Corporate Social Responsibility and the Mining Industry: Areas of Use and Opportunities to Reduce the Negative Effects of Activity

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Mateusz Kurowski¹, Katarzyna Huk²

Abstract:

Purpose: The aim of the article is to present the level of CSR in mining industry comparing to various sectors of the economy and to indicate the differences of CSR performance in mining companies resulting from their geographical location and size.

Design/Methodology/Approach: The paper is based on the literature review and statistical analysis of data derived from CSR ratings.

Findings: Research showed that mining industry represents relatively high level of social responsibility. According to regional analysis European entities were awarded with the highest grades in most of indicators while Japanese companies obtained considerably lower results than other regions.

Practical Implications: Although, there was no significant differentiation in the level of CSR in the mining sector resulting from the size of the company, the smallest entities performed considerably worse than other groups in all environmental and social indicators.

Originality/Value: The presented research shows the degree of use of the CSR concept in the mining industry and the possibilities of improving the company's operations in accordance with sustainable development.

Keywords: CSR, mining industry, environment, stakeholders, corporate governance.

JEL Classification: L6.

Research Type: Research Article.

¹University of Zielona Góra, Poland, m.kurowski@wez.uz.zgora.pl;

²University of Zielona Góra, Poland, k.huk@wez.uz.zgora.pl;

1. Introduction

The concept of Corporate Social Responsibility (CSR) is the primary tool used to minimize the negative aspects of business operations. It focuses not only on omitting and minimizing negative externalities but on combating internal malpractices, child labor, forced labor, fraud, and other issues. Due to their activity profile, mines are not often associated as entities with a high level of CSR, but data do not support this. Thus, there is a research gap in analyzing the implementation and functioning of the CSR concept among industries, especially in mining. The article aims to present the state and specificity of the functioning of the corporate social responsibility concept in the mining industry. The article was prepared based on the literature of the subject and data from corporate social responsibility assessment reports from survey research.

2. Literature Review

There is no single definition that could be able to present the whole idea of CSR. Still, one of the most frequently used is the general definition proposed by European Commission: "the responsibility of enterprises for their impacts on society" (European Comission, 2011). The broad sense of this definition is its strength. It covers all aspects of responsibility. The impact on society indicates not only social influence but also environmental and economic. Although the concept of companies taking other than economic responsibilities is often criticized (Friedman, 1970), it continues to develop both in theory and practice. Under stakeholders' pressure, more and more companies create and implement CSR strategies, programs, measures. It became a field of competition through specific CSR rankings and contests.

Carroll (1991) presented the levels of responsibility like economic, legal, ethical, philanthropic, and he was followed by other authors who set the areas of responsibilities and tasks for companies. Enterprises are subject to rights and obligations and economic, social, and environmental responsibility (Sokołowska, 2009). Processes in the field of cooperation between enterprises in the field of CSR lead to building a competitive advantage (Gableta, 2010), which boils down to the need to cooperate with the social and natural environment (Adamiak and Nowicki, 2012), as well as with stakeholders such as the police, chambers of commerce, suppliers, recipients, and customers (Browne, 2015; Huk, 2016). Adverse effects on the environment and the community resulting from the development of the economy cause the need for implementation of solutions like Industry 4.0, CSR, sustainable development, sustainable transport, etc., (Straka, 2020; Surówka, 2021; Tolley, 2003; Balog, 2019; Porubčinová, 2020). Although much has been written about what companies should and should not do, practical implementation of recommendations and requirements is the other side of the coin. All entities have similar responsibilities towards society, but the type of company's activity partially determines it. One of the sectors of the economy which generate the most concerns in terms of CSR is mining.

The problem of CSR in mining companies has already been discussed in numerous publications. For this research, a literature review of the discussed issue was conducted and showed in Table 1.

Several observations can be made based on the review presented above- papers selected for this research attempt these issues of CSR in the mining sector from different perspectives. Most studies use qualitative data. A case study is a commonly used method, sometimes performed for comparison. Mining companies must meet CSR standards addressed to all entities and have specific criteria like rational exploitation of natural resources, clean extraction technologies, mine closure, and recovery programs (Jenkis and Obara, 2006). Many publications examined mining companies in Africa as there have been significant problems, especially in health and safety standards, child labor, forced labor, frequently reported in media. It is important to remember that substantial environmental and social problems are to solve in developing countries and all world regions. Regardless of the area and organizational environment in which the mine operates, it faces similar challenges and problems (Vintró and Comajuncosa, 2010). One of the studies indicates differences in CSR reporting among mining companies (Jenkins and Yakovleva, 2006). It is doubtful that the differences between leaders and marauders are only in reporting. They instead reflect the general CSR performance. Questions arise about the causes of these differences between the companies – what makes them perform good or bad in CSR. The second question is about the possibility of the successful implementation of CSR strategies in the mining sector. The above questions concerning CSR performance of mining companies comparing to others and the internal differentiation of the mining sector led to this research.

