

# Corporate Social Responsibility in Health Technology Industry Prior and during the Covid-19 Pandemic, in Greece

Margarita Liopa<sup>1</sup> , Dimitra Latsou<sup>1,2</sup> , Mary Geitona<sup>1</sup> 

<sup>1</sup>Department of Social & Educational Policy, School of Social Sciences, University of Peloponnese, Corinth, Greece

<sup>2</sup>Department of Economics & Business, Neapolis University Pafos, Pafos, Cyprus

Email: liopamargarita@gmail.com, demilatsou@yahoo.gr, marygeitona@gmail.com

**How to cite this paper:** Liopa, M., Latsou, D. and Geitona, M. (2022) Corporate Social Responsibility in Health Technology Industry Prior and during the Covid-19 Pandemic, in Greece. *Health*, **14**, 1161-1172.  
<https://doi.org/10.4236/health.2022.1411082>

**Received:** October 23, 2022

**Accepted:** November 22, 2022

**Published:** November 25, 2022

Copyright © 2022 by author(s) and Scientific Research Publishing Inc.  
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

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



Open Access

## Abstract

Corporate Social Responsibility (CSR) activities have been revealed as an emerging managerial tool and research field. The socioeconomic impact of the COVID-19 pandemic has prompted several companies to take on CSR initiatives. The objective of this study was to investigate CSR initiatives implemented in companies specializing in pharmaceutical and biomedical products as well as medical equipment, prior and during the COVID-19 pandemic. A cross-sectional study was conducted in companies of the Hellenic Association of Pharmaceutical Companies (SFEE), the Panhellenic Association of Pharmaceutical Industry (PEF) and the Association of Health-Research and Biotechnology Industry (SEIV). A self-administered questionnaire was distributed to a total of 112 companies. Descriptive and multivariate statistical analyses were performed using SPSS 25.0. Levels of significance were two-tailed and statistical significance was set at  $p = 0.05$ . The final sample consisted of 74 companies with a response rate of 77.7%. Among them 62.2% were multinational and 37.8% national companies. Some companies provided pharmaceuticals (40.5%), medical equipment and biotechnology products (32.4%) and others were specializing in both categories (27.1%). A percentage equal to 89.2% stated that they implemented CSR activities, out of which 75.7% carried out COVID-19 related initiatives, such as in public health (37.7%), societal issues (27.2%), environment (19.9%), etc. Approximately 50% increased their CSR activities during the pandemic. Moreover, the majority of companies devoted  $\leq 30\%$  of their total CSR budget against the pandemic. The higher a company's turnover, the higher CSR activities performance. Pharmaceutical and biomedical companies in Greece implemented CSR actions, prior and during the pandemic. Companies contributed to handle the effects of health crisis through CSR Covid-19 related activities, which differentiated according to

company's culture and wealth. It is important that authorities should reward companies carrying out CSR initiatives, given that they positively contribute to the societal recovery by financially supporting the health care sector and the overall economy.

### **Keywords**

Corporate Social Responsibility (CSR), Pharmaceuticals, Health Technology, Public Health, Pandemic COVID-19, Greece

---

## **1. Introduction**

In the 21<sup>st</sup> century, the assessment of Corporate Social Responsibility (CSR) activities has been revealed as an emerging managerial tool and research field supporting entrepreneurial recognition as well as societies and economies [1]. CSR involves all activities that are beneficial to society and go beyond a company's core operation [2] [3]. Such activities promote companies to voluntarily integrate social and environmental concerns and support contacts with the public and stakeholders [4]. CSR activities should be incorporated into a company's management policies and decision-making since they ensure its survival and promote stable relationships between decision-makers and stakeholders [5] [6]. Companies that exhibit high levels of voluntary commitment and entrepreneurial responsibility are rewarded through recognition by the stakeholders and society [7] [8].

According to the World Health Organization (WHO), in 2022 more than 615 million coronavirus cases and approximately 6.5 million deaths were recorded in 222 countries, causing a humanitarian and economic panic around the world [9]. During the COVID-19 pandemic, CSR initiatives turned out to be valuable for both the sustainable development of the companies and the society, in order to improve their financial performance and at the same time to provide abundant social benefits [10] [11]. Numerous pharmaceutical and biomedical companies implemented CSR strategies mainly focusing on public health campaigns and the support of healthcare systems [11] [12] [13]. The pandemic has accelerated the development of health-related CSR and forced companies to implement long-term activities and policies in order to achieve a balance between profitability and voluntarism, even by limiting other CSR activities [14] [15] [16].

