

The impact of selected environmental factors on the perception of a company's financial performance in the SME segment

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Abstract

The environmental dimension is a significant part of a firm's development, which is crucial to retaining and increasing competitiveness. The aim of the paper was to define and quantify the influence of selected environmental aspects on perceiving the financial performance of a company in the segment of small and medium-sized enterprises (SMEs) in V4 countries. The empirical research included 1,398 respondents who expressed their opinions on statements by means of which the influence of selected environmental aspects on the perception of a company's financial performance was examined. The formulated statistical hypotheses were verified using a linear regression model. The results of the research confirmed the statistically significant positive influence of all the researched environmental factors on the perception of financial performance of SMEs in V4 countries and the survival of SMEs in the markets in the upcoming five-year period. SMEs in V4 countries positively perceive environmental responsibility as a significant part of company management, within which this responsibility is also considered. SMEs in V4 countries also agreed with the fact that including environmental practices in company management is associated with higher costs. The relatively strongest dependency was determined between the factors of considering environmental responsibility and the statement that responsibility brings about higher costs.

Key words

small and medium-sized enterprises, environmental sustainability, environmental management system, green practices, environmental performance, V4 countries.

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Introduction

The concept of sustainable development is currently the focus of attention of researchers, entrepreneurs and economic policy-makers around the world. It is important for the growth and development of every country so that companies are able to monitor the social attributes of business activities alongside their economic interests.

In this context, evaluating the effects of environmental factors is significant in terms of the financial performance of SMEs, which are predisposed to specific characteristics, e.g. the lower availability of external capital, a flat organisational structure, the owner often being a manager in the company, lack of human resources, a higher degree of staff universality, insufficient state support, etc. (Gavurova et al., 2020; Belas & Sopkova, 2016; Kozubikova et al., 2015; Smekalova et al., 2014).

SMEs are an important component of the business environment thanks to their share in the performance of European economies (Rozsa et al., 2022; Forcadell et al., 2021; Belas et al., 2020).

This paper deals with the effects of environmental factors on the perception of the financial performance of SMEs in Visegrad countries (hereinafter referred to as V4 countries).

The originality of this research is based on the views and attitudes of companies as revealed in the course of robust empirical research; the significant relationships between the environmental attitudes of companies and attitudes related to financial performance are sought by means of advanced scientific methods.

The paper is structured as follows. The current studies in the subject of the research that have led us to preparation for the empirical research are presented in the introduction. The aims and methodology of the research are presented in the subsequent section of the paper. The substantive

findings are given in an aggregated form in the final part.

1. Literature review

Global climate issues have resulted in irreversible changes in some cases and are some of the most crucial issues facing the planet nowadays; moreover, technological progress and the excessive use of machines have had a negative impact on the environment (Jaiswal et al., 2019). Environmental sustainability is an inevitable part of management for today's SMEs (Bakos et al., 2020; Quader et al., 2016; Boakye et al., 2021; Gotschol et al., 2014; Ik & Azeez, 2020). Boakye et al. (2021) consider climate change a threat to environmental sustainability and emphasise the consequence of this problem for a wide range of subjects – firms, public and non-profit organisations that aim to apply environmentally sustainable practices, despite the fact that the effects may differ depending on the business sector. Tothova et al. (2022) discovered that whether or not a hotel was green was irrelevant during periods of economic crisis, and the effect on competitiveness was not proven in terms of hotel type. Moreover, it is the typology of a manager's (or businessperson's) personality that the application of new strategic plans depends on. It may be stated that strategies tend to be rather more conservative with age (e.g. Borisov & Vinogradov, 2022).

SMEs, generating a high proportion of economic performance both across Europe and globally as they do, are an integral part of this process and play a significant role in terms of both the causes and origins of negative impacts on the environment and in terms of possible agents mitigating the negative consequences and providing measures to prevent them (Reyes-Rodríguez, 2021; Quader et al., 2016; Boakye et al., 2021). A pro-green behavioural change is inevitable

if one wishes to achieve sustainable development (Iz & Azeez, 2020). Given that the issue of business sustainability in relation to the environment is underestimated in the SME sector, it is necessary to pay sufficient attention to the issue of its implementation (Lewis et al., 2015). Iz and Azeez (2020) emphasise that re-orienting all the members of an organisation towards environmentally friendly behaviour cannot be achieved by coercion, but rather by creating an environment where people will be willing to accept environmental responsibility.

