

Veselovská, Lenka

## Article

# Corporate social responsibility: A victim or a hero of the COVID-19 crisis?

Economies

## Provided in Cooperation with:

MDPI – Multidisciplinary Digital Publishing Institute, Basel

*Suggested Citation:* Veselovská, Lenka (2025) : Corporate social responsibility: A victim or a hero of the COVID-19 crisis?, *Economies*, ISSN 2227-7099, MDPI, Basel, Vol. 13, Iss. 5, pp. 1-27, <https://doi.org/10.3390/economies13050135>

This Version is available at:

<https://hdl.handle.net/10419/329415>

## Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

## Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

## Article

# Corporate Social Responsibility: A Victim or a Hero of the COVID-19 Crisis?

Lenka Veselovská 

Faculty of Economics, Institute of Management Systems in Poprad, Matej Bel University, 5766/16 Dlhé Hony, 05801 Poprad, Slovakia; lenka.veselovska@umb.sk

**Abstract:** The COVID-19 pandemic has had an enormous economic impact on society. One of the little-known links is the impact of the pandemic on corporate social responsibility. The main aim of this research was to compare the situation before and during the pandemic, which allows the assessment of the impact of the pandemic on the rates and ways of implementing CSR in different organizations. A new research model incorporating all CSR dimensions was created to examine the implementation rates through 83 indicators. The findings indicate an overall decrease in CSR activities during the pandemic. Employee and community activities were the most affected. However, the biggest disparities were recorded in the environmental dimension. The originality of the study lies in the development of a novel methodological approach to documenting the CSR involvement in organization and its application to compare the pandemic and post-pandemic levels. By understanding the effects of major adverse events, it is possible to further develop its evolution and combat the barriers that led to a decrease in CSR areas during the pandemic.

**Keywords:** corporate social responsibility; crisis; COVID-19 pandemic

## 1. Introduction

The modern business environment is currently disrupted by negative phenomena, hindering sustainable development worldwide. The global pandemic is one of the most significant challenges in the modern world, which, in addition to normal economic activities, significantly affects the development of corporate social responsibility (CSR) in all public and private organizations. Since the pandemic concluded only recently, it would not be beneficial to define the trends for future CSR development so early, especially without fully understanding how the pandemic changed the attitude towards CSR. Furthermore, this pandemic can also be seen as a trial that tests managers' commitment to CSR. The crisis caused by the COVID-19 pandemic has forced many companies to reconsider their business strategies and actions and contemplate options to endure and implement changes or terminate operations. A considerable number of managers are at a crossroads in terms of applying socially responsible programs and actions: decrease resources for CSR initiatives or choose the opposite and increase CSR activities and implement these principles even further into the managerial system (Navickas et al., 2021; Richnák & Fidlerová, 2022). Such an integral choice under extreme conditions can test their resolve to be fully committed to CSR in their organizations. The question of whether they can pass this test will be crucial for their further direction. If we look at a comprehensive set of organizations in the selected economy, it is possible to create a picture of CSR perception in a given country and at the same time indicate further directions for CSR in the future. If we consider a pandemic and its negative consequences to be a test, the outcome could be different for



Received: 19 February 2025

Revised: 16 April 2025

Accepted: 9 May 2025

Published: 14 May 2025

**Citation:** Veselovská, L. (2025).

Corporate Social Responsibility: A Victim or a Hero of the COVID-19 Crisis? *Economics*, 13(5), 135.

<https://doi.org/10.3390/economics13050135>

**Copyright:** © 2025 by the author.

Licensee MDPI, Basel, Switzerland.

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license

(<https://creativecommons.org/licenses/by/4.0/>).

individual organizations and as a whole it possible to consider CSR as either the victim of the pandemic, if its activities have been diminished, or as a hero, if it could be proven that CSR initiatives prevailed and in some cases even helped the organization overcome the negative effects of the pandemic. There is currently not enough evidence to even speculate which outcome is more likely to be happening in reality.

The main objective of this paper is to develop a comparison between the level of application of CSR before and during the pandemic of the COVID-19 disease. An overall CSR implementation index was developed to measure and consequently compare the level of implementation of CSR before and during the pandemic. The main research question was “What were the most significant changes in CSR during the pandemic in comparison to pre-pandemic state?”. This research question was formulated to document the changes that occurred during the pandemic in a comprehensive way that has not yet been done before.

An empirical study was selected as the basic methodological approach, as it allows for a broad-spectrum analysis of data obtained directly from organizations. At the same time, it was a necessary tool, as similar studies on the impact of a pandemic on CSR are not currently available. A comprehensive look at CSR changes can be a major factor in its future development and can also serve national and regional policy makers to develop future activities to support organizations within their regions on their path to sustainable development. To fulfill the aims of this research study, hypotheses were defined, which were based on the current state of knowledge of CSR issues and findings of other authors involving comprehensively CSR focus or focus on partial CSR issues. Organizations in four central European countries were selected as research subjects. These countries are geographically and economically close, but there were still differences in the impact of the pandemic on their economies and in the approaches of individual national governments to pandemic management. Their similarities and differences made it possible to comprehensively evaluate the researched issue on a sufficiently large sample, which is internally heterogeneous, allowing mutual comparison. The current state of knowledge on CSR and its changes during the COVID-19 pandemic have been documented by researchers, thus enabling us to draw comparisons and formulate hypotheses for this research.

This research study comparing CSR implementation before and during the COVID-19 pandemic can make several valuable contributions to the current pool of knowledge. Primarily, the understanding of CSR evolution can provide insights into how CSR practices have evolved in response to a global crisis. This can highlight shifts in priorities and strategies that companies adopted to address new challenges. Furthermore, the findings can inform policymakers and regulatory bodies of the importance of CSR during crises. This can lead to the development of policies that encourage or mandate CSR activities during challenging times. There lies the main motivation for this research, to contribute to the current pool of knowledge and support the development of new policies that support CSR. This research also strives to shed light on how the shifts in individual CSR areas and initiatives can help companies better align their CSR strategies with stakeholder needs. By examining CSR changes during the pandemic, this research also aims to contribute to discussions on sustainability and organizational resilience by highlighting the areas of CSR that are the most vulnerable during adverse events. The novelty of the research approach lies in new methodology created to examine the extent of CSR involvement and its application through the span of different time periods. No other research studies can be found that rely on data directly from the enterprises that can be used to examine the CSR development. Overall, this study offers valuable insights for businesses, policymakers, and stakeholders on the role and impact of CSR during unprecedented times, helping to shape more effective and responsive CSR strategies in the future.

## 2. Literature Review and Hypotheses Development

CSR is a very complex issue which affects the whole world and therefore, extensive research was carried out on this topic. Many authors have focused their research on exploring its various concepts such as sustainable development, organizations' accountability, the responsibility of the organization towards the environment, partnership, commercial ethics, corporate citizenship, etc. (Gibbs, 2012). CSR is diverse in both theory and practice, encompassing various concepts across all aspects of society. Navickas et al. (2021) focus on the external aspects of CSR that can be represented by various initiatives such as contributions to those in need, volunteering, full customer awareness, comprehensive community support, and environmental protection. Vashchenko (2014) summed the role of CSR up in the fact that in today's world full of differences, it is understandable that there are many different definitions of CSR. Each organization must find its own approach to grasping the principles of CSR and transforming them into its own specific conditions so that they serve its interests and the interests of its stakeholders. CSR can also be regarded as a culture or resource in an organization. Various authors provided indications about how CSR can be perceived in organizations and contribute to its sustainable development (D'Souza et al., 2024; Rehan et al., 2025; Caha et al., 2024).

At present, CSR contains a wide range of principles and recommendations for improving the business environment and improving well-being. Implementing CSR principles and activities into an overall mission of organization involves an enormous set of challenges. At the same time, this means constantly re-evaluating all activities carried out in the organization and, if necessary, reorganizing them. The comprehensive implementation of CSR principles in all areas of the organization's operation is extremely demanding, especially if it is a matter of creating a system that will not only work on paper but will also actually be applied in the form of specific procedures and activities. Various theories currently exist that examine how CSR can be successfully incorporated into all major aspects of organizations' processes (Torres et al., 2023; Niyommaneerat et al., 2023; Caha et al., 2024). Several attempts have been made to evaluate the extent of CSR involvement (Richter et al., 2021; O'Connor & Spangenberg, 2008); however, these theories offer only selected indicators that cannot be applied generally. Building upon these and other studies meant addressing the issue of measuring CSR involvement.

Several authors (Huo et al., 2021; Pattit & Pattit, 2022; Kurland et al., 2022; Daniels et al., 2022) argue that disasters and adverse events such as the current COVID-19 pandemic create pressure on organization to secure their position on the market. Since 2019, when the disease was first reported to the World Health Organization, COVID-19 has significantly disrupted the global business environment. The first documented impacts of COVID-19 on the global markets were massive (Ivanov, 2020; Bell & Blanchflower, 2020). The historical records show that major crises including wars, famines, and pandemics always bring significant changes in public opinions and subsequently also business environments and often have effects that prevail in societies even after the threat has passed. On the other hand, Navickas et al. (2021) believe that such difficult times also present great occasions for organizations to further take on a wider range of CSR initiatives, especially those that focus on employee protection from the spread of the virus. On the other hand, it is necessary to consider the response of an organization in the context of their own declarations. Organizational priorities in CSR often change following a disaster; however, these changes are not always publicly reported. During the COVID-19 pandemic, many organizations reported the narrative of transformation for the better and even promoted their activities; however, the overall direction of change was negative, resulting in a decrease in CSR involvement. Based on these largely contradictory findings, it is necessary to explore not only the publicly promoted activities, but the overall CSR of organization through all

its elements. Therefore, the following hypothesis was proposed in this research as the main assumption for this research:

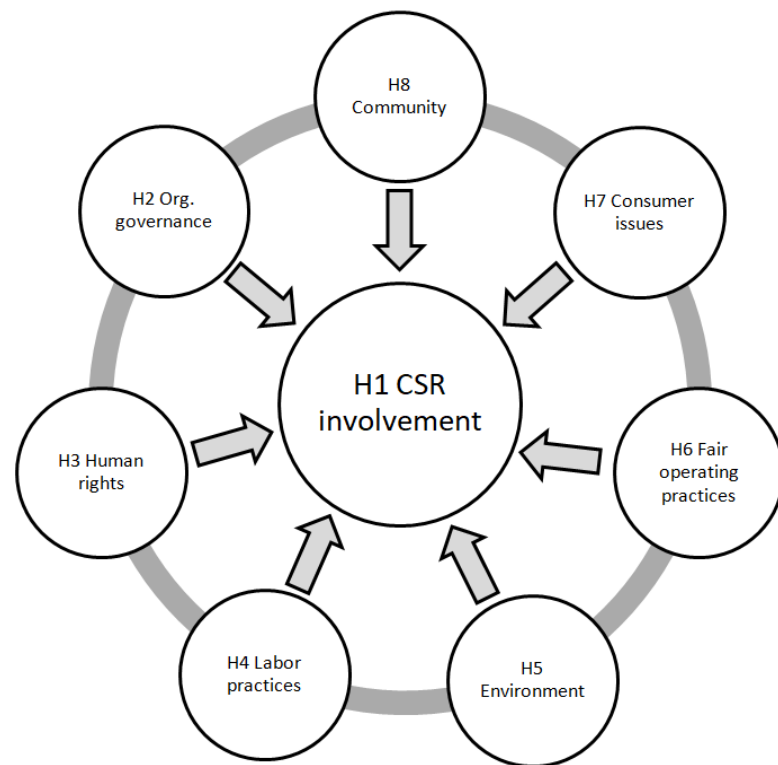
**H1:** *Overall CSR involvement decreased during the pandemic.*

Standard ISO 26000 (ISO, 2010) is a suitable reference document that contains examples of good practice that an organization should apply. As the individual requirements of the standard are formulated as recommendations, each organization has the choice of implementing it as a whole or choosing only the specific measures in the field of CSR that it wants to focus on. Moratis (2013) stresses the significance of ISO 26000 in creating idiosyncratic CSR. Herciu (2016) even labels it ‘the most important document on CSR in the world’. Castka and Balzarova (2008) argue that ISO 26000 provides guidelines on a transition from competitive customer orientation to stakeholder focus, developing a business-to-society focus. The necessity to take into consideration the demands and expectations of stakeholders comes not only from a need to strengthen the image of an organization but also to exist as an integral part of the community in which they conduct their business activities.