In Greece, the COVID-19 pandemic had an adverse economic impact on the productive sector and the overall economy, accompanied by a societal and humanitarian burden [9] [17] [18]. The pharmaceutical and biomedical industry is one of the most dynamic sectors of the Greek economy, with a percentage of 3.3% of Gross Domestic Product (GDP) and high employment rates in 2021 [19]. In this context, the objective of this study was to investigate CSR initiatives implemented in companies specializing in pharmaceutical and biomedical products

as well as medical equipment, prior and during the COVID-19 pandemic.

## 2. Methods

### 2.1. Study Design and Sample Selection

A cross-sectional study has been conducted from April to June 2021 in Greece. The study has been carried out in member companies of the Hellenic Association of Pharmaceutical Companies (SFEE), the Panhellenic Association of Pharmaceutical Industry (PEF) and the Association of Health-Research and Biotechnology Industry (SEIV).

The methodology of convenience sampling has been applied in this study. Data collection was carried out through a self-administered questionnaire. Participants met the following inclusion criteria: 1) active business companies and 2) companies specializing in pharmaceuticals, biotechnological products and medical equipment. The exclusion criteria were: 1) companies producing skin care products, nutritional supplements, baby food and similar products, 2) subsidiaries companies and 3) companies operating as distributors of pharmaceutical, medical and biotechnological products. The questionnaire was sent via email to Chief Executive Officers (CEOs) of the 112 companies which met the inclusion criteria. Companies being members in more than one of the abovementioned Associations had to fulfill only one questionnaire.

### 2.2. Study Instrument

An anonymous self-administered questionnaire was structured and developed based on a review of the international and Greek related literature [20] [21]. A pilot study was carried out on a convenience sample of 5 companies from the target population in order to evaluate the content validity, the clarity and the comprehensiveness of the questionnaire [22]. Feedback was incorporated into the final version. The questionnaire was divided into 3 sections and consisted of 38 questions in total. The first section included questions on the socio-demographic and occupational characteristics of the sample. The second and third sections consisted of questions about the companies' CSR activities prior and during the pandemic (COVID-19). Moreover, the questionnaire included the following types of responses: 1) multiple-choice, 2) ranking questions (4-point Likert scale), where 1 corresponds to "very important" and 4 to "not important", and 3) binary (Yes/No).

### 2.3. Statistical Analysis

Mean values and standard deviation (SD) were used for the description of quantitative variables. Absolute (n) and relative (%) frequencies were used for the description of qualitative variables. For the comparison of proportions, the Pearson's chi-squared test was used. The variables were non-normally distributed and non-parametric tests were chosen. The statistical significance of difference between two independent groups was assessed by using Mann Whitney test and

among three groups using Kruskal Wallis test. Levels of significance were two-tailed and statistical significance was set to  $p = 0.05$ . The SPSS 25.0 version was used for statistical analysis.

### 3. Results

Overall, 87 out of 112 companies replied to the questionnaire, reaching a 77.7% response rate. However, 13 questionnaires were excluded from our analysis due to their low percentage (less than 50%) of completion (*i.e.* missing data). Thus, the final sample consisted of 74 companies, out of which 55 operate internationally. The socio-demographic and occupational characteristics are presented in **Table 1**. The majority of the respondents were the CEOs holding a postgraduate degree. Also, the majority of companies operated in the field of pharmaceuticals, belonged to multinational corporations operating in Greece and with an annual turnover  $\geq 40.000.000$  €.

