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SELECTED FACTORS INFLUENCING THE SOCIAL AND ENVIRONMENTAL ASPECTS OF SUSTAINABILITY OF SMES

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ABSTRACT. *The aim of this paper is to present the impact of significant factors that influence the attitudes of SMEs towards the social and environmental aspects of their sustainability. The research analyses the impact of three important areas which are HRM, CSR and financial management of SMEs. The empirical research to support the research objective was conducted in June 2022 through a questionnaire survey in Visegrad Four countries (V4 countries). SMEs were selected by random sampling method. Data collection was provided by an external agency using the Computer Assisted Web Interviewing (CAWI) method. The total number of respondents in this research was 1,398. The financial performance of the firm has the greatest influence on the formation of positive attitudes of SMEs towards social and environmental responsibility.*

This factor clearly dominated the attitudes of SMEs. The second most frequent factor was the knowledge of the most important aspects of a firm's financial management which also significantly shapes SMEs' social and environmental responsibility. Other factors that significantly shape SMEs' attitudes towards social and environmental responsibility are the application of CSR in the firm's activities and its perception as a tool for gaining competitive advantages in the market and SMEs' belief that they can appropriately manage financial risks in the firm. The third group of factors can be classified as X2 and X6. Caring for employees and motivating them to innovate working practices and the belief that CSR enables the company to win new customers also shape SMEs' responsible approach to social and environmental responsibility. Interestingly, the correct perception of human capital in a firm has minimal influence on shaping these attitudes. SMEs in the V4 countries also confirmed that investment in improving the skills of employees is a rare phenomenon.

KEYWORDS: SMEs sustainability attitudes, Social and environmental responsibility, Human Resource Management (HRM), Corporate Social Responsibility (CSR), Financial performance and management.

JEL classification: Q56, M14, M12, G30.

Introduction

The sustainability of small and medium-sized enterprises (SMEs) is important for the economic, social and environmental development of any country. There are many factors that influence the social and environmental aspects of SME sustainability. Economic sustainability is a fundamental factor for the sustainability of SMEs. Firms need to have stable profits and sufficient capital to invest in social and environmental initiatives. SMEs can play a key role in social responsibility by supporting local communities, education, creating jobs, participating in charity events, etc. Improving working conditions and creating an inclusive working environment is key to social sustainability. SMEs should invest in energy-efficient technologies and practices to minimise their negative environmental impact on society through innovative activities and should encourage their business partners to do the same.

This paper presents the significant factors that influence the attitudes of SMEs towards the social and environmental aspects of their sustainability. It can be assumed that the area of human resource management, financial management and the application of the CSR concept have a significant impact on the sustainability of SMEs.

The originality of this research lies in the fact that the impacts of the defined factors on the sustainability of firms are investigated based on the attitudes of the firms themselves, which best reflect the situation in the SME segment.

The structure of the paper is as follows. In the first section, the views of several authors on the field of sustainability of SMEs are presented, in the next section the research objective, methodology and data used are defined. This is followed by a section presenting the research results and a discussion of them. In the final section, the main results of the research and the limitations of the research are presented.

1. Theoretical Part

The theoretical section is inclusive of three justifications. First, it establishes the connection between the social and environmental aspects of the sustainability of SMEs. Second, how human resources management, CSR and Financial management in SMEs is connected with their sustainability's social and environmental aspects. Finally, how the attitude and perception of the entrepreneurs and SME owners towards social and environmental aspects of their firm's sustainability.

The literature on sustainability is extensive, but only a few studies expressly focus on SMEs (Khoja *et al.*, 2022; Kot, 2023; Mohhamed *et al.*, 2023). SMEs are a key driver of wealth development, employment, and poverty reduction (Manzoor *et al.*, 2021, p.39)

Marcysiak, Pleskacz, 2021; Tomášková, Kaňovská, 2022; Małkowska, Uhruska, 2022;). It has been discovered that SMEs are crucial to promoting environmental sustainability and inclusive growth. These contributions, however, differ significantly between businesses, nations, and industries. Additionally, SMEs are essential to the plan put forth by the Sustainable Development Goals. It has also been found that SMEs are influential in determining sustainable development, and their decisions impact social and environmental conditions (Naveed *et al.*, 2022; OECD, 2017; Tonis, 2015; Peng *et al.*, 2022). Several crucial considerations can help to comprehend how the social and environmental aspects of sustainability for SMEs are interconnected (United Nations Global Impact, 2021).

