

THE CORPORATE SOCIAL RESPONSIBILITY AND THE INNOVATION PERFORMANCE

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Abstract: *In the specialized literature, the relationship between corporate social responsibility and innovation performance is not very well highlighted. There are two basic orientations: on the one hand, there are studies that highlight the relationship between environmental practices and innovation and that extend research to the concept of CSR; on the other hand, there are studies that show the impact of environmental strategies on performance and innovation. This paper aims to establish the relationship between CSR and innovation performance, through the analysis of CSRHub (Consensus ESG Rating 2021), which provides a consistent ranking of companies in different states according to CSR performance, and the Global Innovation Index 2021, which achieves ranking of the most innovative economies in the world.*

Key words: corporate social responsibility, innovation performance, CSRHub, Global Innovation Index 2021, European Union.

JEL Classification Codes: M14, O32.

1. INTRODUCTION

The relationship between corporate social responsibility and innovation has become increasingly interesting in the literature. Some research highlights the relationship between environmental practices and innovation performance and extended research to the concept of CSR (green CSR). Other studies demonstrate the impact of environmental strategies on performance and innovation. Some authors appreciate the importance of CSR as a driver of innovation policy, performance and competitiveness, and others appreciate that the impact is rather indirect or insignificant.

This paper proposes to establish the relationship between CSR performance and innovation performance, by analyzing the data provided by CSRHub (Consensus ESG Rating 2021), which provides a consistent ranking of companies in different states according to CSR performance, and Global Innovation Index 2021, which achieves the ranking of the most innovative economies in the world.

The research is structured in several parts. The first part analyzes the literature on corporate social responsibility, and the second part establishes the relationship between CSR and innovation. The fourth part describes the research methodology, and the fifth part presents the analysis of the data and the results of the research. The last part is dedicated to the conclusions.

2. THE ANALYSIS OF THE SPECIALIZED LITERATURE REGARDING THE CORPORATE SOCIAL RESPONSIBILITY

Corporate social responsibility is a concept widely used today, both in literature and in organizational practice.



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Published after 1950, the concept has undergone various stages of evolution. The literature that addresses the issue of corporate social responsibility captures the steps taken in the ideational enrichment of the concept, from the level of economic responsibilities of shareholders or managers to the responsibility of an organization towards employees, the environment and the community.

Thus, some authors appreciate that the evolution of the concept of corporate social responsibility allows highlighting three distinct approaches (Buciușcan, 2010).

The classic approach emphasizes that the sole responsibility of a company is to increase profits for its shareholders. This view, promulgated by Milton Friedman in 1971, is known as the "corporate selfishness" theory. The main disadvantage of the classical approach is the time constraint. If a company incurs additional expenses in a short period of time, then in a long period of time it will gain benefits on the image of the company, developing relationships with the local community. "The fight against poverty is not the function of private business. This is the work of the state. Our job is to make money for shareholders and customers within the law. We have no other responsibilities. We pay taxes and nothing else should be supreme except God and conscience" (Friedman, 1970).

The theory of "corporate altruism" is the opposite of Milton Friedman's theory. Managers involved in business should be concerned not only with maximizing profits, but also with maximum contributions to solving social problems, such as social justice and environmental protection. The recommendations of the Economic Development Committee emphasized that "the obligation of businesses is to make a significant contribution to improving the quality of life in the United States". Thus, companies cannot shy away from social issues because they are open systems, which are actively involved in drafting laws and making government decisions, sponsoring parties and social associations.

The third position is the theory of "reasonable selfishness", which is based on the fact that corporate social responsibility is beneficial because it reduces long-term losses. Social costs and charity programs reduce current income, but in the long run create a favorable social environment and therefore sustainable profits. Philanthropic programs and sponsorship are justified because they can help reduce the corporate tax base and improve the organization's image.

Regarding the definition of this concept, the specialists did not reach a universally valid opinion. There are different views on the significance of corporate social responsibility.