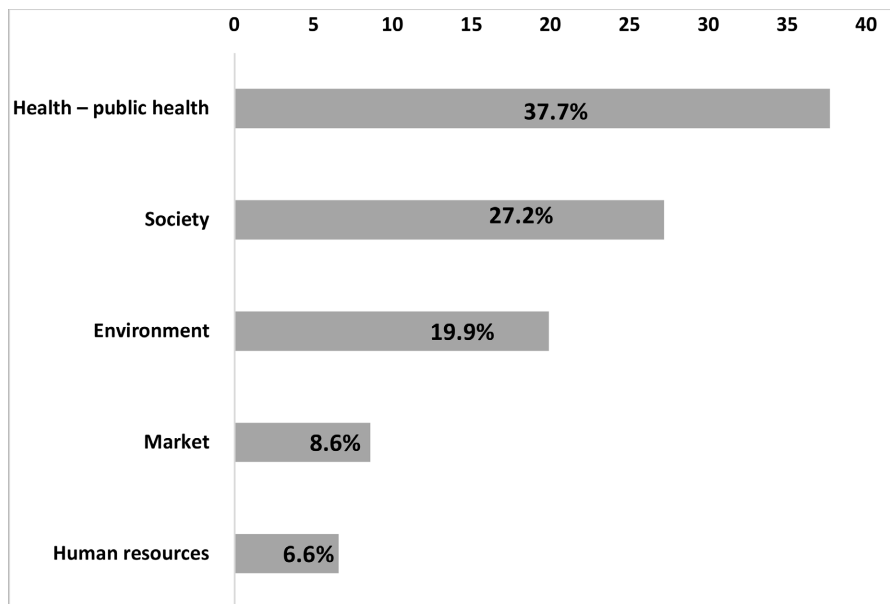
**Table 1.** Sample characteristics.

	No	%
<b>Respondents' characteristics</b>		
<b>Educational level</b>		
Bachelor degree	18	24.3
MSc/PhD	56	75.7
<b>Working Department</b>		
General Directorate	40	54
Financial and Commercial	14	18.9
Regulatory and Communication	10	13.5
Human resources (HR)	10	13.5
<b>Company's field of operation</b>		
Pharmaceutical products	30	40.5
Medical equipment & Biomedical products	24	32.4
Companies specialising in both above categories	20	27.1
<b>Legal status of Company</b>		
Multinational operating company in Greece	46	62.2
National company	28	37.8
<b>Annual company turnover</b>		
$\leq 2.000.000$ €	10	13.5
2.000.001 € - 10.000.000 €	8	10.8
10.000.001 € - 20.000.000 €	14	18.9
20.000.001 € - 40.000.000 €	8	10.8
$\geq 40.000.000$ €	34	45.9

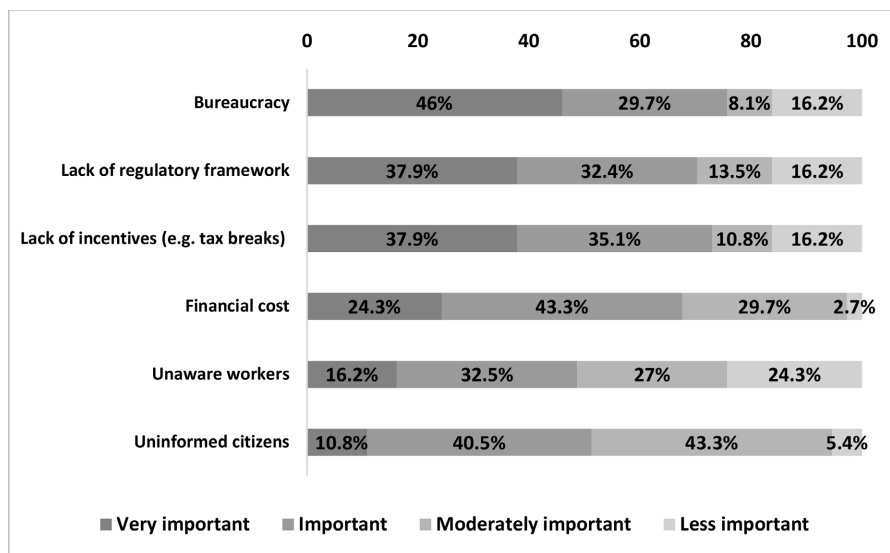
According to the CEOs opinion, 91.9% of companies implement CSR activities in Greece. 89.2% stated that their company implemented CSR activities out of which 42.8% had more than ten years experience in CSR. Also 81.1% reported that CSR activities are incorporated in their annual strategy. As shown in **Figure 1**, the more frequently applied activities were in health/public health and the society.