Seeing through the connection between the social and environmental aspects of sustainability of SMEs, even though SMEs businesses may individually have minimal social, environmental, and financial impacts, together, they can have a huge impact (León-Gómez *et al.*, 2022). How a single economic entity, especially a small business, may employ sustainable methods is one of the fundamental problems and seems critical to be analysed (Khan *et al.*, 2023; Gallo *et al.*, 2023; Barbosa *et al.*, 2020; World Economic Forum, 2021). There are ways to connect specific business operations to sustainable methods. SMEs interact with stakeholders such as staff members, clients, suppliers, neighbours and governmental organisations. Social and environmental issues can be addressed by interacting with these groups. For instance, SMEs can work with suppliers to ensure ethical sourcing, design goods or services that satisfy customer needs while reducing environmental effects, and involve staff members in sustainability projects (Kujala *et al.*, 2022; (Kujala *et al.*, 2022; Setyaningsih, Kelle, 2021). SMEs can adopt a triple-bottom-line strategy that considers sustainability's economic, social, and environmental facets. SMEs can achieve long-term profitability while enhancing society and the environment by integrating social and environmental concerns into their business plans. This strategy emphasises that company success should be determined by financial gains and how successful it is for people and the environment (Edeigba, Arasanmi, 2022; Okanga, Groenewald, 2017; Dvorsky *et al.*, 2023). Environmentally friendly procedures can be implemented by SMEs. For instance, businesses can adopt clean technology, limit trash generation, and develop recycling and waste management programs. Businesses can also optimise the use of energy and resources. These procedures can lead to cost savings and increased productivity, in addition to helping the environment (Fahad *et al.*, 2022; Tounés *et al.*, 2019).

Businesses of all sizes can adopt ethical values that put social responsibility first. It could entail treating staff fairly, maintaining safe workplaces, fostering inclusion and diversity, helping local communities, improving firms' reputation and preventing detrimental social effects like child labour or abuse of resources (Celma *et al.*, 2018; Khuong *et al.*, 2021;

Remišová, Lašáková 2020). SMEs may improve their image, draw in customers that care about the environment, and encourage employees to remain loyal by conducting business ethically (Zvarikova *et al.*, 2023; Stratone, 2023). Openly transparent in their environmental and social performance can strengthen SME sustainability initiatives. Indicators like emissions of greenhouse gases, waste reduction, community contributions, the well-being of staff, and supply chain practices are measured and disclosed as part of this (Androniceanu *et al.*, 2022). SMEs may establish confidence with stakeholders and show their dedication to sustainability by offering accurate and reliable information (Koirala, 2018; Naveed *et al.*, 2022). In short, SMEs' ability to incorporate ethical behaviour and preservation of the environment into their business practices is what connects the social and environmental aspects of sustainability (Buschmann, 2020). SMEs may contribute to a more sustainable future while simultaneously accomplishing their economic objectives by considering the welfare of their workers, communities, and the environment. Hence, examining the SMEs' attitude towards social and environmental aspects is imperative for the firm's sustainability.

Every firm performs some key functions; among them, financial and human resources are the backbone for any firm to sustain its business and run its operations flawlessly. Financial standing of business entities plays an important role in the process of the overall business environment assessment (Belas, Rahman, 2023; Cerkovskis *et al.*, 2022; Krasteva, Nagy, 2022). Investing in a way that benefits the environment and society can increase its usage and acceptance in the business community. Environmental, social, and governance aspects are considered while making investment decisions in sustainable finance. It indicates that sustainable finance also considers sustainability-related concerns, such as the influence on the environment and society, in addition to optimising stakeholders' value through financial returns (OECD, 2022). On the one hand, there is a positive connection between business sustainability and financial performance (Bahta *et al.*, 2021; Pham *et al.*, 2021; Yilmaz, 2021), and some do not support it (Hussain *et al.*, 2018). The existing evidence is mixed and needs further investigation. Sustainability and human resource management are related. When performing the human resource function, sustainable HRM means considering firm objectives' economic, social, and environmental aspects. Sustainable HRM has two goals and can be utilised as a guiding principle for HRM as a whole.

On the one hand, it enhances the capacity of HRM systems to constantly attract, regenerate, and develop motivated and engaged people by making the HRM system itself sustainable (Kramar, 2022; Mazur, Walczyna, 2020). More so, another research demonstrated that social sustainability efforts considerably impact how employees perceive social capital and that social capital has a major impact on their loyalty and retention. To increase employee retention rates, organisational performance, and overall societal benefit, human capital managers should engage in more relational management of human resources that connect to, involve, and disclose their social sustainability actions (Cachón-Rodríguez *et al.*, 2022).

Corporate social responsibility (CSR) incorporates social and environmental considerations in business operations and stakeholder relationships (Valdez-Juárez *et al.*, 2021; Bawazir *et al.*, 2021). SMEs can benefit from CSR by improving their financial performance. Researchers at the University of Tehran discovered that CSR has a considerable impact on the performance of SMEs and that business reputation, also CSR can influence SME success (Bahta *et al.*, 2021; Oduro *et al.*, 2021).

The attitudes of entrepreneurs regarding environmental and social issues can be related to their sustainability and can be influenced by various variables. A study found that stakeholders significantly impacted SMEs' motivation for controlled corporate sustainability

(CS). As opposed to “distant” regulatory pressure, which may even have a detrimental impact on SMEs’ managed CS motivation, SMEs would prioritise the demands of “proximate” stakeholders like employees and community members. A different study discovered that CSR positively impacts SMEs’ performance in the social and environmental spheres (Ernst *et al.*, 2022; Yadegaridehkordi *et al.*, 2023; Betakova *et al.*, 2023).

Sustainability and CSR are intertwined ideas that aim to support businesses in operating in a way that enables them to remain profitable while maintaining their moral integrity. CSR is a company commitment that supports corporate social sustainability, which aims to enhance the quality of human life, the environment, and the economy over time. By concentrating on ethically, socially, ecologically, culturally, and economically advantageous tactics, CSR can also generate long-term value for stakeholders. Efforts to reduce environmental effects while still addressing the requirements of the current and future generations are referred to as sustainable practices. The sustainability of resources and CSR are directly correlated; the more resources are consumed, the less sustainable they are (Buckler, 2017).