In the context of the position of SMEs in European countries, the environmental sustainability of their business is urgent (Syafri et al., 2021; Gotschol et al., 2014; Crossley et al., 2021). These consequences are strengthened when environmental and related socially responsible measures are included in the strategic management of SMEs, particularly their social capital management systems (Mishchuk et al., 2022), brand development (Samoliuk et al., 2022), and CSR programmes (Gallardo-Vázquez & Lizcano-Álvarez, 2020). The effectiveness of these actions has increasingly been aligned with environmental protection management (Ginevičius, 2022). Globally, the potential for SMEs to collectively impact the environment in a negative way is significant (Lewis et al., 2015; Lynch-Wood & Williamson, 2015). Previous research predominantly dealt with environmental practices in large companies; however, this issue in the context of the SME sector has not been sufficiently covered (Syafri et al., 2021; Sadiq et al., 2021).

The V4 countries (Czechia, Poland, Slovakia and Hungary) are close both in terms of their geographical proximity to one another in Central Europe and due to their shared history, values and culture. In relation to environmental practices, Simionescu et al. (2021) suppose that these countries have historically been faced with problems such as an insufficiently qualified workforce, corruption in the state sector, and a lack of capital, and are still

predominantly industrially-based economies which demonstrate a high level of production of greenhouse gases in comparison with other developed countries. The implementation of innovative environmental practices to mitigate or to prevent such impacts is impeded by scepticism, outdated legislation, a lack of competences and a dysfunctional market environment.

On the other hand, many technological ideas, e.g. algal biofuel, are not yet economically sound. Therefore, it is necessary to find optimal bioproduction know-how for the future (Marousek et al., 2022). Even biostations producing biogas are not necessarily effective; it depends on the composition of biowaste, which is an input in electricity generation (Marousek et al., 2020a). The composition of biowaste even has an influence on soil yield, as the fermentative residues from biostations are further used as a fertiliser with a highly negative effect from a long-term perspective. The need to combine technological and economic effects resulting in the required synergies is quite obvious (Marousek et al., 2020b; 2020c).

Lewis et al. (2015) and Graafland et al. (2016) emphasise that despite the significance of SMEs, it is necessary to respect their specific and distinctive characteristics, namely the specific rules and standards of each industry, as well as the specifics of each individual SME related to their size, age, and the management structure. Graafland et al. (2016) underline the fact that SMEs have more adaptable and leaner organisational structures, less codified management practices, and informal communication channels in comparison with large companies (Forcadell et al., 2021).

Due to the abovementioned characteristics, several studies assume that formal environmental management techniques, such as public environmental reporting, audits, and environmental management plans, are inappropriate for SMEs due to their informal and diverse nature. However, the employment of

formal methods may also be advantageous for SMEs; for example, by improving internal management and fostering organisational learning and innovation (Graafland et al., 2016). The effectiveness of these processes can improve a great deal in the scope of appropriate governance in institutional surroundings of SME activity (Digdowiseiso & Sugiyanto, 2021). It has been proven to have a positive influence on overall economic growth in this case (Amoah et al., 2022). However, when enhancing overall innovativeness, it becomes essential to understand the role of environmental corporate social responsibility (CSR), not only in the case of large companies (Forcadell et al., 2021; Dvorský et al., 2021) but in smaller ones as well.

Environmentally-based business management is one of many values that attempt to enhance a company's success (Syafri et al., 2021). Environmental practices are actions taken by businesses to reduce the impact of their operations, goods, and services on the environment. Examples of these actions include limiting waste, conserving resources, recycling, and providing organically grown or environmentally friendly goods (Hoogendoorn et al., 2015). Johnstone (2020) considers an environmental management system (EMS) to be a collection of procedures that enables a company to reduce its environmental impact and improve operational effectiveness through a continuous cycle of process planning, implementation, review, and improvement. Concepts such as sustainable development, sustainable enterprise, and CSR are all closely tied to environmental principles (Hoogendoorn et al., 2015; Dey et al., 2018; Dvorský et al., 2021).

