 (total assets) (2)		
<b>Profitability</b> (X <sub>2</sub> )	It illustrates the efficiency of the economic entity and the extent to		
	which it can provide benefits. In this research, the financial		
	elements have been measured through return on assets, using the		
	rate of return (ROA), according to the formula:		
	ROA=(Net profit)/(Total assets) (3)		
Liquidity (X <sub>3</sub> )	It represents the ability of the economic entity to meet short-term		
	obligations. The better the liquidity ratio, the lower the default		
	risks. In this research, liquidity has been measured using the		
	formula:		
	Liquidity=(Current actives)/(Current liabilities) (4)		

 Table 1. Detailing of independent variables

# Description of statistical analysis data

This research aims to determine whether profitability, entity's size and liquidity have an effect on CSR in the case of the companies listed on BSE in 2020. Based on the descriptive statistical analysis, the description of the sample was obtained as follows:

Table 2. Descriptive Statistics					
	Size of economic entity (X1)	ROA (X2)	Liquidity(X3)	CSR size (Y)	
Mean	8.346470234	2,987185823	3.38029781	0.154216867	
Standard Error	0.117130192	2,893440274	0.520405124	0.004128841	
Median	8.210159362	2,757684699	1.836305793	0.15	
Standard Deviation	1.06710683	26,36049543	4.741116314	0.037615529	
Sample Variance	1.138716986	694,8757193	22.4781839	0.001414928	
Minimum	5.864608371	-86,6120582	0.028200442	0.05	
Maximum	12.11979995	131,2038957	25.44973584	0.2	
Sum	692.7570294	247,9364233	280.5647183	12.8	
Count	83	83	83	83	

The descriptive statistics presented in Table 2 is calculated for all variables; their results are to be interpreted as follows:

-The dependent variable, social responsibility reporting of economic entities (Y), has a sample of 83 economic entities, with a minimum value of 0.05, a maximum value of 0.2, an average value of 0.15 and a standard deviation of 0.04. The lowest values of CSR reporting vary between 0.05 and 0.1, this representing the low value of compliance and awareness of the entity in preparing the social responsibility report, while the highest values of CSR size were between 0.15 - 0.2. Considering the high values registered, it can be mentioned that economic entities provided compliant CSR information to elaborate complete social responsibility reports.

-The independent variable, the size of economic entity  $(X_1)$ , has a sample of 83 economic entities and is determined by calculating the logarithm of total assets. The minimum value registered is 5.864608371, the maximum value is 12.11979995, the average value is 8.346470234 and the standard deviation is 1.06710683. Regarding the size of the economic entity, the highest value is 12.11979995, registered by Erste Group Bank AG and the lowest value is 5.864608371, related to the entity Electroaparataj S.A.

-The independent variable, profitability of economic entity ( $X_2$ ), has a sample of 83 entities and is determined by calculating the logarithm of total assets. The minimum value registered is -86, 6120582, the maximum value is 131, 2038957, the average value is 2,987185823, and the standard deviation is 26, 36049543. The profitability of the sample varies between the maximum value of profitability of 131, 2038957,

registered by Transilvania Broker de Asigurare SA and the minimum value of -86, 6120582, registered by ROMCAB S.A.

-The independent variable, liquidity of economic entity (X3), has a sample of 83 economic entities and is determined by the current assets formula divided by current liquidities. Within the sample, the maximum value registered is 25.44973584, the minimum value registered is 0.028200442, the average value is 3.38029781, and the standard deviation is 4.741116314. At the level of 2020, liquidity varies between the lowest value of 0.028200442, registered by Electroputere S.A. and the maximum value of 25.44973584 registered by Casa de Bucovina-Club de Munte.

Determining the descriptive statistic's results has been done to extract from the constituted database the information necessary for the decisive process. This allows the observation of certain patterns regarding the analyzed data.

### The Jarque-Bera Test (J-B)

In this study, the authors have used the Jarque-Bera (J-B) test, a multiplier test that confirms normalcy. The researchers have used this test as it is reliable when using a sample with a large number of subjects. In other words, the test determines the symmetry and the asymmetry of the data in order to establish a normal distribution. Data can take more forms, such as time series data, regression model errors or data from vector.