Comparatively, SMEs have fewer resources than large firms, which might restrain them from being more favourable towards incorporating social and environmental goals and activities in their strategic plans and operation. Managers and owners of SMEs have even bigger challenges than large firms since they must incorporate social and environmental activities along with their profitability within the range of limited resources (Belás *et al.*, 2020; Çera *et al.*, 2022; Dvorsky *et al.*, 2022). The attitude of SME owners and managers plays a significant role (Belas *et al.*, 2022). It gives an insight into how the owners and managers of SMEs take up the social and environmental aspects and how they perceive and give importance. It makes it imperative to understand their attitude. Also, recently, SMEs have been focusing on social and environmental aspects in Europe and other developed nations. According to a study, managers implement effective governance systems and CSR initiatives to reduce stakeholder conflicts (Gangi *et al.*, 2020) as well as to increase the competitiveness (Gallardo-Vázquez, Lizcano-Álvarez, 2020). Also, Compared to large-size organisations, owners and managers of small-size firms have a greater role in the decision processes (Öksüzöğlü-Güven, 2015). Hence, the present study intends to examine the significant factors, including transparency (Androniceanu, 2021) that influence the attitudes of SMEs towards the social and environmental aspects of their sustainability and how social and environmental affect the SMEs’ sustainability.

2. Aim, Methodology and Data Collection

The aim of this paper is to present the impact of significant factors that influence the attitudes of SMEs towards the social and environmental aspects of their sustainability.

The research analyses the impact of three important areas which are HRM, CSR and financial management of SMEs. The empirical research to support the research objective was conducted in June 2022 through a questionnaire survey in Visegrad Four countries (V4 countries). SMEs were selected by random sampling method. Data collection was provided by an external agency using the Computer Assisted Web Interviewing (CAWI) method.

The questionnaire was designed to find out the subjective attitudes of the respondents on important attributes of the business environment. The questionnaire was constructed from several parts: demographic characteristics of SMEs (business sector; size of the business; location of the business; length of time the business has been in the business environment;

legal form of the business); demographic characteristics of the respondent (age and gender of the respondent; educational attainment; relationship of the respondent to the business); the concept of CSR, financial management of the business, personnel management and other factors. The questionnaire included a control question and the questionnaire was protected from automatic completion by a computer. Respondents had to answer the statements with one of 5 types of answers (a 5-point Likert scale was used): from “completely agree with the statement” to “completely disagree with the statement”. The respondent is defined as the owner or senior manager of the SME.

The questionnaire also included the following formulations of the dependent (Y) and independent variables (X):

Y1: Perceiving the social impact of business is very important.

Y2: Perceiving the environmental impacts of business is very important.

X1: I consider the people in the company as the most important asset.

X2: I regularly evaluate the performance of my subordinates and motivate them to innovate their working practices.

X3: I invest a lot of money in improving the skills of our employees.

X4: I take into account the concept of CSR when managing the company.

X5: The implementation of the CSR concept enables our company to gain competitive advantages in the market (better company image, higher customer loyalty, new business opportunities, etc.

X6: CSR enables our company to win new customers.

X7: I understand the most important aspects of financial management of the company.

X8: I can appropriately manage financial risks in our company.

X9: I have a positive view of our firm's financial performance.

3. Research Hypotheses and Methods

The following scientific-statistical hypotheses (RSH) are the subject of investigation:

RSH1: HRM indicators (RSH1_A), CSR concept (RSH1_B) and financial management (RSH1_C) have a statistically significant impact on the social impact of entrepreneurship in the selected research country (CR, SR, HU, PL).

RSH2: The indicators of HRM (RSH2_A), CSR concept (RH2_B) and financial management (RH2_C) have a statistically significant effect on the environmental impacts of business in the selected research country (CR, SR, HU, PL).

Linear regression modelling (LRM) was applied because the respondents' responses to the independent variables converge linearly to the attitudes of the dependent variable. The calculation of regression coefficients was done by the least squares method. Their statistical significance was verified by t-Stat. The significance level (α) was 0.05. The results of verifying the assumptions for applying the LRM are calculated in the results section. The general form of the linear regression function:

$$Y_n = f(X_m)$$

where: Y - dependent variable; X - independent variable; n = 1,2; n - type of dependent variable; m = 1, 2, ..., 9; m - type of independent variable.

Correlation analysis was applied to demonstrate the relationships between variables using a modified correlation matrix. The dependence between independent variables (multicollinearity) was determined using the Variance Inflation Factor (VIF). If the value of VIF is less than 5, then there is a correlation that is moderate or acceptable. Autocorrelation

was not verified due to the type and nature of the data examined. IBM SPSS Statistics software was used to apply the selected statistical methods.

4. Empirical Results

The total number of respondents in this research was 1,398. The attitudes of 1,398 respondents were obtained in the following structure: 347 SMEs from the Czech Republic (CR); 322 SMEs from the Slovak Republic (SR); 348 SMEs from Hungary (HU) and 381 SMEs from Poland (PL).