Implementing environmental strategies as part of a broader company policy is ideally based on the awareness and responsibility of management combined with duly motivated employees with regard to the environment and the preservation thereof for future generations. In most cases, however, it tends to be a consequence of obligatory

respect for the external regulatory powers and regulations that have a positive effect on their implementation. Li et al. (2022) confirmed a positive relationship between the presence of a sustainability committee and its effectiveness, which indicates its active role in the environmental performance of firms. They found that the composition of such a committee, its authority and resources, which positively and significantly influence the effectiveness of said committee, are the most important determinants. Ik and Azeez (2020) emphasised that should a company apply green practices to foster sustainability, it requires a workforce that have a set of pro-environmental skills at their disposal related to implementing the technologies that are indispensable for meeting ecological objectives. On the other hand, Alraja et al. (2022) stated that green human resource management practices cannot be adopted without external support, especially on the part of governments.

Boakye et al. (2021) also advocated for a positive relationship between financial and environmental performance, discovering that environmental awareness provides greater advantages than approaches focused only on compliance with the rules. The advantages come from operational effectiveness, personnel advantages (better staff morale, higher staff retention, and improved communication), and the avoidance of fines, reduced waste, lower insurance, and higher energy efficiency. Moreover, Ahmed and Streimikiene (2021) argued that environmental and social responsibility have a positive effect on decreasing operational costs, increasing profits and business competitiveness. At the same time, economic concerns and regulatory forces have a positive influence on business performance and competitiveness in the course of creating value for an enterprise. Uyar (2021) also pointed out the effect of reducing costs and demonstrated that implementing environmental strategies supports sustainability

performance, which consequently improves financial performance. Similarly, Ahmed et al. (2021) discovered that a proactive environmental strategy, competitive advantages resulting from differentiation and cost leadership significantly and positively influence the sustainability of companies including financial performance. A positive relationship between environmental sustainability practices, competitive advantage and business performance is also supported by the findings of Pereira-Moliner et al. (2021). Similarly, it is further supported by the findings of Metz et al. (2016), Rehman et al. (2021), and Çelik & Çevirgen (2021), who see a positive impact on the enhancement of competitiveness and company value in implementing environmental sustainability, especially by using sustainability-driven innovation in the sense of an innovative approach which uses environmental sustainability to improve the performance of a company.

Xu and Chen (2020) found that financial sustainability is positively influenced by environmental management and debt financing that can link the effect of environmental management to financial sustainability. De Mendonca and Zhou (2019) found that environmental orientation that focuses on environmental sustainability is directly and positively linked to the degree of indebtedness and long-term market value.

The implementation of EMS in SMEs involves high costs, legislation and other impediments linked thereto, e.g. the need for the individual interest of employees and them having sufficient qualifications (Uyar et al., 2021). As Metz et al. (2016) put it:

“Many companies see environmental sustainability as a cost—a legal and social obligation requiring investments that may never be recovered—rather than as an opportunity.”

However, according to Graafland and Smid (2016), SMEs can improve the standard of environmental management in

their businesses by implementing a number of simple process changes without necessarily incurring significant administrative expenses. Setting goals for items such as energy or water consumption or waste production can be done even by very small businesses with 10 or fewer employees without resorting to time-consuming and expensive bureaucratic processes.

Veja et al. (2020) turned their attention to environmental sustainability boundaries, not only from the perspective of applying environmental sustainability practices in the future, but also from the perspective of their impact. These boundaries may be useful in directing environmentally sustainable practices by evaluating the environmental performance of current actions in relation to such boundaries, and they ought to always be assessed in relation to the values espoused by the enterprise.

Summing up the current findings, it seems clear that environmental sustainability, along with economic sustainability and the social state, need to be seen as an essential part of company management from the perspective of sustainable company development. Despite the fact that recent attention has been paid especially to large companies, the issue of responsibility to the environment is topical for the SME segment in V4 countries with respect to their specifics.

2. Methodology

The aim of the paper is to define and quantify the influence of selected environmental aspects on perceiving the financial performance of companies in the SME segment.