Moreover, companies were asked to prioritize the deterrent reasons for the implementation of CSR as shown in **Figure 2**. As first reason was reported the bureaucracy (46%) followed by the lack of regulatory framework (37.9%) and the lack of incentives (37.9%).

During the pandemic period, 75.7% of respondents answered that their company implemented CSR initiatives against coronavirus, 18.9% responded negatively and



**Figure 1.** Prioritization of overall CSR activities.

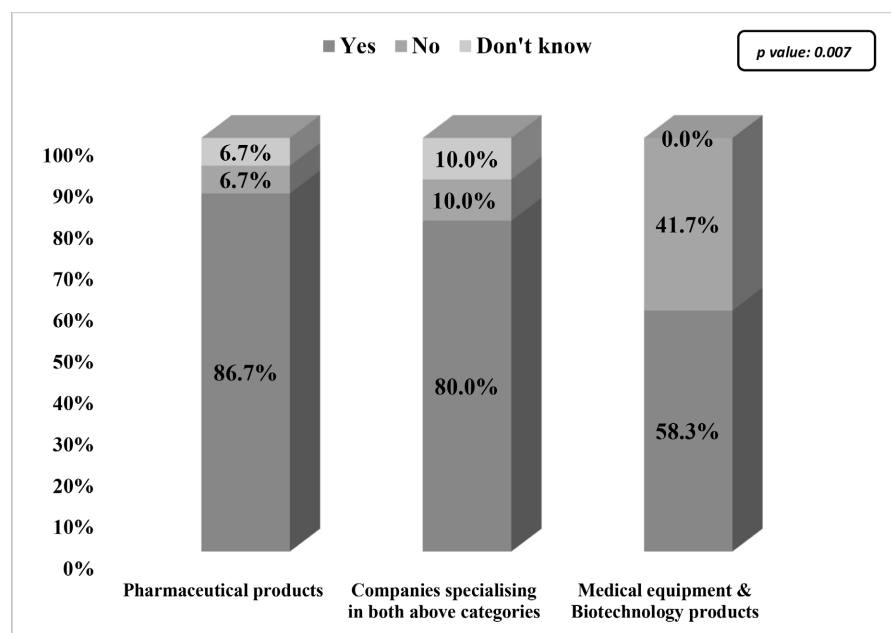


**Figure 2.** Deterrent reasons for implementing CSR actions.

the rest (5.4%) did not know. Specifically, the implemented CSR initiatives in the health sector were donations of medical equipment (e.g. ICU beds), pharmaceutical products and consumables, as well as personal protective equipment (PPE) against COVID-19. Companies also leveraged their partnerships to address social issues providing food and pharmaceutical care to specific vulnerable groups (patients, old age people in need). As far as in the market and human resources field, the participants declared that they ensured the adequacy and the safety of products. They also provided PPE for their employees and rewarded them through bonuses due to the continuity and risk at work. In addition, it is worth noting that 48.6% of companies increased their CSR activities, 35.1% remained stable and 16.2% reduced them. Also, 78.4% devoted  $\leq 30\%$  of the total CSR budget against the pandemic and only 21.4% spent  $\geq 31\%$ .

Statistically significant differences were found between the field of companies' operation, the legal status and annual turnover with the implementation of CSR activities against COVID-19. More specifically, companies specializing in pharmaceuticals (86.7%) and in both categories (80%) adopted CSR activities in response to COVID-19 compared to companies specialising in medical equipment & biotechnology products (58.3%) (**Figure 3**).

Furthermore, pharmaceutical companies significantly supported National Health System throughout donations of medicines, medical services, diagnostic tests ( $p = 0.001$ ), and public health campaigns ( $p = 0.050$ ) compared to other categories, as shown in **Table 2**. As far as the companies' legal status is concerned, it seems that national companies contributed more significantly throughout donations ( $p = 0.030$ ,  $p = 0.006$ ) and infrastructures' improvements ( $p = 0.036$ ) than multinational ones which contributed via public health campaigns ( $p = 0.001$ ) (**Table 2**).