However, what lacks in current pool of knowledge is the information on how the adverse events such as the COVID-19 pandemic affect the adherence of CSR principles. Some parallels can be found due to other crises or disasters in the authors’ works (Hardy, 2006; Matchim, 2019; Huo et al., 2021; Kurland et al., 2022; Nava, 2022). Herron and Manuel (2022) compare the negative impacts of the pandemic to its predecessor—the Spanish influenza in 1918—that resulted not only in a public health crisis, but an economic crisis as well. Nava (2022) suggested that gaining the ability to rapidly respond to these negative events and consequently developing resilience should no longer be considered just an additional activity in organizations, but a significant tool needed for its survival. However, none of the similar events in modern history have had such a major and broad impact on the global business environment as the COVID-19 pandemic and the crisis it has caused. Separate research is needed on the real implications for each part of CSR. The conceptual framework based on theoretical knowledge and ISO 26000 as reference with a clearly stated hypotheses is provided in Figure 1. Hypotheses were formulated on the foundation of current studies, addressing the direction of evolution of each CSR area in accordance with findings from conducted research as described in this literature review. However, due to contradictory nature of the research, hypotheses were formulated primarily to guide the research and structure the findings in accordance with CSR areas.

Borghesi et al. (2019) found out that, due to the economic uncertainties in societies, the rate of implementation and compliance with the principles of organizational governance decreased. Similar conclusions were reached by other authors (Sajko et al., 2021; Zhang, 2021; Nava, 2022). Herron and Manuel (2022) expressed special concerns regarding the decline in adherence to ethical principles in organizations. The major reason for this is usually the need to focus on core processes in organizations that create value and also the economic results. Ma and Zhang (2022) have also reached this conclusion since. They discovered that the transformative capacity of an organization in crisis diminishes; therefore, its orientation on CSR principles suffers during major crises such as the COVID-19 pandemic. Yang et al. (2012) believed that a decrease in organizational governance during a major crisis can also be caused by the mismatch between the organization’s system and environment. Therefore, for this reason, the following hypothesis was formulated, assuming a similar development under the influence of the COVID-19 pandemic:

**H2:** *The importance of core subject: Organizational governance decreased during the COVID-19 crisis.*



**Figure 1.** Conceptual framework. Source: Own elaboration.

On the other hand, several authors ([Gutmann et al., 2017](#); [Link, 2015](#); [Chacon Hernandez, 2021](#)) discovered that even severe disruptions of business environment do not change organizations' commitments to adherence of basic human rights. The findings of [Oanh and An \(2021\)](#) confirmed that organizations remained fully committed to their CSR practices in this area, with the exception of the unilateral termination of labor contracts. However, this area of CSR remained scarcely explored during the pandemic. Even before the outbreak, human rights had not played an overwhelmingly prominent role in CSR in the past, according to [Wettstein \(2012\)](#). This core subject was also included in this research due to its importance; however, the hypothesis formulated supposed no change in its significance.

**H3:** *The importance of core subject: Human rights did not change significantly during the COVID-19 crisis.*

[Navickas et al. \(2021\)](#) compiled various examples of employees providing protective gear and other similar support to eliminate the spread of virus resulting in belief that the COVID-19 pandemic would have a positive effect on employer–employee relationships. [Kholaif and Ming \(2023\)](#) reached the same conclusion based on empirical evidence from small-sized companies, emphasizing the desire of employers to have a healthy workforce to limit disruptions in their processes. However, the other researchers provide convincing evidence indicating the opposite ([Butterick & Charlwood, 2021](#); [Milovanska-Farrington, 2023](#)). Furthermore, the surges in unemployment rates in the majority of Central and Eastern European countries also point towards deteriorations of CSR's area of labor practices ([Svabova et al., 2021](#); [Kapas, 2022](#); [Csakay et al., 2021](#); [Jiskrova et al., 2021](#); [Husted, 2022](#); [Choi & Choi, 2021](#)). The evidence from the financial crises from the first decade of the 21st century shows that times of crisis create immense challenges for organizations dedicated to socially responsible labor practices ([Blanton et al., 2015](#)). [Daniels et al. \(2022\)](#) reported that employees working on-site perceived lower quality support than employees working remotely. The phenomenon of home office-type work was not used on a large scale before



the pandemic; therefore, few managers had previous experiences with managing employees that work remotely. They focused a lot of their attention on learning to successfully organize and control this type of work and therefore dedicated little attention to other areas related to labor. Based on these findings, the following hypothesis was proposed:

**H4:** *The importance of core subject: Labor practices decreased during the COVID-19 crisis.*

The environmental impacts of the pandemic have so far not been as severe as the impacts of other areas of life. Many authors (Loh et al., 2022; Rupani et al., 2020; Sachdeva et al., 2021; Muhammad et al., 2020; Boroujeni et al., 2021) even claim that the COVID-19 pandemic impacted the environment positively, since fewer resources were consumed due to lockdowns. Many authors, prior to the pandemic, had already discovered the true nature of the relationship between the adoption of an environmental management system as a part of an integrated management system and improvements in corporate sustainability (Chen, 2021; Rehman et al., 2022; Halme et al., 2018; Ali et al., 2023). These findings indicate that the orientation on environmental performance and sustainability management can help organizations mitigate the negative impacts of the pandemic on CSR. However, there is evidence of the opposite happening in the environmental area of CSR during the COVID-19 pandemic. Anderson et al. (2021) and Li et al. (2021) claim that consumer behavior changes brought on a surge in plastic waste, especially caused by the fact that, during the lockdowns, restaurants offered food only for delivery, which was mostly packed in disposable plastic packaging. As most of the evidence points to a positive or no change in the environmental aspects of CSR, the following hypothesis was formulated:

**H5:** *The importance of core subject: The environment did not change significantly during the COVID-19 crisis.*

According to Moratis (2016), a moral perspective of CSR towards society is included in the core areas of fair operating practices and consumer issues. Golob et al. (2018) discovered through an empirical survey that consumers' interests influence values related to the well-being of others. However, most evidence seems to point towards negative trends in the fairness of practices and consumer areas of CSR (Veselovská et al., 2022; Foroudi et al., 2021; Yang & Chen, 2022). Ali et al. (2023) discovered that internal and external factors such as rumors, government strategies, fear and anxiety, and health security significantly affect consumers' panic-buying behaviors. These findings also related panic-buying with internal and external consequences that affected all parties involved such as price hike, shortage of supply of products, dissatisfaction of consumers, and increase in utility (benefit) of the products but not in consumers' budgets. Rahman et al. (2022) also examined supply chains that suffered from pandemic-related instabilities and multiple disruptions of supply, demand, and capacity. Any major alterations in demand can cause a chain reaction on the supply side which can result in shortages. When consumers take notice of a lack of some products' stocks, they immediately react by buying more when available, even hoarding, thus deepening the supply problems. Under normal conditions, suppliers need time to react and adjust. However, in extreme situations such as the COVID-19 pandemic, even the most prepared suppliers are unable to react flexibly; therefore, the crisis prolongs. This vicious circle prolongs the problem and even influences suppliers to adopt unfair practices to maintain their revenues. All these factors negatively affect the CSR of organizations that are forced to react to unprecedented conditions. Jeong et al. (2021) even explored the practice of increasing prices during the pandemic caused by the desire of some shop owners to increase their profits to cover for the lack of revenue during mandatory shut-downs periods. Therefore, the following hypotheses were proposed:

**H6:** *The importance of core subject: Fair operating practices decreased during the COVID-19 crisis.*

**H7:** *The importance of core subject: Consumer issues decreased during the COVID-19 crisis.*

The last core subject to be examined in this research was community involvement and development. As CSR continues to become more a central concept in societal development, the organizational treatment of workers and the local community is instrumental in the development of a fair and equitable society. [Shammi et al. \(2020\)](#) discovered that the pandemic increased the desire of all people to aid others during these troubled times, stressing mainly the response of governments as evidence. [Ramya and Baral \(2021\)](#) explore the immediate proactive CSR efforts undertaken by select organizations in response to the coronavirus. The authors emphasized the spirited CSR measures undertaken by the select organizations in the broader interests of the community. However, the authors warned that these activities, though immediate, had not often lasted a very long time. Moreover, the research of [Mejia et al. \(2022\)](#) revealed an emphasis on individual and specific cases during the pandemic. It would be more logical to assume that actions in this CSR area decreased during the pandemic. Many authors believe that this area of CSR practices was diminished due to the social and economic impacts of both imposed social distancing and lockdowns, since people were unable to meet, as reported by [Bacq et al. \(2020\)](#). [Feldman et al. \(2022\)](#) described how the pandemic especially affected marginalized communities around the world, emphasizing their lack of access to the resources necessary to participate in life in their communities. However, since this research aims to map the situation from all organizations' points of view, the supposition remains turned towards the negative outcome in this core subject and therefore, the hypothesis is as follows:

**H8:** *The importance of core subject: Community involvement and development decreased during the COVID-19 crisis.*

The presented evidence clearly emphasizes the need to examine how organizational priorities in CSR changed following a disaster of such magnitude as the COVID-19 pandemic. The evidence discovered so far has been highly conflicting. Authors vary in their findings and even in the causes behind them. Therefore, there is no clear answer as to how the pandemic changed CSR in organizations. This issue is even more complex, since many organizations themselves are not aware of the exact nature of impacts or they intentionally chose to report no changes in their CSR commitment, at times even presenting the narrative of transformation for the better. Therefore, the question remains as to whether the pandemic influences the direction of CSR implementation towards progress, thus making it a hero, or whether the trend has turned downwards, halting or even reversing the achieved results, making CSR another victim of the COVID-19 pandemic. This research aims to answer this question by exploring the changes in all core areas of CSR in various organizations.

### 3. Methodology

Our aim was to compare the situation before and during the pandemic, which allows the assessment of the impact of the pandemic on the rates and ways of implementing CSR in different organizations. Empirical research was chosen as the main research method, since the data needed to meet this aim are not available in sufficient detail in the available databases of any institutions. Two separate methodological approaches were used in this research. The first one was the multiple regression analysis, and the second one involved a new index created specifically for the CSR involvement comparison in different time periods.