Table 1 Selected publications concerning CSR in mining sector

Subject of the study	Main results
Conflicts between mining operations and the community and environment	The challenges mining companies are facing in terms or CSR are not different than in other sectors. Addressing CSR strategies does not reflect the moral need but the will to avoid conflicts. Companies draw the picture of communities with them in the central point (Jenkins, 2004). Based on case studies performed in Ghana it was noted that there is a risk that CSR
development approaches of large-scale mining companies	strategies can lead to communities' dependency on companies. To reduce that risk, specific conditions need to be met (Jenkins and Obara, 2006).
Recent trends in social and environmental reporting in mining sector.	Case studies of 10 mining companies not only showed the recent trends in CSR reporting but also proved that entities in the study represented different levels of reporting. Although, in general, reporting quality improves over time, there is a significant gap between leaders and marauders (Jenkins and Yakovleva, 2006).
CSR in Peruvian mining sector	CSR became a popular topic in public discussions in Peru. The study presents the challenges of CSR in Peru and the specific of the mining sector in this country. In one of the recommendations, it is pointed out that companies different in CSR performance and that benchmarking is important to reduce gaps (Oxfam International, 2006).
CSR performance criteria for mining companies	Proposed CSR performance chart is an easy to implement and use solution for mining companies to improve their CSR performance. 31 indicators are divided into 3 groups: sustainability, ethics, human resources. Scores obtained in single indicators are aggregated into group scores and then Global CSR Index. It helps to compare entities in terms of CSR and to track their performance over time (Vintro and Comajuncosa, 2010).
Different understanding of CSR in mining sector	Three parties included in CSR conversation consider responsibilities of mining companies in a different way. It was also different than understanding CSR in western

by government, society, mining companies	countries. The study based on Carroll's pyramid model. Its modification for Argentina's mining sector was proposed (Yakovleva, Vazquez- Brust, and Mutti, 2010).
The role of CSR in mining SMEs in Catalonia	CSR concept is not widely known among Catalan mining SMEs and the lack of awareness translates to low rate of companies implementing CSR strategies (Vintro <i>et al.</i> , 2012).
Developing CSR systems in mining companies and seizing opportunities in this area	Two mines were compared in the research: one located in Czech Republic, one in Zambia. Although both entities operate in different regions, social, economic, legal environment they have much in common when it comes to realizing the CSR strategy. They also face similar problems and make the same mistake which is the inconsistency between their activity and reporting (Gurská and Válová, 2013).
Evolving policy for CSR programmes assessment in Indian mining sector	There should be economic, ecological and sustainability standards to control the operations of mining companies. Well, designed and implemented CSR strategies allow stakeholders to participate in mining industry and bind industrial growth with overall socio-economic development of communities (Sarkar, 2013).
The general view on CSR in Ghana's mining sector	3 mines from Ghana were selected to the study. Research focuses mostly on community development programmes implemented by these companies. Qualitative data about CSR activities was collected not only from the companies but also from stakeholders. It appeared that CSR community projects are the most effective when supported by other parties e.g., government (Ofori and Ofori, 2014).
CSR projects in mining sector	Case study of 2 mining companies in Ghana showed the spectrum of realized CSR projects and implemented measures. Research concerns also the positive influence CSR projects have on local communities and infrastructure (Siawor-Robertson, Awaworyi, and Churchill, 2015).
The scope of mining sector activities related to CSR	Authors analysed the knowledge about CSR issues in mining sector among members of academic environment and other stakeholders. The low level of CSR knowledge among students should be improved by specific modifications in didactic courses. Other stakeholders represented basic knowledge about CSR in mining sector (Pactwa and Woźniak, 2020).

Source: Own work based on a literature review.

3. Research Methodology

Data for the analysis was obtained from CSR ratings and was provided by GES Investment Services. It covers 1127 companies from 33 countries and nine sectors. The sectors are according to the GICS classification (MSCI, 2020). Data on enterprises participating in the survey broken down by industries are presented in the table are shown in Table 2.