A normal distribution tends to 0; that is, it is perfectly symmetrical around the average value and a *kurtosis* of 3, i.e., it provides information on the maximum values of the distribution. It is not necessary to know the average or standard deviation during the test. The formula of the J-B test is:

$$J-B = n \left[ (\sqrt{b1})2 / 6 + (b2 - 3)2 / 24 \right]$$
(5)

Where:

n = the size of the sample

 $\sqrt{b_1}$  =asymmetry coefficient of the sample (*skewness* coefficient)

 $b_2 = kurtosis$  coefficient

Obtaining a null hypothesis for the test means that the data is distributed normally, and an alternative hypothesis means that the data does not come from a normal distribution. Generally, a high J-B value indicates that errors are not distributed normally.

In this study, the used significance level was  $\alpha = 0.05$ . The basis for decision-making is to analyse probability numbers of J-B statistics under the following conditions. If P-value is  $\geq 0.05$ , then the assumption of normalcy is fulfilled. If P-value is < 0.05, then the assumption of normalcy is not fulfilled. In Table 3, the results of J-B test are calculated.

Table 5. Results of J-B test				
	$X_1$	$X_2$	X3	Y
Mean	8.35	2.99	3.38	0.15
Median	8.21	2.76	1.84	0.15
Minimum	5.86	-86.61	0.03	0.05
Maximum	12.12	131.20	25.45	0.20
Standard Deviation	1.07	26.52	4.74	0.04
Skewness	0.85	0.49	2.93	-0.32
Kurtosis	1.31	8.27	9.15	-0.63
Observation	83.00	83.00	83.00	83.00
J-B	15.99	240.04	408.41	2.75
P-value	0.03%	0.00%	0.00%	25.24%

#### Table 3. Results of J-B test

According to Table 3, J-B statistics are fulfilled only in the case of the dependent variable (Y) with a percentage of 25.24% because the p-value is higher than the significance level of 0.05. This means that the normalcy assumption is fulfilled in the case of the dependent variable.

## Correlation between independent variables

In this study, the correlation values between independent variables have been calculated. If there is a high correlation between independent variables, namely a value over 0.8, this indicates multicollinearity. The results of the multicollinearity tests are presented by means of the correlation n matrix in Table 4.

#### Table 4. Correlation results between independent variables

	$X_1$	X <sub>2</sub>	X3
$X_1$	1	0,018863176	-0,043835235
$X_2$	0,018863176	1	0,165502588
X3	-0,043835235	0,165502588	1

From the results of testing the correlation between variables in Table 4, it can be concluded that there are no cases of multicollinearity between independent variables. This is due to the fact that the correlation value between independent variables is not higher than 0.8.

### Determination coefficient, F-test and T-test

The determination coefficient is a number between 0 and 1, representing the fraction of points (x,y) that follows the regression line of matching a set of data with variables. It is noted with  $R^2$  (R-squared) and is used to determine the parameters of the function, using the least squares method. This calculation method determines the parameters of the adjustment/control function.

The F-test is a test that determines the equality of variations between normal populations by comparing two variables of the population. This test is used when it is not known whether the two populations have the same variation. The F-test can

also be used to verify if the data is compliant with a regression model that it's been obtained by the analysis of the least squares. When there are several linear regression analyses, the F-test examines the general validity of the model, or it determines whether any of the independent variables have a linear relationship with the dependent variable.

The T-test is a test used to find out the value of p (p-value), which can be used to accept or reject the hypothesis. The test analyses whether the means of two data sets are very different from each other, i.e., the population average is equal to or differs from the standard average. This can also be used to verify if the regression line is different from 0.

In testing the hypotheses, the analysis of the determination coefficient, the simultaneous influence test (F-test) and the partial effect test (T-test) will be performed. The statistics values of these tests are presented in Table 5.

Table 5. Results of determination coefficient, of F test and of T test				
Variabile	Coefficients	Standard Error	t Stat	P-value
Y	0,1693681	0,033232042	5,096529953	2,30902E-06
$X_1$	-0,001307749	0,003918528	-0,333734721	0,739463987
$X_2$	-2,99844E-05	0,000160691	-0,18659709	0,852454898
X3	-0,001226689	0,000894137	-1,371926228	0,173969874
<b>R</b> -squared		0,162250454		
Adjusted R-squ	ared	0,02632521		
F statistic		0,711973372		
T test		0,547717214		

Table 5. Results of determination coefficient, of F test and of T test

According to Table 5, the result of the determination coefficient (adjusted R-squared) is R2 = 0,162250454. This value can be interpreted as the size of the economic entity, profitability or liquidity capable of influencing CSR simultaneously in a percentage of 16.225%, the rest of 83.775% being represented by other factors that have not been included in the research variable.