At the same time, the international dimension was taken into consideration, as the research was carried out in four Central European countries. These countries were selected



because they had a similar initial exposure to COVID-19 outbreak; however, later the responses of national governments varied in the implementation of measures and their strictness, creating various conditions for CSR development and challenges. This allowed not only an international comparison of findings, but also a more comprehensive range of results. The intention was to assess how the role of CSR has changed due to the pandemic and, therefore, to characterize whether CSR fell victim to the COVID-19 pandemic or, on the contrary, whether these activities increased precisely as a result of the pandemic. The defined hypotheses focused on both complex changes and sub-areas of CSR. Data collection took place through a questionnaire, which was compiled so that the collected data would allow the evaluation of defined hypotheses.

The study is based on data collected from two samples of organizations operating in Central European countries in 2018 and 2021. Data was collected through a structured questionnaire and sent to organizations that the research team had previously cooperated with on CSR-related projects. The researchers attempted to select the organization randomly; however, due to the length of the questionnaire, not all organizations that were asked to provide data agreed. Furthermore, it was crucial that only those organizations that had, prior to the first survey, declared their commitment to CSR were selected to participate in the research. However, not all the organizations were able to participate in both surveys due to various reasons such as change in management and time constraints. The questionnaires were sent to the email address of the manager responsible for CSR activities in the organization. The questionnaires were anonymous, since the managers were not asked to provide the name of the company. The questionnaire is available on request from the authors. While an attempt was made to create samples that can be representative examples of the national structure of the business environment, there was no way to objectively measure this since the governments of these countries do not provide registries of organizations that actively implement CSR. The priority in selecting organizations to participate was their CSR commitment. Table 1 shows the characterization of both samples. The organizations were divided according to three characteristics: size of the organization, country of origin, and sectoral orientation of economic activities.

**Table 1.** Sample files.

Organization Characteristics	2018 Frequency	Percentage (%)	2021 Frequency	Percentage (%)
Size of organization (no. of employees)				
micro (1–9)	782	58.71	744	56.92
small (10–49)	495	37.16	506	38.71
medium (50–249)	41	3.08	39	2.98
large (250 or more)	14	1.05	18	1.38
Business sector				
industry	739	55.48	770	58.91
services	530	39.79	516	39.48
public works and energies	47	3.53	12	0.92
others	16	1.20	9	0.69
Country				
Slovak republic	382	28.68	369	28.23
Czech republic	297	22.30	319	24.41
Poland	280	21.02	285	21.81
Hungary	373	28.00	334	25.55
Total	1332	100.00	1307	100.00

Source: own elaboration.

The research model providing information about the methodology of this research is provided in Appendix A. The guideline for model development was the ISO 26000 standard. Core subjects and related issues were defined according to individual clauses of this standard. Each issue was addressed by at least one indicator (in some cases multiple indicators), designed to measure organization's CSR involvement. A 5-point scale was used to measure and compare the data (strongly agree, agree, N/A or unknown, disagree, strongly disagree), with the exception of indicators formulated as "existence". In these cases, a simple yes or no scale was used during both surveys. Based on these individual issues, an overall index of CSR involvement in the organization was created, including all indicators, with an emphasis on the equal importance of each core subject—Formula (1). However, a different number of CSR issues were examined in individual areas. Therefore, individual weights were introduced to eliminate the influence of the factor of the different number of indicators in individual core subjects—Formulas (2)–(8), addressing the number of indicators in each dimension. The calculation of overall CSR involvement indicator (CSRI) was as follows:

$$CSRI = CS.I + CS.II + CS.III + CS.IV + CS.V + CS.VI + CS.VII \quad (1)$$

$$CS.I = 78 \times \sum_{n=1}^3 i_n^I \quad (2)$$

$$CS.II = 26 \times \sum_{n=1}^9 i_n^{II} \quad (3)$$

$$CS.III = 18 \times \sum_{n=1}^{13} i_n^{III} \quad (4)$$

$$CS.IV = 19.5 \times \sum_{n=1}^{12} i_n^{IV} \quad (5)$$

$$CS.V = 18 \times \sum_{n=1}^{13} i_n^V \quad (6)$$

$$CS.VI = 15.6 \times \sum_{n=1}^{15} i_n^{VI} \quad (7)$$

$$CS.VII = 13 \times \sum_{n=1}^{18} i_n^{VII} \quad (8)$$

where

CS represents a corresponding core issue;

$i$  represents an indicator within the specific core issue;

$n$  represents the number of indicator within the specific core issue.

The overall calculation of the CSRI was based on its individual dimensions. Therefore, firstly, every CSR dimension was calculated in the organization using a list provided in Appendix A. Secondly, the results were weighted in accordance with Formulas (2)–(8). Finally, the overall indicator was calculated as a simple sum of all dimensions. A similar approach was used by other researchers; however, it was used on different research topics (Saglam & Canata, 2024; Falade et al., 2024). This methodology represents a new and novel approach to CSR involvement calculation that prior to this, had not yet been used in practice.

Furthermore, a multiple regression analysis was performed to evaluate the data and establish relationships between the variables that were empirically tested. The methodology used to perform the analysis was standardized and previously used by various researchers (Graafland, 2018; Mitsul & Okuyama, 2011; Jun et al., 2018; Alamoudi, 2025). The multiple regression analysis was performed for both years and also individually for each country for comparison. The equation for multiple regression analysis was formulated based on CSR dimensions and their contribution to the overall CSR involvement index:

$$CSRI = \beta_0 + \beta_1 \times CS.I + \beta_2 \times CS.II + \beta_3 \times CS.III + \beta_4 \times CS.IV + \beta_5 \times CS.V + \beta_6 \times CS.VI + \beta_7 \times CS.VII + \beta_8 \times CS.VIII \quad (9)$$

Subsequently, the IBM SPSS Statistics 29.0. 2.0 was used to perform statistical tests to identify and describe potential changes in CSR implementation in accordance with the main objective of this research. A Pearson correlation test was used to describe some trends in CSR development. Tests applied to verify hypotheses were nonparametric the Mann–Whitney U-test, Wilcoxon rank-sum test, and Binomial test. Normality had previously been verified by performing a normality test. We had verified the assumption of agreement of variance using a robust technique, the Leven test.

#### 4. Results

The results of this research were obtained by comparing two samples collected via surveys during two different time periods. Overall values of CSRI before the pandemic are presented in Appendix B. The next table (Appendix C) shows the CSRI values during the pandemic. The average value of the CSRI in 2018 was 4804.28, with a standard deviation of 1457.11, which corresponds to the coefficient of variation at the level 30.33%. In terms of sectoral breakdown, the best average value of CSRI was achieved by public sector organizations, where we even noticed a small increase during the pandemic (by 12.87 points). The value of the indicator remained almost the same as before pandemic in industrial organizations, despite the fact that before the pandemic, these organizations showed the worst average value of CSRI. In 2018, service organizations were slightly better off. However, in 2021 there was a huge drop in the average value of the indicator (by 1025.57 points). In 2021, a slight decrease in the average value of the CSRI was observed—from 384.38 points to the level of 4419.90, with standard deviation of 1387.65—which corresponds to coefficient of variation at the level 31.40%.

The motivation of organizations to implement CSR and develop its various initiatives is directly linked to the observed benefits. Potential changes in perception of the benefits of CSR were also explored in this research. Pearson correlation was calculated between two variables—the change in the development of the indicator and decline in observed CSR benefits in each segment of the sample file. It was discovered that there was a statistically significant direct moderate dependence between the examined variables in the segment of industry organizations. However, this correlation was only weak in segments of service organizations and public organizations. Direct moderate dependence was also observed in organizations in Poland and Slovakia. In other countries, this dependence was only weak. Interesting findings can also be identified when dividing organizations according to their size. While in large organizations, this dependence between variables was only weak, in micro-organizations, it was identified as moderately strong, with a correlation coefficient of 0.649. On the contrary, in small organizations, this dependence was assessed as statistically insignificant.

The main hypothesis (H1) of this research was formulated to examine the development of CSR involvement during the pandemic. The assumption based on current literature was that it decreased. Since two independent samples were compared, the nonparametric Mann–Whitney test was used. The significance level was set at 0.05 and the results of the test indicate the confirmation of the first research hypothesis. However, further confirmation could be obtained from the collected data. Table A4 in Appendix D shows the rates of change in values of CSRI for individual organizations. There was at least one organization in each segment in which no change in the value of the indicator was recorded. On the contrary, the largest change recorded was at the level of 5537 points, and it was a decrease. It was a medium-sized Slovak organization providing services. The average value of the

change was negative in almost all segments. The only exceptions were public organizations and energy providers. The average value of the indicator fell by more than thirty percent in the services sector. Furthermore, a binomial test was used to confirm the hypothesis H1. The results decisively show that CSR efforts decreased in all four countries. Since the size of the sample file is quite large and diverse in terms of the size of organizations and their business orientation, the connection between the external influence of the COVID-19 pandemic and the observed decrease is undisputed. The reasons for this decrease are further explored while examining the development of CSR in its individual areas.

Furthermore, significant changes can be observed in some of the individual CSR core subjects, which other formulated hypotheses also focused on. The multiple regression analysis was performed to analyze the data. Table 2 shows the results of the analyses. Firstly, the impact of individual core areas of CSR was tested in 2018. Secondly, the analysis was performed using data from 2021. The outcomes from these two analyses can be compared to demonstrate the changes in CSR during the COVID-19 pandemic. The estimation results show that the core areas of labor practices, consumer issues and community involvement and development are both highly significant (t-values for these core areas) and therefore qualify as strong instruments. The estimation results also show that an organization with a higher CSR involvement in 2018 faced a decrease in CSR involvement during the COVID-19 pandemic in 2021. Therefore, these results support Hypothesis 1.

**Table 2.** The results of the multiple regression analyses.

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
2018	(Constant)	7.296	0.214		38.182	0.001
	CS.I	1.368	0.002	0.197	534.720	0.002
	CS.II	0.765	0.005	0.132	142.763	0.002
	CS.III	0.766	0.005	0.133	142.842	0.026
	CS.IV	1.763	0.003	0.242	571.125	0.019
	CS.V	1.280	0.000	0.202	132.104	0.018
	CS.VI	1.069	0.003	0.197	354.969	0.001
	CS.VII	0.725	0.002	0.172	440.725	0.001
	CS.VIII	1.016	0.002	0.164	535.537	0.002
2021	(Constant)	8.398	0.214		39.292	0.001
	CS.I	1.206	0.003	0.200	536.809	0.002
	CS.II	0.793	0.004	0.129	145.985	0.002
	CS.III	0.784	0.006	0.129	145.985	0.012
	CS.IV	1.663	0.003	0.254	567.808	0.003
	CS.V	1.210	0.001	0.207	130.541	0.026
	CS.VI	1.088	0.002	0.193	355.286	0.001
	CS.VII	0.823	0.002	0.167	440.837	0.001
	CS.VIII	1.223	0.002	0.173	533.387	0.002
Dependent Variable: CSRI						

Source: own elaboration.