**Figure 3.** Companies' field of operation and CSR activities against COVID-19.

**Table 2.** Field of companies' operation and legal status comparisons with CSR activities against COVID-19.

	Donations of medicines, medical services, diagnostic tests, etc.	Public Health campaigns	Improvements in infrastructures	Donations of medical devices/equipment
<b>Field of companies' operation</b>				
Pharmaceuticals	1.73 (1.01)	1.80 (1.19)		
Medical equipment/Biotechnology products	3.16 (1.00)	2.25 (1.18)		
Companies specialising in both categories	2.60 (1.05)	2.60 (0.94)		
<i>P value</i>	0.001	0.050		
<b>Company's legal status</b>				
National Companies	2.07 (1.18)	2.79 (1.10)	1.79 (1.03)	1.57 (0.74)
Multinational Companies in Greece	2.70 (1.17)	1.83 (1.02)	2.35 (1.14)	2.30 (1.24)
<i>P value</i>	0.030	0.001	0.036	0.006

1 = very important contribution; 4 = less important contribution.

**Table 3.** Annual turnover comparison with CSR activities (in billion €).

	≤2	2 - 10	10 - 20	20 - 40	≥40	P value
<b>Implementation of CSR activities</b>						
	<i>in %</i>					
Yes	40.0	75.0	100.0	100.0	100.0	
No	40.0	0.0	0.0	0.0	0.0	0.001
Don't know	20.0	25.0	0.0	0.0	0.0	
<b>CSR activities against COVID-19</b>						
	<i>in %</i>					
Yes	20.0	75.0	85.7	75.0	88.2	
No	80.0	25.0	14.3	25.0	0.0	0.001
Don't know	0.0	0.0	0.0	0.0	11.8	

As shown in **Table 3**, the implementation of CSR activities seems to be affected by the annual turnover of companies, given that companies with higher annual turnover were more likely to apply CSR prior and during the pandemic.

#### 4. Discussion

The aim of this study was to explore CSR initiatives implemented by companies specializing in pharmaceuticals, biomedical products and medical equipment prior and during the COVID-19 pandemic in Greece. According to our results, 9 out of 10 companies implemented CSR activities and 7 out of 10 implemented COVID 19 related activities. Also, it has been found that half of the participating companies increased CSR activities during the pandemic. This is an important finding considering that Greece, after a 10-year economic crisis which resulted in €1.4 billion decrease in pharmaceutical and biomedical expenditure and 25% reduction of GDP, managed to face successfully the humanitarian and economic

impact of the pandemic [23] [24]. This is due to the preventive measures and policies early introduced by the government and the financial support of the EU and health technology industry [25] [26].

Although CSR activities have flourished during the pandemic, there have been companies without established CSR actions during dual crisis in health and financial level. Bureaucracy, lack of regulatory framework and incentives were determined as the major deterrent reasons for the implementation of CSR activities by the participating companies. Hence, relevant studies have pointed out that there are financial obstacles which prevent the CSR implementation as well as the tradition and culture [12] [27]. It is worth mentioning that CSR culture seems to be weak in Greece [18].

Our results showed a predominance of societal and public health activities mainly focused on the timely provision and donations of pharmaceuticals, diagnostic tests and equipment as well as public health campaigns. More specifically, national companies' CSR initiatives targeted mostly to the strengthening and improvement of health facilities' infrastructure, equipment maintenance and donations, while the multinational ones mostly focused on public health awareness through information campaigns. This is also an important finding that might be explained by the fact that CSR decision making by national companies seems to be more flexible than the multinational ones that must follow a common strategic policy set by the parent company. Furthermore, approximately 80% of pharmaceutical and/or biotechnology companies adopted COVID related CSR activities compared to companies specializing in medical equipment.