The owners and top managers of small and medium-sized enterprises doing business in one of the V4 group countries (hereinafter referred to as ‘respondents’) participated in the research. The research was undertaken by means of the Computer Assisted Web Interviewing

(CAWI) research method in June 2022. The main criterion of data collection was approximately double the number of microenterprises in proportion to the number of SMEs in the dataset. Said criterion was defined for the reason that the business environment in V4 countries is characterised by a higher number of microenterprises in contrast to SMEs. A further criterion of data collection was the proportional representation of individual respondent groups in accordance with selected demographic criteria in relation to the proportional representation in the fundamental set of respondents in the selected country. The selected dataset failed to prove significant deviations from the given criteria of data collection. Data collection was undertaken by MNFORCE, an external company which is established in the V4 countries and Austria. MNFORCE implements the quality standards of ESOMAR, the global business community of insights and analytics.

A total of 1,398 SMEs participated in the data collection stage. The structure of SMEs in accordance with the country of business activities was as follows: 347 (24.8%) SMEs from the Czech Republic (CR), 322 (23.0%) SMEs from Slovakia, 381 (28.1%) SMEs from Poland (PL) and 348 (24.9%) SMEs from Hungary (HU). The size of the selected dataset determined the minimum size of the selected sample of respondents to be 684. The number of respondents in the overall dataset is more than twice as many as the minimal limit.

The questionnaire contained 52 closed questions and consisted of several parts: the demographic characteristics of the SME and the respondent (nine questions);

respondents' attitudes to human resource management (seven statements); business ethics (five statements); Corporate Social Responsibility (CSR; eight statements); environmental aspects (EA; four statements); Digitalisation (DG; three statements); sustainability (S; five statements); financial management and crisis phenomena in business (FM and CPB; 10 statements). All variables (i.e. statements, questions) were evaluated equally by the respondents (except for the demographic characteristics of SMEs) on a scale from 1 ('strongly agree') to 5 ('strongly disagree'). The responses to the statements pertaining to ES, FM and the demographic characteristics of enterprises were used to fulfil the aim of the paper.

The structure of respondents was as follows ($n = 1,398$): the size of the enterprise: 678 microenterprises, 347 small enterprises, and 323 medium-sized enterprises; the area of business activities: 368 – services, 264 – trade, 226 – production, 112 – construction, 46 – agriculture, 54 – transport, 226 – tourism, 102 – other areas of business activity; the time period of an enterprise's involvement in business activities: 370 enterprises operating for less than three years, 550 enterprises operating for between three and 10 years, and 478 enterprises operating for more than 10 years; areas of business activity: 410 – the capital city, 988 – other regions.

The independent (EA) and dependent (FM) variables are defined in Table 1. The table also contains the calculated characteristics of descriptive statistics (M – Mean, SD – Standard Deviation, S – Skewness, K – Kurtosis).

Table 1. The descriptive characteristics of EA and FM indicators of SMEs

Indicator	Independent variables – Environmental aspects of business (EA)	M	SD	S	K
EA ₁	Responsibility to the environment is an important area of company management.	1.761	0.823	1.416	1.115
EA ₂	Environmental responsibility is taken into consideration in the course of managing the company.	1.832	0.843	1.147	1.014
EA ₃	Environmental responsibility brings about higher costs for the company.	1.925	0.909	0.427	0.865
EA ₄	Our company actively participates in the protection of the environment.	2.021	0.916	0.538	0.821
FMs	Dependent variables – Financial management (FM)	M	SD	S	K
FM ₁	I view the financial performance of our company positively.	1.928	0.838	0.859	0.881
FM ₂	Our company is going to survive on the market for the next five years.	1.866	0.863	0.801	0.930

Source: own elaboration

The results of descriptive characteristics (K, S) confirmed (K, S values are within the value interval from -2 to 2) were such that a normal division was confirmed for every variable (both dependent and independent). The statement that environmental responsibility is an important area of company management (EA₁: M = 1.761) was most commonly confirmed by the respondents. This statement also drew the highest consistency among respondents' attitudes (EA₁: SD = 0.823).