The multiple correlation coefficient represented by the value of  $R$  can be considered to be one measure of the quality of the prediction of the dependent variable: in this research model, CSRI. A value of 0.813, observed in 2018, indicates a good level of prediction. The same can be stated for the value achieved in 2021 (0.763). The  $R^2$  value represents the coefficient of determination, which describes the proportion of variance in the dependent variable that can be explained by the independent variables. In 2018, the value of  $R^2$  was 0.951 which means that the independent variables (individual CSR core areas) explain 95.1%

of the variability of our dependent variable. The value of the coefficient of determination was even higher in 2021 (0.966). Since  $p < 0.05$  was observed for all models, it is possible to conclude that the coefficients are statistically significantly different to 0. The output of the multiple regression model was formulated as follows in individual years:

$$CSRI_{2018} = 7.296 + 1.368 \times CS.I + 0.765 \times CS.II + 0.766 \times CS.III + 1.763 \times CS.IV + 1.280 \times CS.V + 1.069 \times CS.VI + 0.725 \times CS.VII + 1.016 \times CS.VIII \quad (10)$$

$$CSRI_{2021} = 8.398 + 1.206 \times CS.I + 0.793 \times CS.II + 0.784 \times CS.III + 1.663 \times CS.IV + 1.210 \times CS.V + 1.088 \times CS.VI + 0.823 \times CS.VII + 1.223 \times CS.VIII \quad (11)$$

Furthermore, the multiple regression analysis was also performed for each individual country involved in the research. It was discovered that there were significant changes in how organizations in each country responded to the COVID-19 crisis and adjusted their CSR involvement. Before the outbreak of the pandemic, the organizations in the Czech Republic were in the lead in terms of CSR implementation, followed closely by organizations in Poland. During pandemic in 2021, they traded number one and number two spots, but the difference between the average values of CSRI in these central European countries remained negligible. The lowest average value of CSRI involvement in 2018 was observed in Hungary. The ranking changed slightly in 2021, when the Slovak Republic proved to be the country with the worst average CSRI value, with a decrease of 1025.57 points. On the other hand, the average value in Hungary decreased only by 95.45 points, which is also the lowest observed decrease among the researched countries. The outcomes of the multiple regression analyses support these findings, as shown in Table 2.

Individual data suggest various interesting findings that can be observed; therefore, it is necessary to examine the changes in CSR involvement in greater detail, with special focus on its core areas, defined by the ISO 26000. The first of the core subjects targeted by this research was organizational governance. According to the results of other research and based on the opinions of other authors, the assumption was made that the importance of this dimension of CSR increased during the pandemic. Three indicators measured this dimension in organizations. Prior to the pandemic, 465 organizations said they had CSR incorporated into their goals. This share represented only 34.91% of all organizations in the sample. During the pandemic, this share did not change significantly; there was only a slight increase of 3.42%. The existence of internal corporate guidelines on decision-making processes was confirmed by the majority of organizations (97.90% before the pandemic and 99.31% during the pandemic). This increase represents a positive result and step in the right direction. It is obvious that organizations paid more attention to their governance in 2021, whether it was to tackle the uncertainty of COVID-19 pandemic or because it could also be a natural next step in the evolution of CSR activities. A significant increase was observed in the existence of independent monitoring of corporate management. Before the pandemic, 64.71% of the organizations stated their compliance with this statement, but during the pandemic, up to 75.82% of the organizations in the second sample expressed a positive answer. From a geographical point of view, no significant differences were noted between countries. But differences were observed in the breakdown of responses by the size of the organizations. Larger organizations tended to express more positive views on individual indicators. However, the increase in the existence of independent monitoring of corporate management was, on the contrary, observed almost entirely in the segment of small organizations. A nonparametric Mann–Whitney U test was performed to verify the hypothesis H2. The results indicate that this hypothesis could not be confirmed

with statistical significance. Therefore, the conclusion of this finding is that there were no significant changes in core subject I—Organizational governance caused by the pandemic. This result can be considered a positive one. The period of the COVID-19 pandemic was not only highly volatile, but also full of uncertainties. Organizations therefore strengthened their management concepts and put more emphasis on CSR as one of the possible stabilizing tools. Understanding the reasons for these changes can be a key to developing more robust management strategies to tackle uncertainty such as comprehensive risk management.

Another CSR core subject evaluated in this research was human rights. This dimension was included in the survey as nine indicators. The assumption was that there were no significant changes during the pandemic. The hypothesis H3 was indeed confirmed again by a nonparametric Mann–Whitney U test. None of the nine issues included in this core subject showed a significant change in the assessment before and during the pandemic, except for the periodic monitoring of potential human rights risk situations, where a slight decrease was recorded (by 6.76%). Human rights represent generally accepted rules that even major crises cannot disrupt. It is possible to speculate that this result is typical only for the research sample on which the research was conducted, since it concerned only organizations operating in Central Europe. If organizations from other, less developed countries were also involved in the research, the results would not be so positive. However, this finding is also based on the very nature of CSR principles that are considered unchanging. One caveat that may arise from this finding, however, concerns risk analysis. The slight decline in this indicator suggests that not all organizations have taken the same approach to protecting their employees during the pandemic. The reasons for this behavior may vary, but the main one was a lack of awareness of the potential negative consequences. These findings proved to be fully relevant in verifying hypothesis No. 4.

The controversial dimension of CSR, on which researchers have differing views, is the core issue of labor practices. Early research and national statistics suggest that there have been significant changes in this dimension during the pandemic. One of the main pieces of evidence for this assumption was an increase in unemployment rates in all central European countries. The hypothesis H4 was verified by a Mann–Whitney U test, confirming that the CSR focus on labor practices indeed decreased in Central European countries during the COVID-19 crisis. Issue no. 2, related to conditions of work and social protection, and issue no. 4, focused on health and safety at work, both recorded a slight increase of 5.22%; however, all other CSR issues examined in this dimension decreased. Issue no. 1, related to employment relationships, significantly decreased (by 19.57%). During the pandemic, most organizations introduced a work from home policy for the roles that allowed it due to the nature of their work. The positive thing about this was that organizations did not lose the performance of their employees due to illness. However, the results of our research point to the finding that this measure significantly negatively affected organizations' ability to provide social development to employees. Furthermore, it was observed that the social dialog aspects and human development and training in the workplace both recorded a slight decline during the pandemic (both by 8.17%).

Although the pandemic did not threaten the adoption of environmental solutions, the research also included an assessment of this dimension of CSR. Hypothesis H5 was confirmed by a nonparametric Mann–Whitney U test for two independent samples. The fourth core subject of CSR examined in this study involved the four issues of environmental protection. As a whole, this dimension of CSR did not change significantly during the COVID-19 pandemic. However, the differences among individual issues were noteworthy. The statement "Recycled materials and reuse water are used as much as possible" was the one that recorded the biggest negative trend during the pandemic. The decline in the percentage of organizations that marked it as agreement or strong agreement decreased



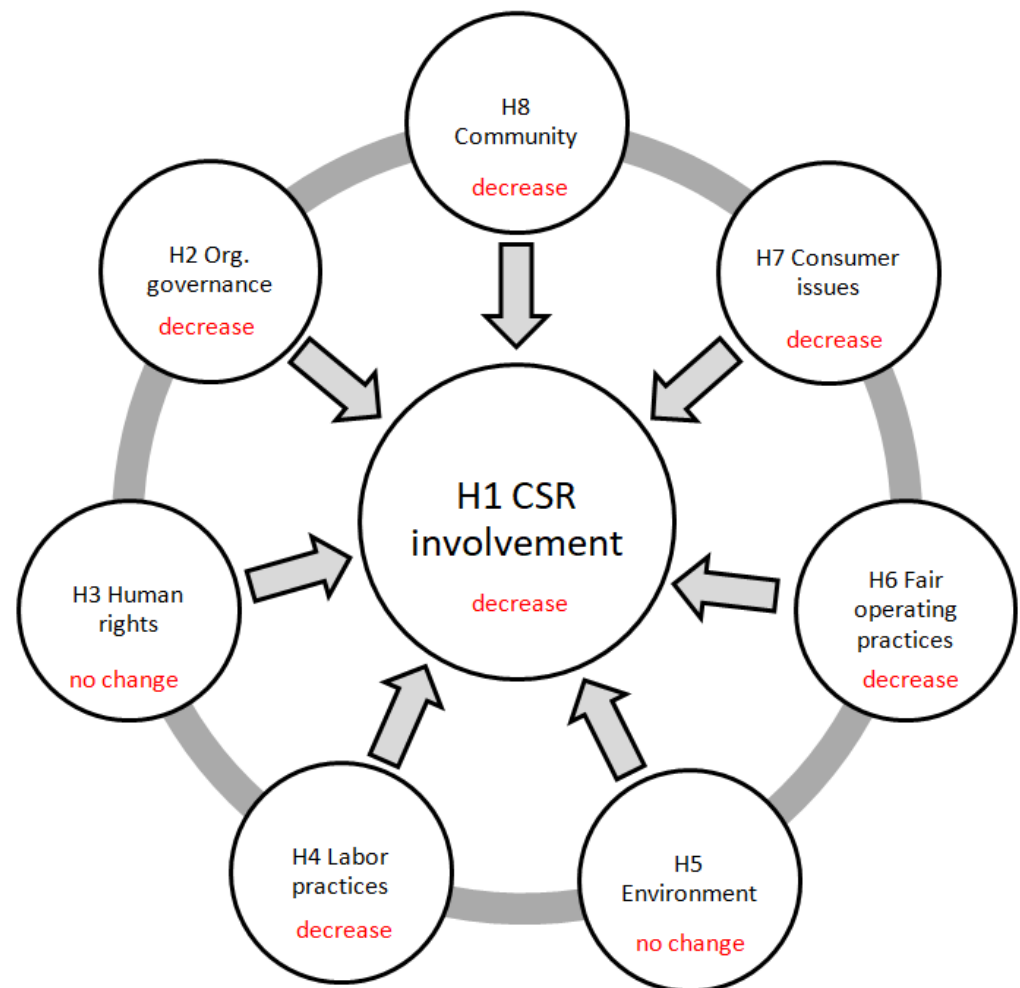
by 21.37% during the pandemic compared to the pre-pandemic situation. The opposite trend was observed for statements “Resource efficiency measures to reduce use of energy, water and other resources are implemented” and “The quantity and type of significant fuels usage within the organization are reviewed periodically and programs to improve efficiency and effectiveness are implemented”. In the first of them, there was an increase of 10.35% and even the latter increased by 14.71%. These findings suggest that the environmental dimension of CSR was intrinsically heterogeneous. Although, as a whole, no significant changes were observed before and during the pandemic, it is clear that there were important changes in individual aspects of environmental protection during the pandemic, which would be beneficial to examine in more detail in subsequent research projects. Furthermore, these findings indicate stagnation in the implementation of new strategies in this CSR dimension.

The findings of both surveys confirm that the importance of a core subject—fair operating practices—decreased during the COVID-19 crisis, as was assumed in hypothesis H6. A similar assumption was defined for the core subject of consumer issues, since the hypothesis H7 was formulated as a decrease in these CSR issues during the COVID-19 pandemic. Both hypotheses were confirmed by the nonparametric Mann–Whitney U test. Whereas the core subject related to consumers recorded differences in development of individual issues, the fair operating practices subject observed the decline of all its issues. It is clear that the pandemic period has presented a huge challenge for all organizations to develop their customer engagement and adapt to their needs. Our results do not mean that organizations have not been attentive to their customers or other partners in the supply chain. However, the findings confirm a negative trend in the development of partnerships. The biggest decrease in this dimension was observed in indicator “Encouragements of other organizations to adopt similar policies are regularly carried out”, related to issue 4: promoting social responsibility in the value chain (slump by 9.93%).