Archie Carrol is considered one of the most important specialists in the field of corporate social responsibility. Archie Carroll's model, also known as the "social responsibility pyramid", enunciated in 1979 and developed over the following years, develops a conceptual framework for corporate social responsibility, introducing four categories of responsibilities (Rwigema and Venter, 2004):

- Economic responsibilities (the obligation of managers and shareholders to generate profit by satisfying consumers, by offering products and services at competitive prices, by properly managing investments, by solving local problems or by promoting innovation);
- Legal responsibilities (observance of laws and rules);
- Ethical responsibilities (running the business in a fair and just way, respecting human rights in relation to employees, customers, other companies or the community);
- Philanthropic responsibilities (volunteering to help the community, donations, local cooperation).

Corporate social responsibility is "a concept that refers to the contribution that the companies have to the development of the modern society" (Hristea, 2011, p. 60). For many

researchers, corporate social responsibility is “the way to success and performance” (Hristea, 2011, p. 59).

It is obvious to all specialists that the social performance of organizations is extremely important, along with economic performance. According to the author Anca Maria Hristea (Hristea, 2011, p.59), “the implication in the life of the community became necessary for any company that wants to have not only commercial success, but also the respect of the company where and for which it operates”.

3. THE RELATIONSHIP BETWEEN CORPORATE SOCIAL RESPONSIBILITY AND INNOVATION

The relationship between corporate social responsibility and innovation has been less analyzed in the literature. The European Commission identifies research gaps and considers relevant the development of empirical studies highlighting the role of CSR on economic growth by supporting the innovation process (European Commission, 2011).

It is found that there are two basic orientations: on the one hand, there are studies that highlight the relationship between environmental practices and innovation and that extend the research to the concept of CSR; on the other hand, there are studies that show the impact of environmental strategies on performance and innovation.

Some authors believe that those organizations that do not take CSR into account may not be able to survive because it will be very difficult for them to innovate (MacGregor, Spinach and Fontrodona, 2007).

Both corporate social responsibility and innovation are considered factors in the competitiveness and performance of organizations. The authors Busch and Schnippering (2022) analyzed innovation as an important factor in analyzing the relationship between CSR performance and financial performance. The results of this study show that innovation and CSR cover different aspects of financial performance. Firms cannot focus only on innovation to sustain sustainability or vice versa, but must define innovation strategies and CSR separately to create value for the firm.

The first attempt to review the literature to identify studies that analyzed the relationship between CSR and innovation belonged to the authors Ratajczak and Szutowski (2016). CSR has been assumed to influence performance in innovation and, conversely, to have an impact on CSR. However, the results indicate a lack of scientific consensus on many aspects of the relationship studied.

The research of authors Wu, Liu, Chin and Zhu “aims to test the correlation between green CSR and innovation performance considering the moderating roles of public visibility and firm transparency” (Wu et al., 2018, p. 9). Green CSR is the obligation or practice to reduce the waste generated by companies' operations in order to maximize resource efficiency and minimize the negative impact of these operations on future generations. The study suggests that the positive relationship between green CSR and innovation performance becomes stronger through greater public visibility and organizational transparency. This study complements the literature, providing a solid theoretical foundation for the correlation between green CSR and innovation performance.

Steven P. MacGregor and Joan Fontrodona (2008) explore the link between CSR and innovation, as a result of a European project aimed at implementing CSR in small and medium-sized enterprises. One of the three hypotheses of the study is that innovation and CSR can be configured as a circle: CSR leads to innovation and innovation determines CSR. The authors believe that CSR-driven innovation is about doing the right things, while innovation-driven CSR is about doing the right things” (MacGregor and Fontrodona, 2008, p. 14). It is demonstrated that

CSR development and innovation development can be integrated in three steps: Step 1. Founding visions; Step 2. Narrow formalization; Step 3. Broad formalization and strategic cross-over. CSR is presented as a process of innovation, which generates value for the organization.