Table 2. Number of companies in research

Industry	Number of enterprises
materials (M)	132
energy (E)	95
industrials (I)	264
consumer discretionary (CD)	208
consumer staples (CS)	118
health care (HC)	122
utilities (U)	80
IT	63
communication services (CO)	45
SUM	1127

Source: Own study.

Fifty-eight industries are included in the sectors presented above. The mining industry is a part of the materials sector and is represented by 40 companies from 10 countries.

The assessment of Corporate Social Responsibility (CSR) was constructed based on ESG analysis and covered two aspects of environmental factor, 3 of the social area and 3 of corporate governance - the classification is presented in Figure 1.

Figure 1. Classification of CSR in the research



Source: Own study.

Therefore, the study was based on three key steps:

• Comparison of the mining industry in relation to other surveyed enterprises (the comparison between 40 entities of mining industry and other 1087 enterprises)

In the first phase CSR performance of mining companies was compiled with the other 9 sectors of the economy. Mean values of grades were used to illustrate the level of CSR in mining industry compared to entities representing different kinds of business activity.

• Comparison of mining industry enterprises broken down by regions (the analysis of 40 enterprises of mining industry)

The next 2 phases of the research provide the internal insight on CSR in the mining industry. In the regional analysis mining companies were divided into 4 regions:

- North America (Canada, USA; n=15),
- Australia (n=8),
- Europe (Austria, Germany, UK, Netherlands, Norway, Sweden; n=10),
- Japan (n=7).

Regions were defined considering the cultural and geographical proximity and differences in CSR performance demonstrated in earlier studies (Witkowski, 2016).

• Comparison of mining industry enterprises broken down by company size (analysis on 40 enterprises of mining industry)

All companies in the mining sector are large companies employing more than 250 people. Hence, only such companies were included in the survey. To verify the size of the enterprises, they were subjectively divided by the authors of the article into 4 groups. In the size-based analysis 40 mining companies were assigned into 4 equinumerous classes according to the number of employees:

I - 1-5,000; II - 5,001-16,000; III - 16,001-40,000; IV - 40,001 and more.

In regional and size-based analysis statistical methods were used to assess the differences between groups. Statistical analysis was used to verify the hypotheses.

Shapiro-Wilk test was chosen to verify the normality of the distribution of results obtained inside specific groups. Test statistics were calculated according to the formula:

$$W = \frac{\left[\sum_{i} a_{i}(n)(X_{n-i+1} - X_{i})\right]^{2}}{\sum_{i=1}^{n} (X_{i} + \overline{X})^{2}}$$
(1)

Where:

a_i(n) can be found in mathematical tables,

 $(X_{n-i+1}-X_i)$ – difference between extreme observations, wherein for i=1 difference between min and max; for i=2 difference between min+1 and max-1,

j – subsequent observations in the sample,

i – subsequent differences between extreme observations.

As not all groups had the distribution close to normal, there were more than two groups to compare and in regional analysis those groups were not equinumerous, nonparametric Kruskal-Wallis test was chosen to verify statistical significance of differences. There are related ranks in the sample, so the statistics are counted using the following formula:

$$H_{p} = \frac{H}{1 - \frac{\sum_{i=1} t_{i}^{3} - t_{i}}{N^{3} - N}}$$
 (2)

Where:

N – total number of observations.

t_i – the number of observations with the same rank,

H – the result of the Kruskal-Wallis test without applying the corrections for associated ranks:

$$H = \frac{12}{N(N+1)} \sum_{i=1}^{p} \frac{R_i^2}{n_i} - 3(N+1)$$
 (3)

Where:

p – number of compared groups,

 R_i – sum of ranks in a given group,

n_i – the number of observations in a given group.

As post hoc analysis Mann-Whitney tests were performed for each pair of assessed groups with following formula:

$$U = R_{min(k)} - \frac{n_k(n_k + 1)}{2}$$
 (4)

Where:

 $R_{\text{min}(k)}$ – sum of ranks for the group in which the sum is smaller,

 n_k – number of observations in the group with the lower sum of ranks.

Statistics for multiple pairwise comparisons were calculated also in Bonferroni corrected version. The correction of significance level was performed in line with this formula:

$$\overline{\alpha} = \frac{\alpha}{m} \tag{5}$$

Where:

 α – Bonferroni corrected significance level,

 α – nominal significance level,

m – number of tests.

4. Results

The analysis of CSR began by comparing the mining sector with others. One thousand one hundred twenty-seven enterprises were used for the study. The analysis was based on averaged results from questionnaire surveys broken down into individual aspects. Figure 2 shows the results for all entities participating in the research and those in the mining sector.