Significance of the simultaneous effect (*F-test*): it aims to analyse the effect of simultaneous independent variables on the dependent variable. Based on Table 5, the F statistics value is known, and that is 0,711973372 > 0.05. This result shows that all independent variables, namely the size of the economic entity, profitability or liquidity, do not simultaneously have a significant effect on the dependent variable (Y).

Partial significance test (*T-test*): it is used to determine if independent variables influence CSR, assuming that independent variables are constant. The basis for decision-making is: variant 1 is rejected if the significant value of P-value > 5% or variant 2 is accepted if the significant value of P-value < 5%. From the results of this test, one can note how independent variables register negative values. From this result, it can be concluded that at least two variables differ significantly.



### Discussion

This study was conducted to analyse whether the size of the economic entity, the profitability and liquidity influence CSR actions in the case of the companies listed on the BSE simultaneously. The research sample consisted of 83 economic entities listed on the BSE in 2020. For this analysis, the econometric model of multiple regressions and the significance coefficient (p-value) were used.

Based on the multiple regression equation, the results of each independent variable demonstrate that:

-The size of the economic entity  $(X_1)$  has a negative relationship direction (direction of the relationship) of -0.001307749. Assuming that each increase in the size of the economic entity of 1% will not determine an increase in CSR;

-Profitability  $(X_2)$  has a negative relationship of -2.99844E-05. Assuming that any 1% increase in profitability does not influence an increase in CSR;

-Liquidity  $(X_3)$  has a negative relationship of -0.001226689. Assuming that any 1% increase in liquidity will not determine an increase in CSR.

The significance coefficient (p-value) demonstrates that the size of the economic entity has a positive and significantly poor effect on CSR, profitability has a positive and significant effect on CSR, and liquidity has a positive and insignificant effect on CSR.

Staring from this, the constructed hypotheses can be validated or invalidated:

Hypothesis<sub>1</sub>: The dimension of the economic entity  $(X_1)$  influences the social responsibility of the companies listed on BSE; it is validated. The validation of the hypothesis results from the value of the t number of the variable (X1), which is - 0.333734721, and the significance value is 0.739463987. The significance value for the T-test obtained is 0.739463987, with a very high correlation. This proves that the size of the economic entity significantly influences the social responsibility of the companies listed on BSE.

The results of this study are consistent with the fact that large economic entities with many operational activities influence the community and are most prone to social responsibility actions and the provision of CSR information. Probably, the theory according to which large entities should publish CSR information results from the fact that the latter is more visible and the public has higher expectations from them than in the case of a smaller economic entity. Another reason may be that large entities manage information more widely and are in contact with more factors while conducting the business. The results of this study are consistent with the research conducted by Contini et al. (2020), which states that the size of the economic entity significantly influences CSR.

Hypothesis<sub>2</sub>: Profitability ( $X_2$ ) influences the social responsibility of the companies listed on BSE; it is validated. The validation of the hypothesis results from the profitability value ( $X_2$ ) is calculated by T-test, and it obtains -0.18659709. The significance value is 0.852454898. The significance value for the T-test obtained is 0.852454898, higher than the established alpha significance value (0.5%). This

shows that profitability has a high correlation, so it influences significantly the corporate social responsibility of the companies listed on BSE.

This result is according to Yu, Khan, Liu (2020) theories that support a direct connection between profitability and CSR. Therefore, the higher the profitability levels of the economic entity, greater the social involvement. Lee, Kim and Kim (2018) argued that the relationship between financial performance and CSR would be better expressed in response to the demands of social environment. The outcomes of this study are according to the research conducted by Alimuddin et al. (2020).

Hypothesis<sub>3</sub>: Liquidity ( $X_3$ ) influences the social responsibility of the companies listed on BSE; it is invalidated. The invalidation of the hypothesis results from the value of the arithmetic variable liquidity obtained, which is -1.371926228 and the significance value of 0.173969874. The significance value for the T-test is 0.173969874, a lower value than the established alpha significance level (0.5). This shows that liquidity does not significantly influence CSR.