Table 1. Descriptive analysis of variables according to the country locality

Variable s	Czech Republic					Slovak Republic				
	M	SE	SD	K	S	M	SE	SD	K	S
Y1	2.104	0.046	0.854	0.746	0.696	1.758	0.038	0.677	-0.021	0.520
Y2	2.135	0.046	0.861	0.313	0.555	1.820	0.038	0.683	0.334	0.539
X1	1.726	0.048	0.885	2.815	1.521	1.575	0.040	0.725	2.474	1.342
X2	2.066	0.052	0.964	0.850	0.938	1.910	0.048	0.862	0.956	0.909
X3	2.519	0.059	1.103	-0.215	0.557	2.248	0.055	0.983	-0.237	0.495
X4	2.533	0.055	1.021	0.118	0.509	2.311	0.051	0.912	0.099	0.437
X5	2.533	0.055	1.026	0.082	0.451	2.270	0.051	0.920	0.261	0.526
X6	2.496	0.052	0.963	0.125	0.393	2.270	0.051	0.909	-0.031	0.389
X7	1.939	0.042	0.790	0.219	0.604	1.733	0.039	0.699	0.318	0.696
X8	2.069	0.041	0.772	0.254	0.486	1.960	0.042	0.758	1.327	0.801
X9	2.112	0.046	0.851	0.350	0.688	2.056	0.046	0.822	1.059	0.843
Variable s	Hungary					Poland				
	M	SE	SD	K	S	M	SE	SD	K	S
Y1	1.721	0.043	0.807	2.513	1.343	1.785	0.042	0.828	1.711	1.119
Y2	1.716	0.041	0.772	1.596	1.106	1.756	0.043	0.837	1.874	1.216
X1	1.509	0.041	0.765	3.268	1.720	1.449	0.038	0.751	1.757	2.275
X2	1.675	0.044	0.818	1.585	1.266	1.861	0.047	0.917	1.667	1.205
X3	1.894	0.047	0.874	0.454	0.833	1.890	0.051	0.989	1.129	1.159
X4	1.784	0.041	0.765	0.777	0.854	1.929	0.047	0.916	0.968	0.987
X5	1.825	0.047	0.876	1.126	1.073	1.927	0.049	0.962	1.186	1.091
X6	1.724	0.041	0.770	0.775	0.937	1.782	0.043	0.844	0.726	0.958
X7	1.566	0.039	0.719	2.643	1.380	1.567	0.037	0.721	3.220	1.458
X8	1.667	0.038	0.715	1.425	1.017	1.822	0.041	0.808	1.464	0.999
X9	1.761	0.045	0.841	0.940	1.060	1.803	0.040	0.788	1.905	1.076

Note: Y_n – Dependent variables; X_m – Independent variables.

Source: own data collection.

Structure of SMEs as follows: type of enterprise: micro-enterprise: 48.5% (n = 678), small enterprise: 28.4% (n = 397), medium enterprise: 23.1% (n = 323); business sector: services - 26.3% (n = 368), trade: 18.9% (n = 264), manufacturing: 16.3%; duration of the

enterprise in the business environment: up to 3 years: 26.5% (n = 370); 3 - 10 years: 39.3% (n = 550); more than 10 years: 34.2% (n = 370).

Structure of owners/managers as follows (n = 1398): age of respondent: up to 35 years: 35.3% (n = 494), 36-45 years: 34.3% (n = 480), 46-55 years: 21.2% (n = 296), more than 55 years: 9.2% (n = 128); gender of respondent: male: 48.5% (n = 678), female: 720 (n = 51. 5%); respondent's relation to the enterprise: SME owner: 54.1% (n = 756), SME manager: 45.9% (n = 642); respondent's highest education attained: primary and secondary education (with matriculation, without matriculation): 51.9% (n = 726), university education: (I degree, II degree, III degree): 48.1% (n = 673).

In the first step of evaluating the formulated hypotheses (see *Table 1*) are shown the results of descriptive statistics (DS; M – Mean; SE – Standard Error; SD – Standard Deviation; K – Kurtosis and S - Skewness) of selected variables.

The DS' results showed that assumption of the linearity of variables was confirmed for each variable because the results of kurtosis and skewness are in range between -2 and 2 (Hair *et al.*, 2019).

In the second step of evaluating the formulated hypotheses (see *Table 2*) are presented the results of correlation analysis (CA; value of Spearman coefficient of correlation and verification of the statistical significance separately for each variable) of selected variables.

Table 2. Modification correlation matrix of variables

TV	Y1	Y2	X1	X2	X3	X4	X5	X6	X7	X8	X9
Y1	1										
Y2	0.733* ±0.101	1									
X1	0.286* ±0.064	0.277* ±0.044	1								
X2	0.331* ±0.073	0.331* ±0.087	0.475* ±0.025	1							
X3	0.349* ±0.061	0.365* ±0.029	0.368* ±0.049	0.596* ±0.070	1						
X4	0.420* ±0.111	0.437* ±0.042	0.293* ±0.083	0.410* ±0.015	0.476* ±0.040	1					
X5	0.414* ±0.103	0.454* ±0.049	0.328* ±0.111	0.405* ±0.127	0.474* ±0.039	0.759* ±0.042	1				
X6	0.401* ±0.106	0.416* ±0.057	0.329* ±0.099	0.400* ±0.127	0.468* ±0.010	0.613* ±0.012	0.629* ±0.065	1			
X7	0.376* ±0.107	0.336* ±0.121	0.321* ±0.170	0.303* ±0.126	0.309* ±0.064	0.356* ±0.069	0.299* ±0.038	0.375* ±0.105	1		
X8	0.390* ±0.077	0.347* ±0.032	0.307* ±0.142	0.357* ±0.124	0.372* ±0.146	0.370* ±0.057	0.359* ±0.078	0.369* ±0.134	0.619* ±0.056	1	
X9	0.432* ±0.033	0.425* ±0.028	0.308* ±0.131	0.381* ±0.101	0.424* ±0.088	0.395* ±0.078	0.393* ±0.070	0.409* ±0.107	0.437* ±0.014	0.611* ±0.024	1