Analyzed entities, in general, got the highest scores in corporate governance indicators, mainly in shareholder rights, where they got 90,63% of the points possible to grant. The lowest grades were obtained in society. The mean value of grades obtained about suppliers stood for 27,50% of the maximum score. It was also an indicator with the highest rate of 0-value qualities (23,25%).

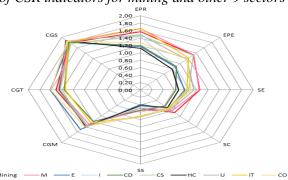
Nine sectors and the mining industry are characterized by mean values of grades obtained in studied indicators, as shown in Figure 2. The most significant differences among groups were observed in environmental preparation, environmental performance, and relations with employees' indicators. For the last of them, the difference between the highest and the lowest mean values stood 21,61% of the maximum possible score. In shareholder rights indicator groups obtained the most similar results. It should be noticed that in the two indicators, the distribution of mean values is specific. In environmental performance, there is a division for six high- and four low-performance groups. Regarding suppliers' consumer staples, IT and communication services got relatively high scores compared to other groups.

Mean values of grades for the mining industry followed the general trend, which means that the highest one was obtained in shareholder rights and the lowest in relations with suppliers. Compared to other groups, the mining industry was awarded the highest score in relations with employees and the community, the third highest in environmental indicators and transparency. The mining industry was ranked fifth in management, sixth in relations with suppliers, and eighth in shareholder rights. Thus, it can be considered one of the leading groups or, specifically, the second-best. It resulted from the ranking method or the leader when the mean values for eight indicators were calculated as a general CSR score. It is worth noting that the consumer discretionary sector appeared as the least responsible according to both methods. The

analysis showed there is no clear evidence that in the mining industry, the principles of CSR are used more intensively.

As mining companies represent a relatively high level of social responsibility the next phase of the research comprises the internal look into the mining industry. Table 3 shows basic statistics describing scores obtained by mining companies from different regions. While mean values obtained by European companies were the highest in the five indicators, North America led in management and transparency and Australia in environmental performance. The group of Japanese entities was awarded the lowest points in 6 hands, but what is important is the distance between this region and the rest of the analyzed groups. It cannot be observed in environmental indicators and shareholder rights. On the other hand, the mean values of Japan's scores were 37-83% lower than this calculated for the region with second-lowest scores. Also, in Japan, the highest percentage of 0 grades was observed. It was 14.29% in relations with community and management and 42.86% in relations with suppliers.

Figure 2. Analysis of CSR indicators for mining and other 9 sectors of the economy



Source: Own study.

Europe was characterized by the lowest values of coefficient of variation, and Japan was the most heterogeneous. Test for statistical significance of differences confirmed that Japan performed worse than all other groups about community, management, and transparency. Still, in the last one, Australia obtained not significantly higher grades.

There were no statistically significant differences between regions in environmental indicators and relations with suppliers. Japan performed significantly worse than Europe in relations with employees. In addition to Japan as a diverging group, it is worth noting that Europe was awarded significantly higher points than Australia in relations with employees and North America in shareholder rights.

There are differences between regions in the application of the CSR concept in the mining sector. The statistical analysis showed that companies from Japan achieved significantly lower results in terms of CSR, while Europe was the leader. The next phase of the study is the size-based analysis. Basic statistics of grades obtained by mining companies in 4 size classes are presented in Table 4. There was no clear trend

indicating a higher level of CSR for enterprises in higher size categories. Nevertheless, values of means and medians of the scores signalize that the smallest companies performed considerably worse than three other groups in all environmental and social indicators. In these areas of CSR, the mean values of I class scores were 26-57% lower than this for the group with second-lowest scores.