All issues related to community involvement and development slumped during the pandemic. Hypothesis H8, related to the decreased importance of this core subject during the COVID-19 pandemic crisis, was confirmed using a nonparametric test for two independent samples (Mann–Whitney U test). Periodic stakeholder involvement assessment decreased by 9.16%, making it the lowest recorded decline of all issues related to this dimension. The biggest decline was observed in the indicator focused on contributions to pensions and other benefits for employees above the minimal legal requirements. The number of organizations that stated they were doing so fell by 13.52% during the pandemic compared to the number of organizations before the pandemic. This finding was not surprising, given the economic consequences of the pandemic.

The documented overall changes in CSR involvement and changes in its individual core subjects defined by the ISO 26000 are also shown in Figure 2. By incorporating the research findings into the conceptual framework presented previously in Figure 1, it is possible to determine the significant areas of change.

Further findings can be identified by more detailed examination of the five indicators that recorded the greatest change during the pandemic. A breakdown by socioeconomic characteristics of the organizations into segments is shown in Table 3.



**Figure 2.** Updated framework incorporating the research findings. Source: own elaboration.

Both positive and negative changes were considered. Such data structuring did not reveal significant differences between individual Central European countries. The smallest changes were reported by public organizations, for all monitored indicators. The highest changes and fluctuations were observed in industrial organizations. The only exception was the indicator aimed at assessing the provision of contributions above the minimum legal level. A significantly higher negative change was recorded in service organizations for this indicator. Moreover, a slight increase was observed for public organizations, in contrast to all other types of organizations. The indicator focused on creating possibilities for quick and easy dismissal of employees, which was evaluated by the opposite point scale, displayed significant differences between organizations of different sizes. It is possible to follow the trend where the larger the organization, the more this measure has started to be applied. Significant differences between organizations of different sizes were also observed in the data of the indicator, which focused on the evaluation and improvement of procedures in the field of fuel usage. While the importance of this CSR measure declined for micro and small organizations, on the other hand, medium-sized and large organizations began to develop these initiatives to a greater extent during the pandemic. Therefore, the highest variability was recorded for this indicator, characterized by its standard deviation.

**Table 3.** Indicators with the biggest pandemic impacts.

Indicator		Recycled Materials and Reused Water Are Used as Much as Possible	Existence of Measures for Quick and Administratively Simple Dismissal of Employees in Times of Unfavorable Economic Situation in the Company	The Quantity and Type of Significant Fuel Usage Within the Organization Are Reviewed Periodically and Programs to Improve Efficiency and Effectiveness Are Implemented	Contribution to Pensions and Other Benefits for Employees Above the Minimal Legal Requirements	Resource Efficiency Measures to Reduce Use of Energy, Water, and Other Resources Are Implemented
2018	Average	3.31	3.25	3.95	2.06	3.05
	Standard deviation	1.25	1.56	2.06	1.72	1.05
	Percentage of organizations that declared affirmative answer	46.77%	49.08%	23.08%	25.13%	36.92%
	Average	2.06	2.76	4.17	1.75	2.85
2021	Standard deviation	1.12	1.63	1.87	1.69	0.97
	Percentage of organizations that declared affirmative answer	25.40%	29.51%	37.79%	11.61%	47.27%
Rate of change in number of organizations that declared affirmative answer before and during the pandemic	Size of organization (no. of employees)					
	micro (1–9)	–30.58%	–6.08%	–10.04%	–18.36%	1.39%
	small (10–49)	–37.06%	–13.04%	–1.27%	–15.08%	5.19%
	medium (50–249)	–11.89%	–20.92%	30.21%	–14.43%	21.41%
	large (250 or more)	–5.96%	–38.23%	39.95%	–6.22%	13.39%
	Business sector					
	industry	–40.92%	–35.82%	33.09%	–13.63%	21.39%
	services	–37.82%	–30.13%	5.07%	–35.98%	5.05%
	public works and energies	–2.58%	5.36%	2.15%	1.09%	2.31%
	others	–4.17%	–17.69%	18.53%	–5.54%	12.66%
	Country					
	Slovak republic	–35.02%	–22.01%	9.25%	–18.71%	1.35%
	Czech republic	–20.47%	–20.84%	15.39%	–9.66%	14.18%
	Poland	–13.56%	–17.30%	19.16%	–8.52%	14.69%
	Hungary	–16.41%	–18.12%	15.02%	–17.20%	11.16%
	Overall	–21.37%	–19.57%	14.71%	–13.52%	10.35%

Source: own elaboration.

## 5. Discussion

The COVID-19 pandemic challenged all aspects of life in societies. Activities were halted, projects were postponed, and policies were revised. The full scope of changes is yet unknown; however, the first research results suggest significant changes that can have long-term consequences and greatly influence the future direction of development in societies. Although a considerable amount of research explored CSR trends in the past, the impact of COVID-19 pandemic on its development has not yet been examined as comprehensively. Even before the outbreak of the pandemic, the issue of CSR involvement examination was addressed and evaluated as very challenging to describe. [Huang et al. \(2020\)](#) stated that due to public concerns and regulatory forces, CSR has become one of the key agendas in corporate management. These authors also added that there is a perception that CSR efforts can help to create value for the organization, but the empirical evidence on the effect of CSR on organizations has been ambiguous. Nowadays, only a few studies have begun to examine its impacts on individual CSR dimensions ([Csakay et al., 2021](#); [Boroujeni et al., 2021](#); [Jeong et al., 2021](#); [Loh et al., 2022](#); [Muhammad et al., 2020](#); [Al-Zyoud & Ordonez-Ponce, 2022](#)), some of them confirming and others contradicting the findings of this study, which is understandable given the complexity of the problem and the regional differences in CSR that had already existed before the outbreak of the pandemic. In 2022, the United Nations published its report on sustainable development goals, outlining early evidence on

how the pandemic halted the progress in meeting the set goals, even reversing the results already achieved before the pandemic in various areas ([The Sustainable Development Goals Report, 2022](#)).

The verification of the hypothesis confirmed that CSR initiatives decreased as whole during the pandemic, making it indeed its victim, at least in Central Europe, confirming the findings of other research studies ([Jeong et al., 2021](#); [Nava, 2022](#)). CSR implementation has been gaining momentum steadily for a while. However, the recent pandemic put breaks on many on-going projects and plans for a sustainable future in many organizations, especially in private sectors. Not all organizations were impacted equally. According to [Graafland \(2018\)](#), in the past, some organizations observed a positive influence of CSR on their performance, whereas others instead declare its negative impacts. The findings of this study indicate that it was mostly micro and small organizations that decided to abandon their commitment to CSR and diminished their initiatives in this area during the pandemic. At the same time, these were organizations that had largely neglected the link between CSR principles and their perceived benefits. Moreover, the results of the research show that the CSR of public organizations was the least affected by the pandemic. On the contrary, the services sector was hit hardest by the consequences of the pandemic, which severely limited the CSR activities of these organizations. Industrial organizations were in a similar situation. However, we can perceive positively the finding that not all dimensions of CSR have decreased. No major changes took place during the pandemic in the perception and protection of human rights. Despite the stagnation of this area of CSR, fundamental human rights have been constantly monitored and respected by organizations, regardless of the size or focus of business activities. Despite many anti-pandemic measures, people in their work environments did not suffer any increased illegal activity. In all four Central European countries, the results in this core subject of CSR were almost identical, indicating a high level of human rights orientation throughout the region. On the other hand, a significant decline was recorded in the CSR core subject of labor practices in Central European countries, contradicting various research studies from other regions ([Navickas et al., 2021](#); [Kholaf & Ming, 2023](#); [Husted, 2022](#); [Feldman et al., 2022](#); [Oanh & An, 2021](#)). [Daniels et al. \(2022\)](#) recorded similar results, since they discovered that workers negatively perceived managers' abilities to care about employee concerns. [Nava \(2022\)](#) provided similar arguments and even recommended an active management of emotions supported by psychological safety, allowing for open conversations, as a tool for overcoming the negative impacts of pandemic on employer–employee relationships. Furthermore, many researchers have already started to focus on the environmental impact of the pandemic. The findings from Central European countries indicate many contradictions in this area. [Anderson et al. \(2021\)](#) discovered a major increase in both industrial and domestic waste. The results of the CSR study indicate that the same happened in Central European countries; however, resource efficiency and fuel consumption have become more closely monitored during the pandemic. This finding indicates a possible adequate development trend in this area towards sustainable development in the future. Furthermore, [Helmi et al. \(2024\)](#) observed an increase in the need for urban green spaces that can be used safely during adverse events by employees for lunch or breaks, which corresponds to findings of this research study in regard to labor practices. [Pirouz et al. \(2020\)](#) and [Nava \(2022\)](#) considered it an essential notion and effort in developing a prosperous future for societies, agreeing that the pandemic will become a major obstacle in this endeavor. The findings from their studies correspond to the findings of this research since they also focused on describing some of the major challenges as hindrances to the sustainable development process and organizational resilience worldwide. The major innovation and contribution of this study from both methodological and theoretical perspectives based on the existing literature on CSR lies in

developing a new methodological approach to evaluate the level of CSR involvement on a scale that had not yet been undertaken before, extending the work of various authors. [Niyommaneerat et al. \(2023\)](#) developed a system of KPIs for the comprehensive assessment of CSR projects of renewable energy and plastic waste recycling. These indicators were established to assess the readiness of companies to implement CSR projects. However, their indicators only measured the initial stages of CSR implementation; therefore, their methodology cannot be applied to sufficiently measure mature CSR systems. Similarly, [Richter et al. \(2021\)](#) conducted a CSR involvement analysis adopting a process approach. Their findings provide an instrumental tool for the implementation and operation of specific CSR processes; however, they lack a comprehensive look at a whole organization. Furthermore, [O'Connor and Spangenberg \(2008\)](#) provided a system of diverse indicators across stakeholders, scales, sites, and performance issues. Such a comprehensive look was inspiring for this study and its methodology development; however, their system of indicators could not be applied for the purpose of our analysis, since the target of their methodology was CSR reporting and its representativeness. This therefore proves that this research and its findings provide a necessary contribution for current pool of knowledge.

This research focused on assessing the effects of the pandemic on CSR in Central European countries. This geographical aspect represents the limitation of this study. For this reason, the conclusions and findings of this research cannot be widely applied as universal truths worldwide. Each country has been hit by the COVID-19 pandemic in a unique way and therefore its implications for CSR activities are different. However, the ambition for the future development of CSR should give priority to mapping the current situation and setting adjusted goals for the future, which will be based on the current reality in the field of CSR and the even more limited capacities of organizations.

Any activity aimed at improving the current situation will sooner or later have to face obstacles. Although the implementation and development of CSR is not a new concept, the global pandemic of COVID-19 has significantly disrupted well-established processes in this area and made the conditions for future development more difficult. As these are complex efforts, it is difficult to generalize the impact of the pandemic as a whole. In this research study, evaluations of individual areas of CSR and an outline of the effects of a pandemic in a specific region were presented. The findings of the research can serve to stimulate further discussion, which is necessary to ensure quality of life on this planet for all.