Another recent study (Ullah and Sun, 2021) looks at the relationship between CSR, innovation, and corporate performance across 15 companies in 12 developed countries. The results show that, in the context of developed countries, the relationship between CSR and corporate innovation is not significant. On the contrary, the study by Gonzalez-Ramos, Donate and Guadamillas (2014) shows that there is a positive relationship between technological innovation and CSR in the Spanish energy sector. Thus, technological leaders should introduce CSR as part of their business and innovation strategies.

The research published by Broadstock, Matousek, Meyer, and Tzeremes (2020) demonstrates the process of "indirect value-creation" by which CSR policy initially increases the organization's ability to innovate and then positively affects value creation and financial and operational performance. The study demonstrates the existence of an indirect link between CSR and innovation, which explains the divergent results of empirical studies. CSR commitments of companies can influence the mechanism for creating the capacity for innovation, which is reflected in the increase in the level of performance.

In our opinion, the relationship between CSR performance and innovation performance is indirect. CSR performance leads to improved stakeholder confidence, increased work motivation and, in the medium and long term, increased financial performance and competitiveness. Companies that achieve CSR performance can be more oriented towards clean technologies, the implementation of new technological solutions, innovative procedures and working methods. However, achieving innovation in performance requires the fulfillment of other conditions, such as the financial resources needed to implement innovative solutions.

4. RESEARCH METHODOLOGY REGARDING THE RELATIONSHIP BETWEEN CSR PERFORMANCE AND INNOVATION PERFORMANCE

The aim of this research is to establish the relationship between CSR performance and innovation performance. To this end, the following objectives have been set:

O1. Identify a CSR performance appraisal tool that allows the classification of states according to the CSR performance reported by companies.

O2. Identify a tool for assessing the innovation performance of national economies.

O3. Use the two tools to analyze the correlation between CSR performance and innovation performance for EU Member States.

The hypothesis of the study is as follows: "The link between CSR performance and innovation performance is low, insignificant".

In the literature, several indexes are used to assess CSR performance, such as: The Korea Economic Justice Institute (KEJI) Index (Cho, Chung and Young, 2019), the CSR performance index for 20 of the OECD states (Gjolberg, 2009), CSR performance in emerging markets (Muller and Kolk, 2009) etc.

For this study we chose to use the results of CSRHub 2021. CSRHub is a tool dedicated to managers, investors, consultants, governments, non-profit organizations and academia, which provides a consistent ranking of CSR performance for over 26,000 companies out of 150 countries. CSRHub develops four levels of CSR, each with three other subcategories: community, employees, environment and governance (CSRHub, Consensus ESG Ratings, 2021a), explained in Table no. 1.

Table no. 1. The categories and subcategories of CSRHub Data

Categories	Subcategories	Description
Community <i>Human rights, supply chain, product quality & safety, product sustainability, community development, philanthropy</i>	Community Development & Philanthropy	- community citizenship through charitable giving, donations of goods, and volunteerism of staff time - protecting public health and managing the social impacts of its operations on local communities - building design impact on the local economy and ecosystem
	Human Rights & Supply Chain	- company's commitment to respecting fundamental human rights conventions - company's transparency - company's relationship with and respect for the human rights of indigenous peoples near its proposed or current operations.
	Product	- the responsibility of a company for the development, design, and management of its products and services and their impacts on customers and society at large - product safety and quality
Employees <i>Diversity, labor rights, treatment of unions, compensation, benefits, training, health, worker safety</i>	Compensation and Benefits	- company's capacity to increase its workforce loyalty and productivity through rewarding, fair, and equal compensation and financial benefits
	Diversity and Labor Rights	- workplace policies and practices covering fair and non-discriminatory treatment of employees, and its diversity policies. - this subcategory measures a company's ability to maintain diversity, provide equal opportunities regardless of gender, age, ethnicity, religion or sexual orientation, and promote work-life balance
	Training, Safety and Health	- a company's effectiveness in providing a healthy and safe workplace
Environment <i>Environmental policy, environmental reporting, waste management, resource management, energy use, climate change policies and performance.</i>	Energy and Climate Change	- a company's effectiveness in addressing climate change through appropriate policies and strategies, energy-efficient operations, and the development of renewable energy and other alternative environmental technologies
	Environment Policy and Reporting	- a company's effectiveness in addressing climate change through appropriate policies and strategies, energy-efficient operations, and the development of renewable energy and other alternative environmental technologies
	Resource Management	- how efficiently resources are used in manufacturing and delivering products and services, including those of a company's suppliers - the capacity to reduce the use of materials, energy or water, and to find more efficient solutions by improving its supply chain management