 Table 3. Basic statistics of grades obtained by mining companies from different

regions

Environmental preparation (EPR)					Environmen	Environmental performance (EPE)				
	N. Am.	Australia	Europe	Japan		N. Am.	Australia	Europe	Japan	
minimum	0.17	0.25	1.17	0.25	minimum	0.00	0.07	0.86	0.14	
maximum	2.25	2.08	2.50	2.42	maximum	2.00	2.14	2.07	1.79	
0 grades	0%	0%	0%	0%	0 grades	13.33%	0%	0%	0%	
mean	1.44	1.33	1.83	1.69	mean	1.24	1.58	1.42	1.11	
median	1.42	1.30	1.80	1.75	median	1.50	1.75	1.33	1.21	
CV	45.83%	44.36%	25.14%	40.24%	CV	56.45%	43.67%	26.76%	45.95%	
Relations with employees (SE)				Relations with community (SC)						
	N. Am.	Australia	Europe	Japan		N. Am.	Australia	Europe	Japan	
minimum	0.23	0.43	1.18	0.07	minimum	0.11	0.45	0.56	0.00	
maximum	1.38	1.30	1.70	1.08	maximum	1.44	1.44	1.44	0.55	
0 grades	0%	0%	0%	0%	0 grades	0%	0%	0%	14.29%	
mean	1.06	1.03	1.37	0.63	mean	0.93	0.99	1.00	0.33	
median	1.25	1.15	1.32	0.67	median	1.06	1.06	1.06	0.44	
CV	37.74%	30.10%	13.14%	53.97%	CV	45.16%	38.38%	26.00%	57.58%	
Relations w	ith supplier	rs (SS)			Managemer	Management (CGM)				
	N. Am.	Australia	Europe	Japan		N. Am.	Australia	Europe	Japan	
minimum	0.00	0.28	0.17	0.00	minimum	1.47	1.10	1.23	0.00	
maximum	1.17	1.00	1.06	0.67	maximum	2.00	1.70	1.70	1.10	
0 grades	20%	0%	0%	42.86%	0 grades	0%	0%	0%	14.29%	
mean	0.47	0.53	0.61	0.30	mean	1.64	1.52	1.54	0.26	
median	0.55	0.53	0.62	0.17	median	1.57	1.55	1.59	0.13	
CV	74.47%	45.28%	52.46%	110.00%	CV	8,54%	13.82%	11.04%	146.15%	
Transparen	cy (CGT)				Shareholder rights (CGS)					
	N. Am.	Australia	Europe	Japan		N. Am.	Australia	Europe	Japan	
minimum	1.58	0.50	1.29	0.08	minimum	0.75	1.00	1.50	1.34	
maximum	2.00	2.00	2.00	1.08	maximum	2.00	2.00	2.00	2.00	
0 grades	0%	0%	0%	0%	0 grades	0%	0%	0%	0%	
mean	1.76	1.61	1.70	0.57	mean	1.60	1.88	1.93	1.91	
median	1.75	1.73	1.73	0.58	median	1.50	2.00	2.00	2.00	
CV	7.38%	31.68%	12.94%	54.39%	CV	24.38%	18.62%	8.81%	13.09%	

Source: Own study.

The first category of mining entities achieved the highest mean score in management, the second in community relations, and other indicators. The third and the fourth category obtained the highest grades. The highest rates of 0 degrees were observed in the group of the smallest companies. 10% of entities did not prove any significant action in community and management, 20% in environmental performance, and 40% in relations with suppliers. In this indicator, the third and the fourth category was characterized by a 10% share of 0 grades. The coefficient of variation values does not indicate the most homogenous group, it depends on specific parameters. Considerably high values of the coefficient of variation were calculated for the first group in environmental indicators, employee relations, and supplier relations.

Statistical significance of differences affirmed that the most prominent companies are significantly better prepared to operate ecologically than two classes of the smallest companies. What is more, the third group achieved significantly higher scores in

shareholder rights than the smallest. No statistically significant differences between size classes were found in 6 other indicators.

As a complement to size-based analysis, Pearson correlation coefficients were calculated for all indicators to assess the direction and the strength of correlation between the number of employees and achieved scores. The coefficient values range from (-0.06) to 0.25 what indicates none or weak correlation. The only negative correlation was observed in management. These findings reflect the results presented above, which also did not confirm the existence of evident relation between the size of the mining company and its level of CSR. It indicates the confirmation of the last hypothesis.

Table 4. Basic statistics of grades obtained by mining companies of 4 size classes