The results of validity and reliability (FL – Factor loadings; CA – Cronbach's Alpha; AVE – Average Variance Extracted; CR – Composite Reliability) factors (EA, FM) with the use of the extraction method principal component analysis (PCA) presented below confirmed the internal consistency of factors. FL: EA₁ – FL = 0.875; EA₂ – FL = 0.890; EA₃ – FL = 0.792; EA₄ – FL = 0.871; EA: AVE = 0.736; CR = 0.918; CA = 0.850. FL: FM₁ – FL = 0.917; FM₂ – FL = 0.917; FM: AVE = 0.841; CR = 0.914; CA = 0.810.

The following hypotheses were formed to fulfil the main aim of the paper:

H1: Environmental aspects have a statistically significant impact (EA₁ – H1_EA₁; ...; EA₄ – H1_EA₄) on the financial performance of a company (FM₁).

H2: Environmental aspects have a statistically significant impact (EA₁ – H2_EA₁; ...; EA₄ – H2_EA₄) on the likelihood of a company surviving on the markets over the upcoming five years (FM₂).

Linear Regression Models (LRM) were applied to the quantification and verification of causal relations between dependent (FMs) and independent variables (EAs). The variables were formulated in such a way so that the respondents' attitudes to environmental aspects (EAs) would linearly converge with statements on the financial management of companies (FMs). Pairwise correlation coefficients between variables (EAs, FMs) were presented in a modified correlation matrix. A T-test was used to verify their statistical significance (Lancaster & Hamdan, 1964). The estimate of regressive coefficients (RCs) was determined with the use of the least squares method (Stewart, 1987). RC is statistically significant if the

p-value of the t-test is lower than the significance level (Arnold, 1980). The significance

level (α) was ; shape of linear regression models (LRMs) in general was as follows:

$$LRM_b: FM_b = \beta_0 + \beta_1 \times EA_1 + \beta_2 \times EA_2 + \beta_3 \times EA_3 + \beta_4 \times EA_4 + \varepsilon_n; \quad (1)$$

where: $b = 1, 2$; FM – indicator of financial management; EA_1, \dots, EA_4 – environmental aspects of business; ε_i – random error.

LRMs contained the following regressive characteristics: multiple correlation coefficient (MCC), coefficient of determination (R^2), and adjusted coefficient of determination (Adj. R^2). The verification of LRM significance was carried out by means of the analysis of variance method (ANOVA; SS – sum of squares; ME – mean of squares; SE – standard error; df. – degree of freedom; F-ratio, p-value) (Breslow, 1990). The presence of dependencies between independent variables (EAs) was defined with the use of a variance inflation factor (VIF). The VIF needs to be calculated if the LRM consists of more than three statistically significant independent variables (O'Brien, 2007). Autocorrelation was not the subject

of the analysis because data file are not data of time series (case study contains only categorical variables). The Shapiro-Wilkov test (S-W test) was applied to verify the statement that the differences between theoretical and real values become a normal difference (Zheng & Yu, 2015). The homogeneity of variances was verified by means of Bartlett's test. The above assumptions are accepted when the p-value of Bartlett's test is greater than the level of significance (Arnold, 1980). IBM SPSS Statistics (version 28) was used for all the results of the case study.

3. Research results

The results of the adjusted correlation matrix of dependencies between variables (EAs, FMs) are listed with the results of their statistical significance in Table 2.

Table 2. The dependence between variables (EAs and FMs)

CM	FM ₁	FM ₂	EA ₁	EA ₂	EA ₃	EA ₄
EA ₁	0.408*	0.375*	1			
EA ₂	0.422*	0.368*	0.760*	1		
EA ₃	0.373*	0.331*	0.457*	0.450*	1	
EA ₄	0.425*	0.404*	0.662*	0.711*	0.506*	1

Note: CM – Correlation matrix. Statistically significant correlation at the level of significance $\alpha = 1\%*$.

Source: own elaboration

The results of correlation analysis (Table 2) proved that all the presented pairwise coefficients of dependency are statistically significant at the 1% level of significance. There are positive dependencies, ranging from averagely strong up to strong, between environmental aspects ($r \in <0.450; 0.760>$). The strongest dependency is between EA₁ and EA₂ ($r = 0.760$). The values of pairwise

coefficients of correlation between dependent variables (FMs) and independent variables (EA₁, ..., EA₄) showed positive dependencies ranging from weak to averagely strong (FM₁: $r \in <0.373; 0.425>$; FM₂: $r \in <0.331; 0.404>$).