Categories	Subcategories	Description
Governance <i>Leadership ethics, board composition, executive compensation, transparency and reporting, stakeholder treatment.</i>	Board	- a company's effectiveness in following best practices in corporate governance principles related to board membership, independent decision making through experienced, diverse and independent board members, effectiveness toward following best practices related to board activities and functions, and board committee structure and composition
	Leadership Ethics	- how a company manages its relationships with its various stakeholders, including investors, customers, communities, and regulators
	Transparency and Reporting	- corporate policies and practices aligned with sustainability goals - this subcategory includes whether the company provides a list of its major stakeholders and how it engages with them - it also covers whether the company is a signatory of Global Compact and other leading global entities. It evaluates the assurance (3 rd party audit) of the accuracy, completeness, and reliability of its Sustainability or Corporate Social Responsibility reports

Source: CSRHub, Consensus ESG Ratings, 2021a. *CSRHub Data Schema Description*. [online] Available at: <<https://www.csrhub.com/csrhub-esg-data-schema>> [Accessed 23 January 2022]

The research methodology involves the conversion on a numerical scale from 0 to 100 (100 = positive rating) of the data obtained from the over 5000 sources, through normalization and aggregation (CSRHub, Consensus ESG Ratings, 2021b). Data is collected about each reporting company to provide an overview of different industries, states and regions. Thus, the states of the world receive a score that establishes the position in the region.

To evaluate innovation performance, there are several indexes, such as: Bloomberg Innovation Index, Global Innovation Index, European Innovation Scoreboard, etc. For the present research, it was decided to use the Global Innovation Index (GII) 2021. "The Global Innovation Index 2021 captures the innovation ecosystem performance of 132 economies and tracks the most recent global innovation trends" (Dutta, Lanvin, Leon and Wunsch-Vincent, 2021, p. 2). The fourteenth edition of the index includes a novelty, respectively captures the innovation ecosystem during the COVID-19 crisis. The analyzed states receive a score and a position in the top, according to this score. In GII 2021, the first position was occupied by Switzerland, with a GII score of 65.5, and the last position went to Angola, with a score of 15.

5. RESEARCH DATA ANALYSIS AND RESULTS

To highlight the relationship between CSR performance and innovation performance, the database was completed with scores from the 27 EU Member States: CSR performance (CSRHub 2021 score) and innovation performance (GII 2021 score). The following notations were used for the two variables: CSR performance (CSRP) and innovation performance (IP).

Table no. 2. Database on CSR performance and innovation performance for EU Member States

Current number	States		CSRHub 2021		Global Innovation Index 2021 (GII)
			Companies in country	CSR Performance (CSRP)	Innovation Performance (IP)
1.	Austria	AT	126	58	50.9
2.	Belgium	BE	171	54	49.2
3.	Bulgaria	BG	86	52	42.4
4.	Croatia	HR	87	55	37.3
5.	Cyprus	CY	68	53	46.7
6.	Czech Republic	CZ	24	54	49
7.	Denmark	DK	233	52	57.3
8.	Estonia	EE	16	54	49.9
9.	Finland	FI	170	55	58.4
10.	France	FR	993	55	55
11.	Germany	DE	858	54	57.3
12.	Greece	EL	214	51	36.3
13.	Hungary	HU	31	54	42.7
14.	Ireland	IE	85	51	50.7
15.	Italy	IT	477	57	45.7
16.	Latvia	LV	14	65	40
17.	Lithuania	LT	34	57	39.9
18.	Luxembourg	LU	70	55	49
19.	Malta	MT	25	55	47.1
20.	Netherlands	NL	341	57	58.6
21.	Poland	PL	406	51	39.9
22.	Portugal	PT	84	58	44.2
23.	Romania	RO	104	56	35.6
24.	Slovakia	SK	12	47	40.2
25.	Slovenia	SI	31	61	44.1
26.	Spain	ES	417	59	45.4
27.	Sweden	SE	572	51	63.1