	Environmental preparation (EPR)					Environmen	tal perform	ance (EPE)		
	I	II	III	IV		I	II	III	IV	
minimum	0.17	0.25	1.25	1.17	minimum	0.00	0.07	0.43	0.86	
maximum	2.50	2.08	2.42	2.42	maximum	2.07	2.00	2.00	2.14	
0 grades	0%	0%	0%	0%	0 grades	20%	0%	0%	0%	
mean	1.03	1.58	1.83	1.81	mean	0.97	1.29	1.56	1.52	
median	1.13	1.88	1.84	1.75	median	1.14	1.43	1.79	1.33	
CV	67.96%	37.97%	22.95%	20.99%	CV	81.44%	41.09%	30.13%	29.61%	
	Relations with employees (SE)					Relations with community (SC)				
	I	II	III	IV		I	II	III	IV	
minimum	0.07	0.43	0.62	0.40	minimum	0.00	0.45	0.22	0.22	
maximum	1.70	1.35	1.38	1.57	maximum	1.11	1.44	1.44	1.44	
0 grades	0%	0%	0%	0%	0 grades	10%	0%	0%	0%	
mean	0.81	1.15	1.09	1.17	mean	0.60	0.98	0.87	0.98	
median	0.77	1.23	1.23	1.27	median	0.56	1.03	0.95	1.17	
CV	64.20%	23.48%	28.44%	33.33%	CV	65.00%	28.57%	51.72%	46.94%	
	Relations	with supplie	ers (SS)		Management (CGM)					
	I	II	III	IV		I	II	III	IV	
minimum	0.00	0.17	0.00	0.00	minimum	0.00	0.13	0.13	0.13	
maximum	1.00	1.17	0.94	1.06	maximum	2.00	1.80	1.80	1.70	
0 grades	40%	0%	10%	10%	0 grades	10%	0%	0%	0%	
mean	0.24	0.57	0.58	0.56	mean	1.51	1.36	1.25	1.28	
median	0.17	0.56	0.64	0.61	median	1.67	1.47	1.57	1.52	
CV	129.17%	45.61%	41.38%	67.86%	CV	36.42%	34.56%	49.60%	46.88%	
	Trans	sparency (Co	GT)		Shareholder rights (CGS)					
	I	II	III	IV		I	II	III	IV	
minimum	0.08	0.50	0.33	0.58	minimum	1.34	0.75	1.34	1.50	
maximum	1.88	2.00	1.92	2.00	maximum	2.00	2.00	2.00	2.00	
0 grades	0%	0%	0%	0%	0 grades	0%	0%	0%	0%	
mean	1.54	1.48	1.36	1.65	mean	1.79	1.49	1.93	1.95	
median	1.75	1.63	1.58	1.84	median	2.00	1.34	2.00	2.00	
CV	35.06%	34.46%	43.38%	29.09%	CV	16.20%	29.53%	10.88%	8.21%	

Source: Own study.

5. Discussion

In this article the solutions, and possibilities of using the concept of CSR in the mining sector were analyzed. The following conclusions can be drawn from the conducted research:

 There is no relationship between the sector in which the enterprise operates, in terms of the intensity of application of the instruments of CSR;

- The number of people employed also does not affect the degree of use of solutions to the concept of CSR;
- There are differences between the applied solutions in terms of the CSR between countries;
- Organizations should use benchmarking in the field of applied policies and CSR solutions, which may significantly affect their competitiveness and material and non-material effects;
- All surveyed companies (1127) are best at dealing with shareholders' rights, next in management and transparency. Significant disparity between sectors was observed in environmental preparation and environmental performance. All sectors obtain the lowest grades about employees, community, and suppliers. The conclusion is that companies perform the best in the corporate governance aspect. Environmental issues generate more problems for entities under research, but the social part of CSR seems to be their biggest weakness;
- Mining is a specific type of activity that affects the environment, not only
 when companies are active. The negative impact lasts long after the
 exploitation of the resources. It is therefore not possible to estimate the total
 effect of the mining sector on the environment and society in advance;
- Doubts concerning the possibility of successful implementation of CSR strategy in mining companies found no justification in this research.
 Comparing to other analyzed sectors, the group of mining companies performed better than average. The mining sector obtained the highest employee and community scores, the second highest in environmental performance, and the third highest in environmental preparations and transparency.

Under the term "mining companies" used in this research, there are many entities. They represent the same economic sector but differ in other parameters, e.g., size and region of activity. It turned out that European mines obtained the highest CSR scores, and Japanese companies performed the worst. Differences between regions observed in statistical parameters were only partially statistically significant. In most cases, it confirmed that Japan did worse than other regions.

6. Conclusions

The article attempts to analyze the use of CSR as an alternative to the negative impact of economic development. The attempt concerned the analysis of CSR solutions in individual industries, with particular emphasis on the mining sector. The study did not reveal any significant differences between the mining sector and other sectors. Development, however, is influenced by the region of the world in which the company operates. Europe is the most developed in this area, and Japan the least. An exciting conclusion is that corporate governance is the most highly rated aspect of CSR, and then social. Environment ranked the lowest, which is mainly associated with the concept of CSR.

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