Note: TV – Type of variable; ± Range of variance of spearman coefficient of correlation between respondents according to the country of SMEs; * $\alpha = 0.05$.

Source: own data collection.

The CA' results showed that dependences between dependent variables (Y1, Y2) and independent variables (X1, ..., X9) were statistically significant (see *Table 2*). Also, the results showed that dependences between independent variables were statistically significant (see *Table 2*). The values of Spearman coefficient of correlation between variables are medium strong (range between 0. and 0.6) and strong (the range between 0.6 and 0.8)

In the third step of evaluating the formulated hypotheses (see *Table 3*) are presented the results of multicollinearity (MU; value of Variance inflation factor (VIF)) separately for each variable and country locality of SMEs.

Table 3. VIF values of the effect of multicollinearity in regression models

Variables	CR	SR	HU	PL
X1	1.440	1.391	1.381	1.609
X2	1.938	1.874	1.708	2.067
X3	1.846	1.688	1.877	2.201
X4	3.286	3.714	2.095	2.584
X5	3.961	3.784	2.136	2.344
X6	2.160	2.348	1.707	2.120
X7	2.009	1.736	1.820	1.758
X8	2.311	2.149	2.236	2.207
X9	1.913	1.683	1.765	1.979

Source: our data calculation.

The VIF' results showed (see *Table 3*) that assumptions of the multicollinearity were rejected for each variable because the values of VIF are less than 5 (Hair *et al.*, 2019).

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In the four step of evaluating the formulated hypotheses (see *Table 4*) presents the results of LRM1 of Y1 according to the country locality of SMEs (CR, SR, HU, PL).

Table 4. Impact of independent variables on the Y1

RAI	LRM1			
	CR	SR	HU	PL
C	0.616	0.516	0.588	0.586
R ²	0.380	0.267	0.346	0.344
Adj. R ²	0.363	0.246	0.329	0.338
SE	0.681	0.588	0.661	0.679
ANOVA results				
F- ratio	22.946	12.611	19.864	21.590
Significance F	2.06E-30***	4.27E-17***	9.88E-27***	2.26E-29***
Verification of the regression coefficients (t-Stat)				
Intercept	3.032***	4.560***	2.008*	4.071***
X1	1.603	1.775	0.654	0.109
X2	1.048	0.409	0.286	2.460*
X3	0.027	0.775	1.602	0.931
X4	2.001*	0.312	2.616**	1.822
X5	1.215	0.237	1.759	2.150*
X6	2.977**	1.311	1.259	0.124
X7	1.398	2.019*	0.143	5.476***
X8	1.037	0.664	3.908***	0.147
X9	3.736***	4.410***	2.025*	1.454

Note: RAI – Regression analysis indicators; * $\alpha = 0.05$; ** $\alpha = 0.01$; *** $\alpha = 0.001$.

Source: our data collection

Each LRM1 is statistically significant (see *Table 4*) for the SME segment of country locality (Significance F is less than 0.05). The LRM1 explained from 24.6% (SR) to 36.3% (CR) of the total variance of Y1.

The most significant independent variable with positive effect on the Y1 is: (i) variable X9 according to the Czech and Slovak respondents; (ii) variable X8 according to the Hungary respondents; (iii) variable X6 according to the Polish respondent. Also, the results show that variables X4 and X6 are too significant in CR; X7 is too significant in SR; X4 and X9 are too significant in HU and X2 and X5 are too significant in PL.

The linear regression function (LRF) with relationships between X_m and Y_1 are shown in *Table 5*.

Table 5. LRF with the regression coefficients (RCs) of independent variables (X_m)

Country	LRM1 – Y1.
CR	$Y1 = 0.408 + 0.080 \times X1 + 0.055 \times X2 + 0.001 \times X3 + \mathbf{0.126 \times X4} + 0.086 \times X5 + \mathbf{0.166 \times X6} + 0.092 \times X7 + 0.075 \times X8 + \mathbf{0.222 \times X9}$
SR	$Y1 = 0.556 + 0.095 \times X1 + 0.021 \times X2 + 0.034 \times X3 + 0.022 \times X4 + 0.016 \times X5 + 0.072 \times X6 + \mathbf{0.123 \times X7} + 0.042 \times X8 + \mathbf{0.228 \times X9}$
HU	$Y1 = 0.246 + 0.036 \times X1 + 0.016 \times X2 + 0.089 \times X3 + \mathbf{0.176 \times X4} + 0.104 \times X5 + 0.076 \times X6 + 0.010 \times X7 + \mathbf{0.290 \times X8} + \mathbf{0.114 \times X9}$
PL	$Y1 = 0.431 + 0.006 \times X1 + \mathbf{0.134 \times X2} + 0.049 \times X3 + 0.111 \times X4 + \mathbf{0.119 \times X5} + 0.007 \times X6 + \mathbf{0.350 \times X7} + 0.009 \times X8 + 0.090 \times X9$