As far as the resources' allocation is concerned, the majority of companies spent approximately 30% of their total CSR budget for initiatives related to coronavirus. Finally, another significant finding is that the higher company's turnover, the higher the implementation of CSR initiatives. Our findings have many similarities with the international literature. An important and common finding is that CSR strategies implemented have contributed to handle the effects of health crisis. Several studies suggest that well organized and executed CSR initiatives, can generate reference best practices for tackling any economic, humanitarian and health crises [14] [28] [29] [30] [31]. Also, studies conducted in the USA, Korea, Spain, and India [12] [32] [33] [34] showed that companies made donations of medicinal and protective products during the pandemic and implemented targeted CSR policies, mainly focused on the reinforcement of public health awareness and the stable relationships with stakeholders in order to address the COVID-19 effects and respond to the existing societal needs. Furthermore, several studies have reported that parent-subsidiary companies and geographic distance are factors related with barriers to the CSR performance [35] [36] [37]. Thus, our finding that national companies are more flexible in CSR decision making than the multinational ones, constitutes another similarity. Finally, the relation of companies' wealth with the implementation of CSR actions, is also found in other studies highlighting that larger companies tend to carry out more social activities than the smaller ones [38] [39].



## 5. Study Limitations

Despite all efforts to address the weaknesses of the research, certain shortcomings still exist. First, although the questionnaire was constructed after consulting a pilot sample of the CEOs, all information collected to actually assess the implementation of CSR was only from top and middle level managers of companies specializing in pharmaceuticals and biomedical technology. As a result, bias cannot be completely avoided as the survey data solely represented managers' perceptions. Second, most of the companies surveyed operated nationally or even internationally, so the culture of their headquarters may not accurately reflect the diversity apparent in their local enterprises. The corporate culture is likely to show significant differences.

## 6. Conclusion

Companies specializing in pharmaceuticals and biomedical technology implement CSR initiatives in Greece. During the pandemic, companies contributed to handle the effects of health crisis through CSR Covid-19 related activities. Public health, societal and environmental issues were among the CSR priorities which differentiated according to company's culture and wealth. Our findings brought to light the necessity of implementing CSR initiatives. Authorities should reward companies carrying out CSR initiatives, given their contribution to the societal recovery by financially supporting the health care sector and the overall economy.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

- [1] McLennan, S. and Banks, G. (2019) Reversing the Lens: Why Corporate Social Responsibility Is Not Community Development. *Corporate Social Responsibility and Environmental Management*, **26**, 117-126. <https://doi.org/10.1002/csr.1664>
- [2] Carroll, A.B. (2021) Corporate Social Responsibility (CSR) and the COVID-19 Pandemic: Organizational and Managerial Implications. *Journal of Strategy and Management*, **14**, 315-330 <https://doi.org/10.1108/JSMA-07-2021-0145>
- [3] McWilliams, A., Siegel, D. and Wright, P. (2006) Corporate Social Responsibility: Strategic Implications. *Journal of Management Studies*, **43**, 1-18. <https://doi.org/10.1111/j.1467-6486.2006.00580.x>
- [4] European Commission (2001) Promoting a European Framework for Corporate Social Responsibility. European Commission, Brussels. [https://ec.europa.eu/commission/presscorner/detail/en/DOC\\_01\\_9](https://ec.europa.eu/commission/presscorner/detail/en/DOC_01_9)
- [5] Bruna, M.G. and Lahouel, B.B. (2022) CSR & Financial Performance: Facing Methodological and Modeling Issues Commentary Paper to the Eponymous FRL Article Collection. *Finance Research Letters*, **44**, Article ID: 102036. <https://doi.org/10.1016/j.frl.2021.102036>
- [6] Bruna, M.G. and Nicolò, D. (2020) Corporate Reputation and Social Sustainability in the Early Stages of Start-Ups: A Theoretical Model to Match Stakeholders' Ex-