Sources: realised by the author based on: CSRHub, Consensus ESG Ratings, 2021c. *Browse by geography, Europe*. [online] Available at: <https://www.csrhub.com/geographic_region/Europe> [Accessed 23 January 2022]. and

Dutta, S., Lanvin, B., Leon, L.R. and Wunsch-Vincent, S., 2021. *Global Innovation Index 2021. Tracking Innovation through the COVID-19 Crisis*. Geneva: World Intellectual Property Organization. [pdf] Available at: <<https://www.globalinnovationindex.org/gii-2021-report>> [Accessed 21 January 2022].

Statistical methods of analysis were applied for data analysis, using SPSS software. The Kolmogorov-Smirnov test indicates the extent to which the observed scores deviate from a normal distribution. The test results show that the null hypothesis is not rejected, so we can assume that the data set is distributed normally (Table no. 3).

Table no. 3. Tabel de rezultate, testul Kolmogorov-Smirnov

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of CSRH is normal with mean 54.85 and standard deviation 3.60.	One-Sample Kolmogorov-Smirnov Test	.576	Retain the null hypothesis.
2	The distribution of GII is normal with mean 47.26 and standard deviation 7.45.	One-Sample Kolmogorov-Smirnov Test	.963	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Source: calculated by the author

Hypothesis testing was performed using the statistical correlation method. The aim was to establish the correlation between CSR performance and the innovation performance of EU Member States in order to demonstrate how strong the relationship between these two variables is.

Table no. 4. Results table**Descriptive Statistics**

	Mean	Std. Deviation	N
CSRP	54.8519	3.60239	27
IP	47.2556	7.45021	27

Correlations

		CSRH	GII
CSRH	Pearson Correlation	1	-.111
	Sig. (2-tailed)		.580
	Sum of Squares and Cross-products	337.407	-77.678
	Covariance	12.977	-2.988
	N	27	27
GII	Pearson Correlation	-.111	1
	Sig. (2-tailed)	.580	
	Sum of Squares and Cross-products	-77.678	1443.147
	Covariance	-2.988	55.506
	N	27	27

Source: calculated by the author

The results (Table no. 4) show the existence of a negative correlation, of low intensity, between the analyzed variables (Pearson correlation coefficient registers the value -0.111). Consequently, the study hypothesis, according to which “The link between CSR performance and innovation performance is low, insignificant”, is validated.

6. CONCLUSIONS

Studies in the literature express divergent results on CSR performance and innovation performance: some believe that there is a direct link between CSR performance and environmental performance, and others suggest an insignificant relationship.

The results of this research show that there is a weak, insignificant correlation between CSR performance and innovation performance. CSR performance may be a factor that can support innovation performance, but it is not a significant factor.

The limitations of this study also lie in the difficulty of assessing CSR performance at the national or regional level. The results published by CSRHub were used for this research, a tool that was based on the companies' reports, sometimes insufficient. We believe that future research should focus on identifying other tools that provide solid and relevant data.