Source: our data calculation

The independent variable in LRF (bold colour; see *Table 5*) indicates that it has a positive impact on the Y1 and this relationship is statistically significant. Other variables have no positive impact on the Y1. Hypothesis RSH1_A was rejected for CR, SR and HU. Hypothesis RSH1_A was partially supported for PL. Hypothesis RSH1_B was rejected for SR. Hypothesis RSH1_B was partially supported for CR, HU and PL. Hypothesis RSH1_C was partially supported for each country.

Environmental aspects of entrepreneurships

In the five step of evaluating the formulated hypotheses (see *Table 6*) presents the results of LRM2 of Y2 according to the country locality of SMEs (CR, SR, HU, PL).

Each LRM2 is statistically significant (see *Table 6*) for the SME segment of country locality. The LRM2 explained from 21.0% (SR) to 38.5% (CR) of the total variance of Y2.

The most significant independent variable with positive effect on the Y2 is: (i) variable X9 according to the Czech and Slovak respondents; (ii) variable X8 according to the Hungary respondents; (iii) variable X7 according to the Polish respondent. Also, the results show that variables X1, X4 and X6 are too significant in CR; X7 is too significant in SR; X5 and X9 are too significant in HU and X2, X5, X9 are too significant in PL.

Table 6. Impact of independent variables on the Y2

RAI	LRM2			
	CR	SR	HU	PL
C	0.633	0.482	0.587	0.623
R ²	0.401	0.232	0.345	0.388
Adj. R ²	0.385	0.210	0.327	0.374
SE	0.676	0.607	0.633	0.663
ANOVA results				
F- ratio	25.046	10.466	19.760	26.178
Significance F	7.82E-33***	3.71E-14***	1.32E-26***	7.2E-35***
Verification of the regression coefficients (t-Stat)				
Intercept	3.172***	5.663***	2.686*	3.369***
X1	2.502*	0.528	0.317	1.275
X2	0.222	0.981	1.764	2.565**
X3	1.260	0.891	1.156	0.550
X4	1.903*	1.086	1.554	1.328
X5	1.500	0.572	2.492**	4.425***
X6	3.276***	1.508	1.403	0.081
X7	1.869	1.997*	1.757	5.448***
X8	2.116*	0.123	3.837***	1.687
X9	3.423***	3.712***	2.574**	3.345***

Note: RAI – Regression analysis indicators; * $\alpha = 0.05$; ** $\alpha = 0.01$; *** $\alpha = 0.001$.

Source: our data collection.

The linear regression model 2 with relationships between X_m and Y_2 are shown in Table 7.

Table 7. LRM2 with the regression coefficients (RCs) of independent variables (X_m)

Country	LRM2 – Y2.
CR	$Y2 = 0.423 + \mathbf{0.123 \times X1} + 0.012 \times X2 + 0.056 \times X3 + \mathbf{0.123 \times X4} + 0.106 \times X5 + \mathbf{0.182 \times X6} + 0.122 \times X7 + \mathbf{0.151 \times X8} + \mathbf{0.202 \times X9}$
SR	$Y2 = 0.556 + 0.095 \times X1 + 0.021 \times X2 + 0.034 \times X3 + 0.022 \times X4 + 0.016 \times X5 + 0.072 \times X6 + \mathbf{0.133 \times X7} + 0.042 \times X8 + \mathbf{0.228 \times X9}$
HU	$Y2 = 0.315 + 0.017 \times X1 + 0.096 \times X2 + 0.062 \times X3 + 0.100 \times X4 + \mathbf{0.141 \times X5} + 0.081 \times X6 + 0.112 \times X7 + \mathbf{0.273 \times X8} + \mathbf{0.138 \times X9}$
PL	$Y2 = 0.348 + 0.073 \times X1 + \mathbf{0.137 \times X2} + 0.028 \times X3 + 0.079 \times X4 + \mathbf{0.239 \times X5} + 0.005 \times X6 + \mathbf{0.340 \times X7} + 0.105 \times X8 + \mathbf{0.203 \times X9}$

Source: our data calculation.

The independent variable (X_1, \dots, X_9) in LRM2 (bold colour; see Table 7) indicates that it has a positive impact on the Y_2 and this relationship is statistically significant. Other variables have no positive impact on the Y_2 . Hypothesis RSH2_A was rejected for SR and HU. Hypothesis RSH2_A was partially supported for CR and PL. Hypothesis RSH2_B was partially supported for each country, without SR. Hypothesis RSH2_C was partially supported for each country.

5. Discussion

Empirical results from the business environment of SMEs in the V4 countries have led to interesting findings.

The defined factors that determine the positive attitude towards social sustainability of SMEs in V4 countries showed significant influence (except factors X_1, X_3). Thus, it can be

concluded that the area of HRM, CSR and financial management have a significant influence on the formation of positive perception of social sustainability of SMEs.