- pectations through Corporate Social Commitment. *Finance Research Letters*, **35**, Article ID: 101508. <https://doi.org/10.1016/j.frl.2020.101508>
- [7] Freeman, R.E. (1984) Stakeholder Theory. In: Freeman, R.E., Ed., *Strategic Management: A Stakeholder Approach*, Pitman Publishing, London, 248.
- [8] Bae, K.-H., El Ghoul, S., Gong, Z. and Guedhami, O. (2021) Does CSR Matter in Times of Crisis? Evidence from the COVID-19 Pandemic. *Journal of Corporate Finance*, **67**, Article ID: 101876. <https://doi.org/10.1016/j.jcorpfin.2020.101876>
- [9] World Health Organization (2021) WHO Coronavirus Disease (COVID-19) Dashboard. World Health Organization, Genève.
- [10] Baatwah, S.R., Al-Qadasi, A.A., Al-Shehri, A.M. and Derouiche, I. (2022) Corporate Social Responsibility Budgeting and Spending during COVID-19 in Oman: A Humanitarian Response to the Pandemic. *Finance Research Letters*, **47**, Article ID: 102686. <https://doi.org/10.1016/j.frl.2022.102686>
- [11] Bapuji, H., Patel, C., Ertug, G. and Allen, D.G. (2020) Corona Crisis and Inequality: Why Management Research Needs a Societal Turn. *Journal of Management*, **46**, 1205-1222. <https://doi.org/10.1177/0149206320925881>
- [12] Mahmud, A., Ding, D. and Hasan, M.M. (2021) Corporate Social Responsibility: Business Responses to Coronavirus (COVID-19) Pandemic. *SAGE Open*, **11**. <https://doi.org/10.1177/2158244020988710>
- [13] Guerriero, C., Haines, A. and Pagano, M. (2020) Health and Sustainability in Post-Pandemic Economic Policies. *Nature Sustainability*, **3**, 494-496. <https://doi.org/10.1038/s41893-020-0563-0>
- [14] He, H. and Harris, L. (2020) The Impact of Covid-19 Pandemic on Corporate Social Responsibility and Marketing Philosophy. *Journal of Business Research*, **116**, 176-182. <https://doi.org/10.1016/j.jbusres.2020.05.030>
- [15] Droppert, H. and Bennett, S. (2015) Corporate Social Responsibility in Global Health: An Exploratory Study of Multinational Pharmaceutical Firms. *Globalization and Health*, **11**, Article No. 15. <https://doi.org/10.1186/s12992-015-0100-5>
- [16] Sharma, P., Leung, T.Y., Kingshott, R.P., Davcik, N.S. and Cardinali, S. (2020) Managing Uncertainty during a Global Pandemic: An International Business Perspective. *Journal of Business Research*, **116**, 188-192. <https://doi.org/10.1016/j.jbusres.2020.05.026>
- [17] Ducharme, J. (2020) World Health Organization declares COVID-19 a “Pandemic.” Here’s What That Means. The Time. <https://time.com/5791661/who-coronavirus-pandemic-declaration/>
- [18] Kritas, D., Tzagkarakis, S., Atsipouliaiki, Z. and Sidiropoulos, S. (2020) The Contribution of CSR during the Covid-19 Period in Greece: A Step Forward. *HAPSoc Policy Briefs Series*, **1**, 238-243. <https://doi.org/10.12681/hapscpbs.24971>
- [19] Foundation for Economic & Industrial Research (IOBE) (2022) The Pharmaceutical Market in Greece: Facts & Figures 2021.
- [20] Pouliopoulos, L., Geitona, M., Pouliopoulos, T. and Triantafillidou, A. (2012) Managers’ Perceptions and Opinions towards Corporate Social Responsibility (CSR) in Greece. *Procedia Economics and Finance*, **1**, 311-320. [https://doi.org/10.1016/S2212-5671\(12\)00036-6](https://doi.org/10.1016/S2212-5671(12)00036-6)
- [21] Gallardo-Vázquez, D., Sánchez-Hernández, M.I. and Corchuelo-Martínez-Azúa, M.B. (2013) Validación de un instrumento de medida para la relación entre la orientación a la responsabilidad social corporativa y otras variables estratégicas de la empresa. *Revista de Contabilidad*, **16**, 11-23.