3.1. The impact of environmental aspects on the perception of a company’s financial performance

The results of applying regression analysis to the perception of a company’s financial performance (FM_1), when LRM_1 influences the independent variables (EAs), are shown in Table 3.

Table 3. LRM_1 – The verification of the impact of EA aspects on FM_1

Regression characteristics					
MCC	0.490	Adj.R ²	0.238		
R ²	0.240	SE	0.732		
Verifications of the statistical significance of LRM_1					
ANOVA	Df.	SS	MS	F- ratio	
Regression	4	235.568	58.892	109.949	
Residual	1393	746.135	0.536	p-value	
Total	1397	981.703		0.00001*	
Estimates and verifications of the statistical significance of regression coefficients					
Independent variable	Regression Coefficients (RC)	Standard Error	t-Stat	p-value	VIF
Intercept	0.857	0.055	15.615	0.000	-
EA₁	0.114	0.038	2.979	0.003**	2.589
EA₂	0.144	0.040	3.641	0.000*	2.907
EA₃	0.162	0.025	6.368	0.000*	1.398
EA₄	0.145	0.033	4.453	0.000*	2.333

Note: Statistically significant LRM_1 at the level of significance $\alpha = 1\%^*$; $\alpha = 5\%^{**}$.

Source: own elaboration

The results in Table 3 show that the suggested LRM_1 of linear relations between the dependent variable and the environmental aspects is statistically significant (F-ratio = 109.949 and p-value = 0.00001). The suggested LRM_1 explains 23.8% of the variability of

the dependent variable FM_1 . All the examined environmental aspects (EAs) are statistically significant. The linear regression function obtains the following form:

$$LRM_1: FM_1 = 0.857 + 0.114 \times EA_1 + 0.144 \times EA_2 + 0.162 \times EA_3 + 0.145 \times EA_4 \quad (2)$$

where: FM_1 – the perception of a company’s financial performance; EA_1, \dots, EA_4 – environmental aspects of business.

Homoscedasticity was supported (Bartlett’s Test: LRM_1 – p-value = 0.107). The normal distribution of errors was supported for the regression model (S-W test:

LRM_1 – p-value = 0.187). Hypotheses $H1_{EA_1}$; $H1_{EA_2}$; $H1_{EA_3}$ and $H1_{EA_4}$ were confirmed.

3.2. The influence of environmental aspects on the likelihood of a company surviving on the markets for the next five years

The results of applying regression analysis to the perception to survive of company on the market for the next five years (FM₂), when LRM₂ influences the independent variables (EAs), are shown in Table 4.

Table 4. LRM₂ – The verification of the impact of EA aspects on FM₂

Regression characteristics					
MCC	0.447	Adj,R ²	0.198		
R ²	0.200	SE	0.773		
Verifications of the statistical significance of LRM ₂					
ANOVA	Df.	SS	MS	F-ratio	
Regression	4	208.090	52.023	87.111	
Residual	1393	831.896	0.597	p-value	
Total	1397	1039.986		0.00001*	
Estimates and verifications of the statistical significance of regression coefficients					
Independent variable	Regression Coefficients (RC)	Standard Error	t-Stat	p-value	VIF
Intercept	0.867	0.058	14.962	0.000	-
EA₁	0.137	0.040	3.388	0.001*	2.587
EA₂	0.061	0.042	1.470	0.142	2.911
EA₃	0.135	0.027	5.022	0.000*	1.400
EA₄	0.191	0.034	5.537	0.000*	2.335

Note: Statistically significant LRM₂ at the level of significance $\alpha = 1\%*$.

Source: own elaboration

The results given in Table 4 show that the LRM₂ of linear relations between the dependent variable (FM₂) and the environmental aspects (EAs) is statistically significant (F-ratio = 87.111 and p-value = 0.00001). The suggested LRM₂ explains 19.8% of the variability of the dependent variable (FM₂).

All the examined environmental aspects (EAs) are statistically significant at the significance level of 0.01%, except EA₂ (statistically insignificant variable; p-value = 0.142). The linear regression function forms the following shape:

$$LRM_2: FM_2 = 0.867 + 0.137 \times EA_1 + 0.061 \times EA_2 + 0.135 \times EA_3 + 0.191 \times EA_4 \quad (3)$$

where: FM₂ – the likelihood of a company continuing to operate on the market in the next five years; EA₁, ..., EA₄ – environmental aspects of business.