The most frequent factor of social sustainability of SMEs was factor X9. This means that adequate financial performance of the firm has the greatest influence on the formation of positive attitudes towards social sustainability of SMEs. Other significant factors were the implementation of CSR in the management activities of SMEs (X4) and knowledge of the most important aspects of financial management of the firm (X7), other factors (X2, X5, X6 and X8) also showed an influence on positive perceptions of social sustainability. Thus, it can be concluded that employee care and motivation, perception of the CSR concept as an opportunity to gain competitive advantages in the market and the possibility of gaining new customers, or the ability to appropriately manage risks in the firm are significant factors for SMEs' positive attitude towards social sustainability.

The defined factors that determine the positive approach to environmental sustainability of SMEs in the V4 countries have shown a significant impact (except factor X3). Thus, it can be concluded that the area of HRM, CSR and financial management have a significant influence on the formation of a positive perception of environmental sustainability of SMEs.

The most frequent factor of environmental sustainability of SMEs was factor X9, which occurred in every V4 country. This means that adequate financial performance of the firm has the greatest influence on the formation of positive attitudes towards environmental sustainability of SMEs. Other significant factors were factors X5, X7 and X8. This means that the implementation of the CSR concept in the context of potential competitive advantages, knowledge of the financial management of the firm and the ability to properly manage financial risks in the firm are also significant factors that make SMEs perceive the relevance and importance of the environmental impacts of business on society. Factors X1, X2, X4 and X6 also showed significant influence. Proper perception of human capital, concern for employees and their motivation, acceptance of CSR in the management of the firm and perception of CSR as a means to attract new customers influence SMEs' perception of the importance of the environmental impacts of doing business.

In the Czech Republic, the perception of the financial performance of SMEs has the strongest positive impact on both the social aspects of business and the environmental aspects of business. The ability to attract new customers through CSR is the second most significant factor with a positive impact on the social and environmental aspects of business. Czech respondents also think that the concept of CSR in the context of both social and environmental aspects of business should be taken into account when managing SMEs. Managing financial risks in a business has a positive impact on the environmental aspects of business.

Slovak Republic. The understanding of financial management of SMEs and the positive perception of the financial performance of SMEs have had a significant positive impact on both the social and environmental aspects of business. The positive perception of the financial performance of SMEs by the owner/manager is a more significant factor with a positive impact on both the social and environmental aspects of business. The other factors of HRM and CSR concepts are not significant in the context of social and environmental aspects of business.

Hungary. The ability to manage financial risks of SMEs by the owner/manager was the most significant and strongest factor determining both social and environmental aspects of the business. Also a significant (although less strong) factor that positively influences both the

social and environmental aspects of entrepreneurship is the positive perception of financial performance. Acceptance of CSR in business management and implementation of CSR in corporate activities are two significant sectors that have had a positive impact on the environmental aspects of business (Czaja-Cieszyńska *et al.*, 2021; Escobar-Sierra, Calderón-Valencia, 2021).

Poland. The ability of the owner/manager to understand the most important aspects of SME financial management had the strongest positive impact on both the social and environmental aspects of the business. Regularly evaluating employee performance and motivating them to adopt innovative working practices also had a positive impact (albeit with lower intensity) on both the social and environmental aspects of the business. The implementation of CSR to gain a competitive advantage in the market was a significant factor determining both the social and environmental aspects of the business.

Our research followed the results of studies (Edeigba, Arasanmi, 2022; Okanga, Groenewald, 2017) that emphasise the necessity of addressing not only the economic but also the social and environmental impacts of SMEs entrepreneurship ((Fahad *et al.*, 2022; Tounés *et al.*, 2019). Research has defined and quantified the most important factors that determine the social and environmental responsibility of SMEs. These factors are concentrated in financial, CSR and HRM.

(OECD, 2022) emphasises sustainable finance of SMEs and also considers sustainability-related concerns, such as the influence on the environment and society, in addition to optimising stakeholders' value through financial returns. It should be stressed that there is a positive connection between business sustainability and financial performance (Bahta *et al.*, 2021; Pham *et al.*, 2021; Yilmaz, 2021).

The research results confirmed that the dominant element of social and environmental responsibility is the financial performance of the firm. According to Potkany *et al.* (2022b), the ideal approach to monitor business performance and potential risks is the use of reporting based on controlling. In this context, Al-Nimer *et al.* (2021) state that risk management has a significant impact on the innovation of efficient business models, through which it enhances the financial performance of the firm. According to Syrova, Špička (2023), organisational culture and strategic risk management are positive mediators between enterprise risk management and financial performance. Saci, Mansour (2023) highlight that as a result of better financial risk management due to government support, SMEs are able to reduce the reluctance of banks to lend them money, which enables them to accelerate their financial performance.

One can agree with the approach that CSR incorporates social and environmental considerations in business operations. Our empirical research has confirmed this view. The application of CSR in SME business has a number of advantages. SMEs can benefit from CSR by improving their financial performance (Bahta *et al.*, 2021; Oduro *et al.*, 2021), CSR has the potential to enhance competitiveness (Apospori, 2018; Rashiti, Skenderi, 2023), builds trust, client relationships and improves corporate image (Berniak-Wozny *et al.*, 2023).