- [https://doi.org/10.1016/S1138-4891\(13\)70002-5](https://doi.org/10.1016/S1138-4891(13)70002-5)
- [22] Rea, L.M. and Parker, R.A. (2014) Designing and Conducting Survey Research: A Comprehensive Guide. John Wiley & Sons, Hoboken.
- [23] Athanasiadis, T. (2022) Press Release: “The Pharmaceutical Market in Greece: Facts & Figures 2021”.  
<https://policycommons.net/artifacts/2648154/deltio-tupou-e-pharmakeutike-agora-sten-ellada/3671001/>
- [24] Maska, L., Tsekeris, T., Kadas, C. and Tsekeris, C. (2017) Measuring the Crisis Preparedness in the Pharmaceutical Sector: The Case of Greece. *Zbornik Radova Veleučilišta u Šibeniku*, **3-4**, 7-18.
- [25] Androutsou, L., Latsou, D. and Geitona, M. (2021) Health Systems’ Challenges and Responses for Recovery in the Pre and Post COVID-19 Era. *Journal of Service Science and Management*, **14**, 444-460. <https://doi.org/10.4236/jssm.2021.144028>
- [26] Moris, D. and Schizas, D. (2020) Lockdown during COVID-19: The Greek Success. *In Vivo*, **34**, 1695-1699. <https://doi.org/10.21873/invivo.11963>
- [27] Tellis, G.J. and Tellis, K. (2009) Research on Advertising in a Recession. *Journal of Advertising Research*, **49**, 304-327. <https://doi.org/10.2501/S0021849909090400>
- [28] Panagiotopoulos, I. (2021) Novel CSR & Novel Coronavirus: Corporate Social Responsibility inside the Frame of Coronavirus Pandemic in Greece. *International Journal of Corporate Social Responsibility*, **6**, Article No. 10. <https://doi.org/10.1186/s40991-021-00065-7>
- [29] García-Sánchez, I.M. and García-Sánchez, A. (2020) Corporate Social Responsibility during COVID-19 Pandemic. *Journal of Open Innovation: Technology, Market, and Complexity*, **6**, Article No. 126. <https://doi.org/10.3390/joitmc6040126>
- [30] Aguinis, H., Villamor, I. and Gabriel, K.P. (2020) Understanding Employee Responses to COVID-19: A Behavioral Corporate Social Responsibility Perspective. *Management Research: Journal of the Iberoamerican Academy of Management*, **18**, 421-438. <https://doi.org/10.1108/MRJIAM-06-2020-1053>
- [31] Brammer, S., Branicki, L. and Linnenluecke, M.K. (2020) COVID-19, Societalization, and the Future of Business in Society. *Academy of Management Perspectives*, **34**, 493-507. <https://doi.org/10.5465/amp.2019.0053>
- [32] Kim, S. (2022) The COVID-19 Pandemic and Corporate Social Responsibility of Korean Global Firms: From the Perspective of Stakeholder Theory. *Emerald Open Research*, **4**, Article No. 16. <https://doi.org/10.35241/emeraldopenres.14511.1>
- [33] García-Sánchez, I.M., García-Sánchez, A. and Asadi Lari, H. (2021) Corporate Social Responsibility during COVID-19 Pandemic. *Social Security Journal*, **17**, 203-232.
- [34] Ramya, S.M. and 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. <https://doi.org/10.1108/CG-09-2020-0426>
- [35] Su, F., Liang, X., Cai, S., Chen, S. and Fahad, S. (2021) Assessment of Parent-Subsidiary Companies’ Geographical Distance Effect on Corporate Social Responsibility: A Case of A-Share Listed Companies. *Economic Research-Ekonomika Istraživanja*, **35**, 4922-4946. <https://doi.org/10.1080/1331677X.2021.2019597>
- [36] El Ghouli, S., Guedhami, O., Ni, Y., Pittman, J. and Saadi, S. (2013) Does Information Asymmetry Matter to Equity Pricing? Evidence from Firms’ Geographic Location. *Contemporary Accounting Research*, **30**, 140-181. <https://doi.org/10.1111/j.1911-3846.2011.01147.x>

- [37] Cashman, G.D., Harrison, D.M., Seiler, M.J. and Sheng, H. (2019) The Impact of Geographic and Cultural Dispersion on Information Opacity. *The Journal of Real Estate Finance and Economics*, **59**, 166-208.  
<https://doi.org/10.1007/s11146-017-9607-2>
- [38] Sugiyanto, E., Trisnawati, R. and Kusumawati, E. (2021) Corporate Social Responsibility and Firm Value with Profitability, Firm Size, Managerial Ownership, and Board of Commissioners as Moderating Variables. *Riset Akuntansi Dan Keuangan Indonesia*, **6**, 18-26.
- [39] Putri, Z.B. and Budiyanto, B. (2018) Pengaruh Corporate Social Responsibility terhadap nilai perusahaan dengan kepemilikan manajerial sebagai Variabel Moderating. *Jurnal Ilmu dan Riset Manajemen*, **7**, 13-14.