Homoscedasticity was supported (Bartlett's Test: LRM₂ – p-value = 0.147).

The normal distribution of errors was supported for the regression model (S-W test: LRM₁ – p-value = 0.214). Hypotheses H2_EA₁; H2_EA₃ and H2_EA₄ were confirmed. Hypothesis H2_EA₂ was rejected.

4. Discussion

The empirical research on the business environment of SMEs in V4 countries gave rise to several interesting findings. In accordance with the subjective attitudes of businesspeople in the SME segment, it was found that all the environmental factors studied positively affect the positive perception of the financial performance of a company. The perception of a firm's financial performance is most influenced by the attitude which companies have towards the fact that environmental responsibility brings about higher costs ($\beta_3 = 0.162$). The second significant factor in this area is the strong conviction held by companies that they actively participate in the protection of the environment ($\beta_4 = 0.145$). The companies unequivocally claimed that they take environmental responsibility into consideration in management ($\beta_2 = 0.144$).

The research concludes that factor EA₂ bears no statistically significant influence on FM₂ attitudes, which may be interpreted as saying that environmental responsibility bears no influence on companies' perception of the likelihood of the company surviving on the market for the next five years.

On the contrary, the factors EA₄, EA₁ and EA₃ do not have an influence on such attitudes. The greatest influence was attributed to the independent variable EA₄, according to which the companies claimed that they actively participate in the protection of the environment ($\beta_4 = 0.191$). The second most important factor was EA₁, according to which the companies declared that environmental responsibility is an important area of company management ($\beta_1 = 0.137$). The third most significant factor was EA₃, referring to an attitude that environmental responsibility brings about higher costs for the company ($\beta_3 = 0.135$).

The results of the research confirm the significance of respecting CRS principles in the SME environment, which is emphasised

by Forcadell et al. (2021), among others (e.g. Hoogendoorn et al., 2015; Dey et al., 2018).

The results of the research also follow on from the conclusions of studies emphasising the significance of environmentally-based business management (Syafri et al., 2021), within which companies are able to significantly implement innovation in operational procedures, save input resources, recycle (Hoogendoorn et al., 2015) and increase operating efficiency (Johnstone, 2020).

This research also follows on from the conclusions of Uvar (2021), according to whom the implementation of environmental strategies exerts a direct effect on the sustainability of a firm's overall performance and financial performance, as well as positively influencing the growth of competitive advantages (Rehman et al., 2021; Metz et al., 2016).

The results of the research expand the current knowledge pertaining to the impact of costs on companies' environmental policies in the context of conclusions reached by Graafland and Smid (2016), as SMEs are able to reduce direct costs of production more significantly due to a lower level of bureaucracy and greater managerial flexibility.

Conclusions

The aim of the paper was to define and quantify the impact of environmental aspects on the perception of the financial performance of firms in the SME segment.

The study revealed interesting findings that complement and enlarge theoretical knowledge in this relatively little explored, but therefore even more significant, area.

The essential conclusion that can be formulated on the basis of this research is that despite their specifics, SMEs pay significant attention to environmental factors and certainly perceive the need to implement 'green' approaches in their business activities.

SMEs in V4 countries unequivocally claimed that they perceive responsibility

to the environment as a significant part of company management, accepting the necessity of increased costs arising from this area, and thus demonstrated a willingness to actively participate in the protection of the environment.

In the context of the current economic situation, it is a positive sign that companies perceive their current and future performance quite optimistically and believe that they will survive in the medium term. In this vein, the research showed the influence of environmental factors on the evaluation of a firm's financial performance and sustainability in the market.

This research has certain limitations; therefore, it is appropriate to see it in the context of the empirical research undertaken, and also in the context of the current economic situation. However, we assume that it has given rise to certain stimuli for a discussion of the issue and may provide the inspiration for further research.

The future research that our scientific team intends to conduct will focus on the construction of a complex model of the dependency of economic, social and environmental factors on a company's sustainability in the SME segment.

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