The level of significance contradicts the theory according to which the higher the liquidity of an entity and the stronger the financial situation of the entity, the more the company will move towards CSR actions. This is based on the expectations of third parties to see responsible actions on the part of a strong economic entity rather than on the part of a weak economic entity. Furthermore, liquidity is seen as a measure of performance, and entities with a low degree of liquidities should provide detailed information to explain the poor performance compared to the entities with a high degree of liquidity.

The results of this study indicate that the size of the economic entity and profitability represent an important factor in influencing the social responsibility of economic entities, especially for companies listed on the BSE.

## Conclusions

Within this paper, a direct rendering of reality is done using two research methods, respectively qualitative and quantitative research. Thereby the authors observe how in Romania, the companies have implemented CSR actions significantly, offering a research direction for the initially emitted hypotheses. By doing this research, an answer has been given regarding the influence of the financial factors on CSR. The research results have demonstrated that the economic entity's dimension and profitability significantly influence CSR. In contrast, liquidity does not influence CSR in a significant way, according to the invalidated hypothesis.

The present research contains a series of limitations, such as the number of economic entities, even though it is representative for Romania because the sample is made of BSE listed entities; the amount of time it took for the paper to be made, referring only to the year of 2020; the fact that the research was done only for the Romanian entities and not fo the entities existent in the European or international space; the way of scoring within the qualitative research because it can be subjective, therefore influencing results.

To overcome the limitations of this case study, the research can be extended at a European or international level and for a longer period, allowing for the possibility of making a broader comparison. The advantage offered by overcoming the limitations would consist of observing the evolution of the CSR reports that are drafted from one year to another or from the first year of reference to the last one. Moreover, overcoming the limits allows for accomplishing the comparisons of entities at the state level, as well as the entities of the same type, which activate in more countries.

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# ANALIZA WPŁYWU CZYNNIKÓW FINANSOWYCH NA SPOŁECZNĄ ODPOWIEDZIALNOŚĆ BIZNESU: DOWODY Z RUMUNII

**Streszczenie:** Nowatorski element niniejszego opracowania stanowi Społeczna Odpowiedzialność Biznesu (CSR) związana z trzema czynnikami finansowymi: wymiarem podmiotu gospodarczego, rentownością i płynnością spółek notowanych na Giełdzie Papierów Wartościowych w Bukareszcie (BSE). Próba składa się z 83 spółek notowanych na BSE na rynku regulowanym w 2020 roku. Zebrane dane zostały przetworzone w ramach badań jakościowych i ilościowych. Do analizy danych i określenia wyników wykorzystano szereg modeli ekonometrycznych, takich jak statystyka opisowa, test Jarque-Bera (J-B), korelacja między zmiennymi niezależnymi, współczynnik determinacji, test F i T-test. Wyniki badań wykazały, że wielkość podmiotu gospodarczego i rentowność miały istotny wpływ na elementy CSR, o czym świadczy współczynnik istotności zarejestrowany dla dwóch zmiennych niezależnych. Testowanie stawianych hipotez odbywało się za pomocą regresji wielokrotnych i współczynnika istotności (wartość p). Zgodnie z tym, że wielkość podmiotu gospodarczego i rentowność spółek notowanych na BSE, hipotezy są walidowane, rejestrując wysokie korelacje, a tym samym znacząco wpływając na CSR.

Słowa kluczowe: CSR, czynniki finansowe, wielkość podmiotu gospodarczego, rentowność, płynność.

# 财务因素对企业社会责任的影响分析:来自罗马尼亚的证据

**摘要:本文的新**颖之处在于与三个财务因素相关的企业社会责任 (CSR):经济实体的维度、可出租性和布加勒斯特证券交易所 (BSE) 上市公司的流动性。样本包括2020年在受监管市场上 BSE 上市的 83 家公司。使用定性和定量研究处理收集的数据。一系列计量经济模型用于分析数据并确定结果,如描述性统计、Jarque-Bera检验(J-B)、自变量之间的相关性、确定系数、F检验和T检验。研究结果表明,经济实体的规模和盈利能力对企业社会责任要素有显着影响,两个自变量的显着性系数证明了这一点。已发布假设的检验是通过多元回归和显着性系数(p值)进行的。根据经济实体规模和盈利能力对疯牛病上市公司社会责任的影响,假设得到验证,相关性高,从而显着影响企业社会责任。

关键词:企业社会责任,财务因素,经济实体规模,盈利能力,流动性。