## 6. Conclusions

The COVID-19 pandemic is one of the most serious disruptions to societies around the world in the 21st century. Understanding the changes it has brought, and their consequences, is the basis for mitigating their effects. The current events indicate that the situation in the global world is deteriorating not only due to the still on-going effects of the pandemic, but also due to the military conflict in Europe and climate change. Although each crisis is unique in its manifestations and effects, knowing them will help us better prepare for any further disruptions that may occur in the future. The COVID-19 pandemic has an enormous economic impact on society. However, in addition to the economic crisis, there are increased indications of an emerging social crisis. The number of people suffering from anxiety, insomnia, and depression is growing, and at the same time the mental state of existing patients is deteriorating. Limitation of social interaction and isolation are factors that negatively affect the quality of life in societies. Therefore, the support, prevention, and systematic mitigation of the consequences of a pandemic on society are extremely important. Implementing an appropriate mitigation policy and creating the conditions for long-term support for the development of all aspects of life in societies can ultimately reduce social costs and reduce productivity decline. However, the perception of individual organizations,



which at their level can also influence this development, remained questionable until this study provided the analysis of current attitude to CSR. The findings of this research have the potential to contribute to the current pool of knowledge on the adherence to CSR principles and their implementation in organizations during major crises. The results indicate how CSR initiatives would evolve when organizations find themselves under the cloud of the external environment. It was discovered that there are minor regional differences, even when comparing organizations from neighboring countries such as Central European states. At the same time, it was observed that the area of CSR that was most negatively affected by the pandemic was people, both as employees and consumers. Here lies the potential for improvement and further research into more specific CSR issues that need more attention than others. The largest decline was recorded in activities that are directly linked to corporate finance. The consequences were suffered mainly by the employees of the organizations, but also by communities that often lost support. The need to develop awareness of CSR is therefore necessary, nowadays even more than before the pandemic, since these changes can be a major factor in future development and can also serve national and regional policy makers to create future activities to support organizations within their communities on their path to sustainable development. However, it is also necessary to emphasize that not all the changes, either negative or positive, can be solely contributed to the COVID-19 pandemic. The recorded changes could have been caused by other factors. The relatively large scale of the sample throughout the spectrum of various countries ensures that regional differences were observed and therefore, it can be concluded that the years of pandemic was a turbulent period during which many societal changes were observed. Further research on this topic will shed more light on these findings and also provide the reasons behind these documented changes.

Recently, many authors dealt with the impact of the COVID-19 crisis on corporate social responsibility. The analyses were mostly performed in small and medium enterprises, usually in country of the author's origin. [Al Blooshi et al. \(2024\)](#) dealt with the CSR in small and medium enterprises in the United Arab Emirates before and during COVID-19 and the research was based on thirty interviews with the owners of the enterprises. Another interesting study was conducted by [Vinod et al. \(2023\)](#). Their study dealt with reactive and proactive models of crisis management in India. Our research has one factor in common with all of those (and many others) studies. The research was carried out in four Central European countries, in more than a thousand companies, that have very similar historical backgrounds. But despite this fact, the impact of COVID-19 crisis to CSR was different. The survey shows how different government interventions can support or decelerate the willingness of the companies to invest time, money, and energy into CSR activities.

COVID-19 caused the decline in CSR efforts in the four countries. The findings documented in the study clearly indicate a new direction that CSR research should take in the future. It has become obvious that the current theoretical models have become obsolete and need to be updated to incorporate the post-pandemic development of new policies. Future research into CSR also needs to focus on this direction. The main limitation of this study lies in the fact that it omits the impacts of government measures to prevent the spread of the virus that affected the CSR activities. This topic would also be interesting for future research, since the policies during adverse events can influence not only the operative but also the strategic development of organizations. Moreover, it is also necessary to emphasize that, despite the general findings from this research about the impact of the pandemic on CSR activities, it is possible that not all documented changes were necessarily caused by the pandemic or the measures associated with it. In the mentioned time period, other fundamental changes may have occurred in the companies and/or their surroundings, but



this research did not deal with them. However, this limitation could be considered minimal, given the size of both research samples.

One of the main contributions of this research is the development of a tool for measuring an organization’s CSR involvement that is specifically designed to fit the needs of organizations during the times of crisis. The proposed CSRI indicator for evaluating the degree of implementation of CSR principles can be used by individual organizations as a management evaluation tool, which represents the practical benefit of the proposed methodology. Individual organizations can use the CSRI calculation methodology as a checklist for evaluating the application of CSR principles and thus identify their shortcomings. The proposed methodology supports the efforts aimed at learning the lessons of the pandemic in the CSR area. This is not the only technique to assess the impacts of the pandemic on organizations, but it is a comprehensive tool that focuses on all core subjects of CSR. Furthermore, the methodology used in this research builds on the theoretical propositions provided by the current literature to create concrete measures that can be implemented by managers in organizations whose CSR actions suffered the effects of the COVID-19 pandemic. In this way, this research contributes to creating a better understanding of how individual organizations can use their CSR as a tool for overcoming some of the major negative impacts of the pandemic.

The aim of this paper was also to stimulate a discussion focused on changes in CSR due to the pandemic and through this to increase awareness of the issue not only in academia but also in the public. The novelty of this research has manifested mainly in guidelines for the future steps that need to be taken in a post-pandemic world that is recovering from its effects to get back on the path of sustainable development. The practical benefit of this research can also be the methodological apparatus for calculating the CSRI indicator that can also serve as a tool for managers to evaluate their activities in CSR and to document the progress of their organization in detail. In practice, organizations can apply this indicator to evaluate the extent of their implementation of CSR principles and make time and inter-organizational comparisons.

**Funding:** This research was funded by VEGA, grant number 1/0023/25 “Possibilities and barriers of the implementation of anti-bribery management systems in the practice of Slovak enterprises”.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** Data available upon request from author.

**Conflicts of Interest:** The author declares no conflicts of interest.

Appendix A

Table A1. Research model.

Core Subjects and Issues According to ISO 26000.	Indicators
CS-I.: Organizational governance. (hypothesis H2.).	Existence of CSR objectives Existence of internal corporate guidelines on decision-making process Existence of independent monitoring of corporate management

Table A1. Cont.

Core Subjects and Issues According to ISO 26000.	Indicators
CS-II.: Human rights (hypothesis H3.)	<p>Existence of internal corporate guidelines with respect to human rights</p> <p>Awareness of human rights is regularly developed in the organization</p> <p>Respect for human rights is periodically evaluated</p> <p>Periodic monitoring of potential human rights risk situations</p> <p>Security arrangements respecting human rights are consistent with international norms and standards for law enforcement</p> <p>Existence of an internal company document involving procedures on resolving grievances</p> <p>Existence of independent control of procedures concerning resolving grievances</p> <p>Existence of an internal company document declaring a commitment and anti-discrimination procedures</p> <p>Occurrence of a complaint of human rights violations in the company</p>
CS-III.: Labor practices (hypothesis H4.)	<p>Existence of internal corporate guidelines on labor practices</p> <p>All work is performed by women and men who are legally recognized as employees or who are legally recognized as being self-employed</p> <p>Equal opportunities for all workers are provided</p> <p>Periodic monitoring of employee turnover</p> <p>Existence of measures for quick and administratively simple reduction in employees' wages in times of unfavorable economic situation in the company</p> <p>Existence of measures for quick and administratively simple dismissal of employees in times of unfavorable economic situation in the company</p> <p>Conditions of work are consistent with international norms and standards for law enforcement</p> <p>Company actively seeks options for decent conditions of work with regard to wages, hours of work, weekly rest, holidays, health and safety, maternity protection and ability to combine work with family responsibilities</p> <p>Employers' organizations are recognized as partners and engaged in dialog</p> <p>Existence of occupational health and safety policy</p> <p>Adherence of occupational health and safety policy is periodically monitored</p> <p>All workers at all stages of their work experience are provided with access to skills development, training and apprenticeships, and opportunities for career advancement, on an equal and non-discriminatory basis</p> <p>Workers being made redundant are helped to access assistance for new employment, training and counseling</p>
CS-IV.: The environment (hypothesis H5.)	<p>Existence of internal corporate guidelines on environment protection</p> <p>The aspects and impacts of its decisions and activities on the surrounding environment are identified</p> <p>Sources of pollution are identified and monitored</p> <p>Significant uses of energy, water and other resources are identified, measured, recorded and reported on</p> <p>Resource efficiency measures to reduce use of energy, water and other resources are implemented</p> <p>Sustainable procurement and sustainable consumption are promoted</p> <p>Recycled materials and reuse water are used as much as possible</p> <p>Future global and local climate projections are considered to identify risks and to integrate climate change adaptation into its decision-making</p> <p>Opportunities to avoid or minimize damage associated with climate change are identified and periodically reviewed</p> <p>The quantity and type of significant fuels usage within the organization are reviewed periodically and programs to improve efficiency and effectiveness are implemented</p> <p>Potential adverse impacts on biodiversity and ecosystem services are identified and measures are taken to eliminate or minimize these impacts periodically</p> <p>Planning, design and operating practices are implemented as a way to minimize the possible environmental impacts resulting from decisions on land use</p>

Table A1. Cont.

Core Subjects and Issues According to ISO 26000.	Indicators
CS-V.: Fair operating practices (hypothesis H6.)	<p>Existence of internal corporate guidelines on fair operating practices</p> <p>Risks of corruption are identified and periodically reviewed</p> <p>Policies and practices that counter corruption and extortion are implemented, maintained and adhered</p> <p>Periodic raise of the awareness of employees, representatives, contractors and suppliers about corruption and how to counter it</p> <p>Transparent policies and activities related to lobbying, political contributions and political involvement</p> <p>All activities are conducted in a manner consistent with competition laws and regulations</p> <p>Integration of ethical, social, environmental and gender equality criteria, and health and safety, in purchasing, distribution and contracting policies and implementation of practices to improve consistency with social responsibility objectives</p> <p>Encouragements of other organizations to adopt similar policies are regularly carried out</p> <p>Appropriate due diligence and monitoring of the organizations with which company has relationships are regularly carried out, with a view to preventing compromise of the company's commitments to social responsibility</p> <p>Policies and practices that promote respect for property rights and traditional knowledge are implemented</p> <p>Proper investigations to be confident it has lawful title permitting use or disposal of property are conducted on a need-to-know bases</p> <p>Activities that violate property rights, including misuse of a dominant position, counterfeiting and piracy are prohibited</p> <p>Fair compensation for property that company acquires or uses are paid</p>
CS-VI.: Consumer issues (hypothesis H7.)	<p>Existence of internal corporate guidelines on consumer issues</p> <p>Occurrence of a complaint of incorrect or deceiving information provided to consumers by company</p> <p>Periodic inspection of product risks to the health or safety of customers</p> <p>Periodic supplier selection</p> <p>Preferring supplies that can contribute to sustainable development</p> <p>Existence of complains system</p> <p>Existence of adequate and efficient support and advice systems</p> <p>Occurrence of a complaint(s) from consumers</p> <p>The collection of personal data are limited to information that is either essential for the provision of products and services or provided with the informed and voluntary consent of the consumer</p> <p>Consumers' data are obtained only by lawful and fair means</p> <p>Personal data of consumers is protected by adequate security safeguards</p> <p>Open and transparent setting of prices and charges</p> <p>Providing a subsidy to those customers who are in need</p> <p>Immediate penalization of consumers based on non-payment without verifying the reason</p> <p>Providing complete and correct information about the product, its composition, its package and risks related to use and any necessary precautions.</p>

Table A1. Cont.