BIBLIOGRAPHY:

1. Broadstock, D.C., Matousek, R., Meyer, M.S. and Tzeremes, N.G., 2020. Does corporate social responsibility impact firms' innovation capacity? The indirect link between environmental & social governance implementation and innovation performance. *Journal of Business Research*, 119, pp. 99-110.
2. Buciușcan, S., 2010. *Responsabilitatea socială a întreprinderilor în contextul integrării Republicii Moldova în Comunitatea Europeană*. PhD. Academia de Studii Economice din Moldova. [online] Available at: <<http://www.scribd.com/doc/96036582/Silvia-Buciuscan-Abstract>> [Accessed 14 October 2021].
3. Busch, T. and Schnippering, M., 2022. Corporate social and financial performance: Revisiting the role of innovation. *Corporate Social Responsibility and Environmental Management*, Early View, pp. 1-11. [online] Available at: <<https://onlinelibrary.wiley.com/doi/10.1002/csr.2225>> [Accessed 23 January 2022].
4. Cho, S.J., Chung, C.Y. and Young, J., 2019. Study on the Relationship between CSR and Financial Performance. *Sustainability*, 11(2), 343, pp.1-26.
5. CSRHub, Consensus ESG Ratings, 2021a. *CSRHub Data Schema Description*. [online] Available at: <<https://www.csrhub.com/csrhub-esg-data-schema>> [Accessed 15 January 2022].
6. CSRHub, Consensus ESG Ratings, 2021b. *CSRHub Rating Methodology*. [online] Available at: <<https://www.csrhub.com/csrhub-esg-ratings-methodology>> [Accessed 15 January 2022].
7. CSRHub, Consensus ESG Ratings, 2021c. *Browse by geography, Europe*. [online] Available at: <https://www.csrhub.com/geographic_region/Europe> [Accessed 15 January 2022].
8. Dutta, S., Lanvin, B., Leon, L.R. and Wunsch-Vincent, S., 2021. *Global Innovation Index 2021. Tracking Innovation through the COVID-19 Crisis*. Geneva: World Intellectual Property Organization. [pdf] Available at: <<https://www.globalinnovationindex.org/gii-2021-report>> [Accessed 21 January 2022].
9. European Commission, 2011. *Towards a greater understanding of the changing role of business in society*. Luxembourg: General Directorate for Research and Innovation, Socio-Economic Sciences and Humanities.
10. Friedman, M., 1970. The Social Responsibility of Business is to Increase its Profits. *The New York Times Magazine*, September 13th, pp.32-33.
11. Gjolberg, M., 2009. Measuring the immeasurable?: Constructing an index of CSR practices and CSR performance in 20 countries. *Scandinavian Journal of Management*, 25(1), pp.10-22.
12. Gonzalez-Ramos, M.I., Donate, M.J. and Guadamillas, F., 2014. Technological posture and corporate social responsibility: effects on innovation performance. *Environmental Engineering & Management Journal (EEMJ)*, 13(10), pp. 2497-2505.
13. Hristea, A.M., 2011. Corporate Social Responsibility – between Desideratum and Reality. *Theoretical and Applied Economics*, Volume XVIII, 10(563), pp. 57-74.

14. MacGregor, S.P., Spinach, X. and Fontrodona, J., 2007. *Social innovation: Using design to generate business value through corporate social responsibility*. Barcelona: IESE Business School.
15. MacGregor, S.P. and Fontrodona, J., 2008. *Exploring the fit between CSR and innovation*. Barcelona: IESE Business School.
16. Muller, A. and Kolk, A., 2009. CSR performance in emerging markets evidence from Mexico. *Journal of Business Ethics*, 85(2), pp. 325-337.
17. Ratajczak, P. and Szutowski, D., 2016. Exploring the relationship between CSR and innovation. *Sustainability Accounting, Management and Policy Journal*, 7(2), pp. 295-318.
18. Rwigema, H. și Venter, R., 2004. *Advanced Entrepreneurship*. Southern Africa: Oxford University Press.
19. Ulah, S. and Sun, D., 2021. Corporate social responsibility corporate innovation: A cross-country study of developing countries. *Corporate Social Responsibility and Environmental Management*, 28(3), pp. 1066-1077.
20. Wu, W., Liu, Y., Chin, T. and Zhu, W., 2018. Will Green CSR Enhance Innovation? A Perspective of Public Visibility and Firm Transparency., *International Journal of Environmental Research and Public Health*, 15(2), 268, pp. 1-14.