An important element of SMEs' social responsibility is, above all, the care of employees. Sustainable human resource management means taking into account the economic, social and environmental aspects of corporate objectives in personnel management, both in the short and long term (Kramar, 2022). This approach can attract, and develop motivated and committed people, which are indispensable for the sustainable growth of SMEs (Mazur, Walczyna, 2020), has a major impact on employee loyalty and retention (Cachón-Rodríguez *et al.*, 2022), employee engagement (Saks, 2022) and employee satisfaction

(Alsafadi, Altahat, 2021). Human capital is generally considered as a critical source of sustainability and development in firms (Khan *et al.*, 2022). In SMEs, skilled and motivated employees lead to success. According to Santhosh (2021) human capital significantly improves revenue growth and moderates the relationship between the two dimensions of CRM and performance and source of competitive advantage Al Qershi *et al.* (2022).

Conclusion

The aim of this paper was to present the impact of significant factors that influence the attitudes of SMEs towards the social and environmental aspects of their sustainability.

This research has brought interesting results. The main results of the research can be summarised in the following points.

All defined factors (except X3) have shown an influence on the formation of SMEs' attitudes in the social and environmental field. The most frequently occurring factor was factor X9. This means that the financial performance of the firm has the greatest influence on the formation of positive attitudes of SMEs towards social and environmental responsibility. This factor clearly dominated the attitudes of SMEs. The second most frequent factor was X7, which means that knowledge of the most important aspects of a firm's financial management also significantly shapes SMEs' social and environmental responsibility. Other factors that significantly shape SMEs' attitudes towards social and environmental responsibility are the application of CSR in the firm's activities and its perception as a tool for gaining competitive advantages in the market and SMEs' belief that they can appropriately manage financial risks in the firm. The third group of factors can be classified as X2 and X6. Caring for employees and motivating them to innovate working practices and the belief that CSR enables the company to win new customers also shape SMEs' responsible approach to social and environmental responsibility. Interestingly, the correct perception of human capital in a firm has minimal influence on shaping these attitudes. SMEs in the V4 countries also confirmed that investment in improving the skills of employees is a rare phenomenon.

The limitations of this research can be seen primarily in the fact that the empirical research was conducted in the V4 countries. It would be useful in future research to obtain similar information from a larger number of European countries. Nevertheless, it can be assumed that the results of the research will contribute to the debate on this issue and bring inspiring possibilities for researchers from other parts of the world.

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ATRINKTI VEIKSNIAI, DARANTYS ĮTAKĄ MVĮ TVARUMO SOCIALINIAMS IR APLINKOS ASPEKTAMS

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SANTRAUKA

Šio straipsnio tikslas – pristatyti reikšmingų veiksnių, darančių įtaką MVĮ požiūriui į jų tvarumo socialinius ir aplinkos aspektus, poveikį. Tyrime analizuojamas trijų svarbių sričių – žmogiškųjų išteklių valdymo, įmonių socialinės atsakomybės ir MVĮ finansų valdymo – poveikis. Empirinis tyrimas, siekiant pagrįsti tyrimo tikslą, buvo atliktas 2022 m. birželio mėn. – apklausa keturiose Višegrado šalyse (V4 šalyse). MVĮ buvo atrinktos atsitiktinės atrankos būdu. Duomenų rinkimą teikė išorinė agentūra, naudodama kompiuterinio interviu internetu (CAWI) metodą. Bendras respondentų skaičius šiame tyrime buvo 1 398. Įmonės finansiniai rezultatai turi didžiausią įtaką formuojantis teigiamam MVĮ požiūriui į socialinę ir aplinkosaugos atsakomybę. Šis veiksnys aiškiai vyravo MVĮ požiūryje. Antras pagal dažnumą veiksnys buvo svarbiausių įmonės finansų valdymo aspektų išnaminimas, kuris taip pat labai svarbus MVĮ socialinei atsakomybei ir atsakomybei už aplinką. Kiti veiksniai, kurie reikšmingai formuoja MVĮ požiūrį į socialinę atsakomybę ir atsakomybę už aplinką, yra ĮSA taikymas įmonės veikloje ir jos, kaip priemonės įgyti konkurencinį pranašumą rinkoje, suvokimas ir MVĮ tikėjimas, kad jos gali tinkamai valdyti įmonės finansinę riziką. Trečioji veiksnių grupė gali būti klasifikuojama kaip X2 ir X6. Rūpinimasis darbuotojais ir jų motyvavimas diegti naujoves darbo praktikoje bei tikėjimas, kad ĮSA suteikia įmonei galimybę pritraukti naujų klientų, taip pat formuoja atsakingą MVĮ požiūrį į socialinę ir aplinkosaugos atsakomybę. Įdomu tai, kad teisingas žmogiškojo kapitalo suvokimas įmonėje yra minimalus formuojant šias nuostatas. V4 šalių MVĮ taip pat patvirtino, kad investicijos į darbuotojų įgūdžių gerinimą yra retas reiškinys.

REIKŠMINIAI ŽODŽIAI: MVĮ požiūris į tvarumą; socialinė atsakomybė ir atsakomybė už aplinką; žmogiškųjų išteklių valdymas; įmonių socialinė atsakomybė (ĮSA); finansiniai rezultatai ir valdymas.