Core Subjects and Issues According to ISO 26000.	Indicators
CS-VII. Community involvement and development (hypothesis H8.)	<p>Existence of internal corporate guidelines on community involvement and development</p> <p>Active contribution to community development</p> <p>Periodic stakeholder involvement assessment</p> <p>Periodic research into company's potential impacts on the community and planning of ways of mitigating negative impacts and optimizing positive impacts</p> <p>Consulting representative community groups in determining priorities for social investment and community development activities</p> <p>Cooperation and support of educational and cultural institutions in the region</p> <p>Encouragement and support of employees to be volunteers for community service</p> <p>CSR education for employees</p> <p>Support and promotion of learning opportunities</p> <p>Contribution to the development of innovative technologies that can help solve social and environmental issues in local communities</p> <p>Engagement in partnerships with organizations, such as universities or research laboratories</p> <p>Adoptions of practices that allow technology transfer and diffusion</p> <p>Active preference to local suppliers of products and services and contributing to local supplier development</p> <p>Involvement in the development of community-based associations of entrepreneurs</p> <p>Contribution to pensions and other benefits for employees above the minimal legal requirements</p> <p>Actively seeking ways to eliminate negative health impacts of any production process, product or service provided by the organization</p> <p>Promoting good health and raising awareness about health threats</p> <p>Contribution to policy formulation and the establishment, implementation, monitoring and evaluation of development programs</p>

Source: own elaboration.

## Appendix B

Table A2. CSRI values in 2018.

Segment	2018 Average	Minimum Measured Value in the Segment	Maximum Measured Value in the Segment	Standard Deviation
Size of organization (no. of employees)				
micro (1–9)	4955.63	2963	6912	2063.41
small (10–49)	3940.24	2067	6830	1364.90
medium (50–249)	5091.17	3094	7064	1409.65
large (250 or more)	5230.08	4175	7604	990.46
Business sector				
industry	3950.04	2067	7136	2589.60
services	4407.01	2269	6243	1208.11
public works and energies	5926.21	4958	7604	573.19
others	4933.84	2169	6930	1457.55
Country				
Slovak republic	4692.01	2949	7042	1096.71
Czech republic	5367.49	3912	7604	1015.25
Poland	5298.28	3108	7269	1318.69
Hungary	3859.33	2067	6724	2397.78
The whole sample	4804.28	2067	7604	1457.11

Source: own elaboration.

## Appendix C

**Table A3.** CSRI values in 2021.

Segment	2021	Minimum Measured Value in the Segment	Maximum Measured Value in the Segment	Standard Deviation
	Average			
Size of organization (no. of employees)				
micro (1–9)	4552.01	1409	7125	1963.96
small (10–49)	3463.12	1936	7360	1301.83
medium (50–249)	4594.91	2715	7239	1383.00
large (250 or more)	5069.55	4125	7604	901.80
Business sector				
industry	3863.73	1592	7239	2505.34
services	3079.35	1409	6259	1131.85
public works and energies	5939.08	5011	7604	601.11
others	4797.44	2169	6930	1312.29
Country				
Slovak republic	3666.44	1409	6921	1034.47
Czech republic	5119.02	2169	7239	937.01
Poland	5130.27	4125	7604	1234.56
Hungary	3763.88	1936	7360	2344.54
The whole sample	4419.90	1409	7604	1387.65

Source: own elaboration.

## Appendix D

**Table A4.** The rates of change in values of CSRI for individual organizations.

Segment	Average Rates of Change in CSRI Value		Minimum Measured Change in Value in the Segment	Maximum Measured Change in Value in the Segment
	Absolute	Relative		
Size of organization (no. of employees)				
micro (1–9)	−403.62	−8.14%	0	5165
small (10–49)	−477.12	−12.11%	0	4139
medium (50–249)	−496.26	−9.75%	0	5537
large (250 or more)	−160.53	−3.07%	0	3680
Business sector				
industry	−86.31	−2.19%	0	3950
services	−1327.66	−30.13%	0	5537
public works and energies	12.87	0.22%	0	4903
others	−136.4	−2.76%	0	5165
Country				
Slovak republic	−1025.57	−21.86%	0	5537
Czech republic	−248.47	−4.63%	0	5165
Poland	−168.01	−3.17%	0	4139
Hungary	−95.45	−2.47%	0	3680
The whole sample	−384.38	−8.27%	0	5537

Source: own elaboration.

## References

- Alamoudi, M. (2025). Estimating patients' satisfaction in healthcare sector using multiple regression analysis. *Advances and Applications in Statistics*, 92, 273–302. [\[CrossRef\]](#)

- Al Blooshi, A. M., Jose, S., & Venkitachalam, K. (2024). CSR performance practices and COVID-19—A qualitative study of SME owners in UAE. *Measuring Business Excellence*, 28, 84–104. [\[CrossRef\]](#)
- Ali, M. R., Khan, A. G., Islam, M. N., & Akram, U. (2023). Determinants of panic buying during COVID-19: Causes and consequences. *International Journal of Quality and Service Sciences*, 15, 34–56. [\[CrossRef\]](#)
- Al-Zyoud, H., & Ordonez-Ponce, E. (2022). COVID-19 and credit unions: CSR approaches to navigating the pandemic. *Business and Society Review*, 127, 171–192. [\[CrossRef\]](#)
- Anderson, A., Chandralingam, R., & Praveen Kumar, T. R. (2021). Impact of COVID-19 pandemic on plastic surge and environmental effects. *Energy Sources Part A-Recovery Utilization and Environmental Effects*, 47(1), 5812–5817. [\[CrossRef\]](#)
- Bacq, S., Geoghegan, W., Josefy, M., Stevenson, R., & Williams, T. A. (2020). The COVID-19 virtual idea blitz: Marshaling social entrepreneurship to rapidly respond to urgent grand challenges. *Business Horizons*, 63, 705–723. [\[CrossRef\]](#)
- Bell, D. N. F., & Blanchflower, D. G. (2020). US and UK labour markets before and during the COVID-19 crash. *National Institute Economic Review*, 252, R52–R69. [\[CrossRef\]](#)
- Blanton, R. G., Blanton, S. L., & Peksen, D. (2015). Financial crises and labor: Does tight money loosen labor rights? *World Development*, 76, 1–12. [\[CrossRef\]](#)
- Borghesi, R., Chang, K., & Li, Y. (2019). Firm value in commonly uncertain times: The divergent effects of corporate governance and CSR. *Applied Economics*, 51, 4726–4741. [\[CrossRef\]](#)
- Boroujeni, M., Saberian, M., & Li, J. (2021). Environmental impacts of COVID-19 on Victoria, Australia, witnessed two waves of Coronavirus. *Environmental Science and Pollution Research*, 28, 14182–14191. [\[CrossRef\]](#)
- Butterick, M., & Charlwood, A. (2021). HRM and the COVID-19 pandemic: How can we stop making a bad situation worse? *Human Resource Management Journal*, 31, 847–856. [\[CrossRef\]](#)
- Caha, Z., Skýpalová, R., & Mrhálek, T. (2024). CSR as a framework for sustainability in SMEs: The relationship between company size, industrial sector, and triple bottom line activities. *Asia Pacific Management Review*, 29, 451–461. [\[CrossRef\]](#)
- Castka, P., & Balzarova, M. A. (2008). Adoption of social responsibility through the expansion of existing management systems. *Industrial Management & Data Systems*, 108, 297–309. [\[CrossRef\]](#)
- Chacon Hernandez, D. (2021). Crisis migration and migration crisis. A vision from human rights. *Ciencia Juridica*, 10, 137–160. [\[CrossRef\]](#)
- Chen, Z. (2021). Study on environmental management and sustainable development of corporate. *Fresenius Environmental Bulletin*, 30, 2273–2277.
- Choi, M., & Choi, Y. (2021). Employee perceptions of Hotel CSR activities during the covid-19 pandemic. *International Journal of Contemporary Hospitality Management*, 33, 3355–3378. [\[CrossRef\]](#)
- Csakay, Z., Gorgenyi-Hegyes, E., & Fekete-Farkas, M. (2021). The potential responses of the human resource management through CSR in the COVID-19 pandemic. *Polish Journal of Management Studies*, 24, 102–118. [\[CrossRef\]](#)
- Daniels, R. A., Miller, L. A., Mian, M. Z., & Black, S. (2022). One size does not fit all: Understanding differences in perceived organizational support during the Covid-19 pandemic. *Business and Society Review*, 127, 193–222. [\[CrossRef\]](#)
- D'Souza, C., Sullivan-Mort, G., Nguyen, Q., Nanere, M., & Maritz, A. (2024). CSR investments and innovation—Aligning and creating shared value. *Journal of Cleaner Production*, 481, 144189. [\[CrossRef\]](#)
- Falade, J., Cremer, S., & Rosenberger, C. (2024). Digital fingerprint indexing using synthetic binary indexes. *Pattern Analysis and Applications*, 27, 57. [\[CrossRef\]](#)
- Feldman, G., Itzaki-Braun, Y., Frankenburg, R., & Friedmand-Hauser, G. (2022). Let's talk about our feelings: Emotional labour of community practice in times of pandemic. *Social Policy & Administration*, 56, 693–704. [\[CrossRef\]](#)
- Foroudi, P., Tabaghdehi, S. A. H., & Marvi, R. (2021). The gloom of the COVID-19 shock in the hospitality industry: A study of consumer risk perception and adaptive belief in the Dark Cloud of a pandemic. *International Journal of Hospitality Management*, 92, 102717. [\[CrossRef\]](#)
- Gibbs, C. (2012). Corporate citizenship and corporate environmental performance. *Crime Law and Social Change*, 57, 345–372. [\[CrossRef\]](#)
- Golob, U., Podnar, K., Koklic, M. K., & Zabka, V. (2018). The importance of corporate social responsibility for responsible consumption: Exploring moral motivations of consumers. *Corporate Social Responsibility and Environmental Management*, 26, 416–423. [\[CrossRef\]](#)
- Graafland, J. (2018). Does corporate social responsibility put reputation at risk by inviting activist targeting? An empirical test among European SMEs. *Corporate Social Responsibility and Environmental Management*, 25, 1–13. [\[CrossRef\]](#)
- Gutmann, J., Pfaff, K., & Voigt, S. (2017). Banking crises and human rights. *Applied Economics Letters*, 24, 1374–1377. [\[CrossRef\]](#)
- Halme, M., Rintamäki, J., Knudsen, J. S., Lankoski, L., & Kuisma, M. (2018). When is there a sustainability case for CSR? Pathways to environmental and social performance improvements. *Business & Society*, 59, 1181–1227. [\[CrossRef\]](#)
- Hardy, A. (2006). The Spanish influenza pandemic of 1918–19: New perspectives. *European History Quarterly*, 36, 641–643. [\[CrossRef\]](#)
- Helmi, H., Kara, C., & Tulbentci, T. (2024). Comparison of green space usage during COVID-19. *Urban Science*, 8, 216. [\[CrossRef\]](#)
- Herciu, M. (2016). ISO 26000—An integrative approach of corporate social responsibility. *Studies in Business and Economics*, 11, 73–79. [\[CrossRef\]](#)



- Herron, T. L., & Manuel, T. (2022). Ethics of U.S. government policy responses to the COVID-19 pandemic: A utilitarian is perspective. *Business and Society Review*, 127, 343–367. [\[CrossRef\]](#)
- Huang, K., Sim, N., & Zhao, H. (2020). Corporate social responsibility, corporate financial performance and the confounding effects of economic fluctuations: A meta-analysis. *International Review of Financial Analysis*, 70, 101504. [\[CrossRef\]](#)
- Huo, C. H., Hameed, J., Nawaz, A., Shah, S. A. R., Albahser, G., Alqahtani, W., Maqsoom, A., & Anwar, M. K. (2021). Scientific risk performance analysis and development of disaster management framework: A case study of developing Asian countries. *Journal of King Saud University Science*, 33, 101348. [\[CrossRef\]](#) [\[PubMed\]](#)
- Husted, B. W. (2022). Business and health: A research agenda post-covid-19. *Business and Society Review*, 127, 159–161. [\[CrossRef\]](#)
- ISO. (2010). *ISO 26000: Guidance on social responsibility* (106p). ISO: The International Organization for Standardization.
- Ivanov, D. (2020). Predicting the impacts of epidemic outbreaks on global supply chains: A simulation-based analysis on the coronavirus outbreak (COVID-19/SARS-CoV-2) case. *Transportation Research Part E-Logistics and Transportation Review*, 136, 101922. [\[CrossRef\]](#) [\[PubMed\]](#)
- Jeong, H., Ye, H. J., Bhatt, S., Zhang, J. T., & Suri, R. (2021). When should retailers increase prices during a crisis? A longitudinal inquiry during the COVID-19 pandemic. *Journal of Consumer Behaviour*, 20, 1269–1276. [\[CrossRef\]](#)
- Jiskrova, G. K., Bobak, M., Pikhart, H., & Ksinan, A. J. (2021). Job loss and lower healthcare utilization due to COVID-19 among older adults across 27 European countries. *Journal of Epidemiology and Community Health*, 75, 1078–1083. [\[CrossRef\]](#) [\[PubMed\]](#)
- Jun, S., Wood, J., & Park, S. (2018). Multivariate multiple regression modelling for technology analysis. *Technology Analysis & Strategic Management*, 30, 311–323. [\[CrossRef\]](#)
- Kapas, J. (2022). Has COVID-19 caused a change in the dynamics of the unemployment rate? The case of North America and continental Europe. *Regional Statistics*, 12, 3–26. [\[CrossRef\]](#)
- Kholaif, M. M. N. H. K., & Ming, X. (2023). The impact of uncertainty-fear against COVID-19 on corporate social responsibility and labor practices issues. *International Journal of Emerging Markets*, 18, 5280–5298. [\[CrossRef\]](#)
- Kurland, N. B., Baucus, M., & Steckler, E. (2022). Business and society in the age of Covid-19: Introduction to the special issue. *Business and Society Review*, 127, 147–157. [\[CrossRef\]](#)
- Li, K. Q., Chen, Y., Liu, J., Zhang, L., & Mu, X. (2021). Online food delivery platforms and restaurants' interactions in the context of the ban on using single-use plastics. *IEEE Access*, 9, 96210–96220. [\[CrossRef\]](#)
- Link, M. G. (2015). Human rights in times of crisis. *Security and Human Rights*, 26, 69–77. [\[CrossRef\]](#)
- Loh, H. C., Looi, I., Ch'ng, A. S. H., Goh, K. W., Ming, L. C., & Ang, K. H. (2022). Positive global environmental impacts of the COVID-19 pandemic lockdown: A review. *GeoJournal*, 87, 4425–4437. [\[CrossRef\]](#) [\[PubMed\]](#)
- Ma, B., & Zhang, J. (2022). Tie strength, organizational resilience and Enterprise Crisis Management: An empirical study in pandemic time. *International Journal of Disaster Risk Reduction*, 81, 103240. [\[CrossRef\]](#)
- Matchim, J. R. (2019). We all expected to die: Spanish influenza in labrador, 1918–1919. *Canadian Historical Review*, 100, 676–677. [\[CrossRef\]](#)
- Mejia, C., Bæk, M., Zientara, P., & Orłowski, M. (2022). Importance-performance analysis of socially sustainable practices in U.S. restaurants: A consumer perspective in the quasi-post-pandemic context. *International Journal of Hospitality Management*, 103, 103209. [\[CrossRef\]](#)
- Milovanska-Farrington, S. (2023). Job loss and food insecurity during the Covid-19 pandemic. *Journal of Economic Studies*, 50, 300–323. [\[CrossRef\]](#)
- Mitsul, T., & Okuyama, S. (2011). Measurement data selection using multiple regression analysis for precise quantitative analysis. *Bunseki Kagaku*, 60, 163–170. [\[CrossRef\]](#)
- Moratis, L. (2013). A tale of two standards on responsible management education. *Journal of Global Responsibility*, 4, 138–156. [\[CrossRef\]](#)
- Moratis, L. (2016). Signaling strategies for ISO 26000: A firm-level approach. *International Journal of Operations & Production Management*, 36, 512–531. [\[CrossRef\]](#)
- Muhammad, S., Long, X. L., & Salman, M. (2020). COVID-19 pandemic and environmental pollution: A blessing in disguise? *Science of the Total Environment*, 728, 138820. [\[CrossRef\]](#)
- Nava, L. (2022). Rise from ashes: A dynamic framework of organizational learning and Resilience in disaster response. *Business and Society Review*, 127, 299–318. [\[CrossRef\]](#)
- Navickas, V., Kontautiene, R., Stravinskiene, J., & Bilan, Y. (2021). Paradigm shift in the concept of corporate social responsibility: COVID-19. *Green Finance*, 3, 138–152. [\[CrossRef\]](#)
- Niyommaneerat, W., Suwanteep, K., & Chavalparit, O. (2023). Sustainability indicators to achieve a circular economy: A case study of renewable energy and plastic waste recycling corporate social responsibility (CSR) projects in Thailand. *Journal of Cleaner Production*, 391, 136203. [\[CrossRef\]](#)
- Oanh, T. T. D., & An, N. B. (2021). Legal aspects and practice of guarantee of employees' rights in being unilaterally terminated labor contract in the context of COVID 19 pandemic in Vietnam. *Journal of Law and Political Sciences*, 31, 142–158.

- O'Connor, M., & Spangenberg, J. H. (2008). A methodology for CSR reporting: Assuring a representative diversity of indicators across stakeholders, scales, sites and performance issues. *Journal of Cleaner Production*, 16, 1399–1415. [CrossRef]
- Pattit, J., & Pattit, K. (2022). Responding to crisis: World War 2, COVID-19, and the business school. *Business and Society Review*, 127, 319–342. [CrossRef]
- Pirouz, B., Haghshenas, S. S., Haghshenas, S. S., & Piro, P. (2020). Investigating a serious challenge in the sustainable development process: Analysis of confirmed cases of COVID-19 (new type of coronavirus) through a binary classification using artificial intelligence and regression analysis. *Sustainability*, 12, 2427. [CrossRef]
- Rahman, T., Paul, S. K., Shukla, N., Agarwal, R., & Taghikhah, F. (2022). Managing panic buying-related instabilities in supply chains: A covid-19 pandemic perspective. *IFAC-PapersOnLine*, 55, 305–310. [CrossRef] [PubMed]
- Ramya, S., & Baral, R. (2021). CSR during COVID-19: Exploring select organizations' intents and activities. *Corporate Governance: The International Journal of Business in Society*, 21, 1028–1042. [CrossRef]
- Rehan, M. H., Yeo, S. F., Khan, I. U., & Tan, C. L. (2025). Redefying the strength between CSR and sustainable social performance through mediational role of green intellectual capital. *Cleaner and Responsible Consumption*, 16, 100238. [CrossRef]
- Rehman, S. U., Bresciani, S., Yahiaoui, D., & Giacosa, E. (2022). Environmental sustainability orientation and corporate social responsibility influence on environmental performance of small and Medium Enterprises: The mediating effect of Green Capability. *Corporate Social Responsibility and Environmental Management*, 29, 1954–1967. [CrossRef]
- Richnák, P., & Fidlerová, H. (2022). Impact and potential of sustainable development goals in dimension of the technological revolution industry 4.0 within the analysis of industrial enterprises. *Energies*, 15, 3697. [CrossRef]
- Richter, U. H., Shirodkar, V., & Shete, N. (2021). Firm-level indicators of instrumental and political CSR processes—A multiple case study. *European Management Journal*, 39, 279–290. [CrossRef]
- Rupani, P. F., Nilashi, M., Abumalloh, R. A., Asadi, S., Samad, S., & Wang, S. (2020). Coronavirus pandemic (COVID-19) and its natural environmental impacts. *International Journal of Environmental Science and Technology*, 17, 4655–4666. [CrossRef]
- Sachdeva, S., Wu, J. S. T., & Zhao, J. Y. (2021). The impact of scarcity on pro-environmental behavior in the COVID-19 pandemic. *Frontiers in Sustainable Cities*, 3, 767501. [CrossRef]
- Saglam, U., & Canata, F. (2024). A new scientific indexing model: U-index. *SCIRES-IT—Scientific Research and Information Technology*, 14, 277–284. [CrossRef]
- Sajko, M., Boone, C., & Buyl, T. (2021). CEO greed, corporate social responsibility, and organizational resilience to systemic shocks. *Journal of Management*, 47, 957–992. [CrossRef]
- Shammi, M., Bodruz-Doza, M., Islam, A. R. M. T., & Rahman, M. M. (2020). COVID-19 pandemic, socioeconomic crisis and human stress in resource-limited settings: A case from Bangladesh. *Heliyon*, 6, E04063. [CrossRef]
- Svabova, L., Tesarova, E. N., Durica, M., & Strakova, L. (2021). Evaluation of the impacts of the COVID-19 pandemic on the development of the unemployment rate in Slovakia: Counterfactual before-after comparison. *Equilibrium-Quarterly Journal of Economics and Economic Policy*, 16, 261–284. [CrossRef]
- The Sustainable Development Goals Report. (2022). Available online: <https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf> (accessed on 31 March 2025).
- Torres, L., Ripa, D., Jain, A., Herrero, J., & Leka, S. (2023). The potential of responsible business to promote sustainable work—An analysis of CSR/ESG instruments. *Safety Science*, 164, 106151. [CrossRef]
- Vashchenko, M. (2014). Organizational CSR portfolio: Exploration and evaluation. *Business & Professional Ethics Journal*, 33, 351–369. [CrossRef]
- Veselovská, L., Hudáková, L., & Bartková, L. (2022). Feeling of safety: A new important factor influencing consumers? *Cogent Business & Management*, 9, 1. [CrossRef]
- Vinod, M. S. S., Umesh, P., & Sivakumar, N. (2023). Impact of COVID-19 on corporate social responsibility in India—A mixed methods approach. *International Journal of Organizational Analysis*, 31, 168–195. [CrossRef]
- Wettstein, F. (2012). CSR and the debate on business and human rights: Bridging the great divide. *Business Ethics Quarterly*, 22, 739–770. [CrossRef]
- Yang, C., & Chen, X. (2022). Factors affecting consumers' purchasing of suboptimal foods during the COVID-19 pandemic. *Agriculture*, 12, 99. [CrossRef]
- Yang, C., Liu, H., & Wang, X. (2012). 2012 2nd international conference on applied social science (ICASS 2012) 4 (pp. 344–353). Information Engineering Research Inst, USA.
- Zhang, Y. J. (2021). Corporate responses to COVID-19: A nonmarket strategy approach. *Sociological Perspectives*, 64, 1032–1057. [CrossRef]

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.