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## BUSINESS ETHICS IN THE SME SECTOR – DO FIRM SIZE AND THE GENDER AND EDUCATION LEVEL OF ENTREPRENEURS PLAY A ROLE?

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### Abstract

**Purpose.** *The aim of this study is to define and compare important attributes in business ethics according to company size and the gender and education of entrepreneurs in the SME sector in the four Visegrad countries (hereinafter V4).*

**Design/methodology/approach.** *Empirical research which was aimed at uncovering the attitudes of small and medium-sized companies was carried out in June 2022 in the V4 countries (Czech Republic, Slovakia, Poland and Hungary) through the renowned external company MNFORCE. In the Czech Republic, the total number of respondents was 347. In the Slovak Republic, the total number of respondents was 322. In Poland, the total number*

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of respondents was 381. In Hungary, the total number of respondents was 348. Statistical hypotheses were verified through descriptive statistics, the chi-squared test and Z-score at the  $\alpha = 5\%$  level of significance.

**Findings.** The level of business ethics in the V4 countries is high. According to our findings, SMEs consider business ethics important; they consider the ethical consequences of their decisions when managing the company and enforce the rules of business ethics. We found partial differences in the overall structure of the responses of SMEs in terms of company size, the gender of the respondents and their education. The research showed statistically significant differences in SMEs' positive attitudes toward business ethics in the Czech Republic, Poland and Hungary. No differences in the positive attitudes of SMEs were found in Slovakia. The Czech Republic most often showed differences in the overall structure of answers and the structure of positive answers.

**Originality.** The originality and strength of this research lie in the fact that we rely on the results of our own empirical study and do not use secondary data or opinions in a mediated form. In this study, we examine the selected attitudes of owners/managers of SMEs towards business ethics. This approach allows us to gain appropriate insights directly from the responsible people who carry out their business activities in the day-to-day business environment. The results of this research can be used by policymakers for the improvement of the business environment in the SME segment.

**Keywords:** small and medium-sized enterprises, business ethics, company size, gender, education of entrepreneurs

**JEL classification:** L26, A13, M14

## 1. Introduction

According to the consensus of theorists, a company's market value growth is its primary strategic goal. It is evident that small and medium-sized enterprises (SMEs) may have a different view of their primary strategic goal due to their specific characteristics such as more frequent exposure to risk, lack of resources, informal organisational structure, absence of strategic view etc. (Mayanja & Perks, 2017; Sunil, 2017; Ibañez & Fernandez, 2021). It can be assumed that their efforts are aimed at maximizing profit from their business activities, and their approach may prefer short-term goals rather than long-term goals.

Business ethics represents a significant business element, especially for large companies which are essential in improving the socio-economic system in the world's developed countries. The improvement of these conditions creates the prerequisites for higher expectations of society directed not only to large enterprises but also to SMEs. Therefore, if SMEs want to be more competitive, they must implement the concepts that large companies apply in their business activities.

However, many signals from the theoretical field and the business activity of SMEs point to the fact that SMEs also pay attention to business ethics. There are rational rea-

sons as to why SMEs behave ethically – for example, an effort to stabilize the best workers, keep the best clients, attract new clients, or avoid being at odds with their community, because these companies have more personal relationships with the community they operate in than larger organisations. In this context, Mazharul et al. (2020), Arend (2013) and other authors emphasised the necessity for SMEs to build trust with customers and other elements of their environment (suppliers, customers, local communities, etc.) and the need to build an appropriate company image.

The aim of this study was to define and compare important attributes in business ethics according to company size and the gender and education of entrepreneurs in the SME segment sector in the V4 countries. The V4 countries were selected based on their shared historical features and similar socio-economic development as post-communist countries. The originality and contribution of this research lie in the fact that we rely on the results of our own empirical study and do not use secondary data or opinions in a mediated form.

The authors define the following research questions (RQs):

RQ1: Does the gender of the respondents play an important role in the perception of business ethics?

RQ2: Does the entrepreneurs' education level play an important role in the perception of business ethics?

RQ3: Is the size of an SME important for the perception of business ethics?

The structure of the article is as follows. The first chapter presents significant scientific opinions on the given issue. The second chapter contains the goal, a description of the methodology used and a description of the data that presented in the paper. In the third chapter, the results of the research and their discussion are presented. In the conclusion, the basic results of the study are formulated in an integrated form.

## 2. Theoretical Background

### 2.1. Business ethics and entrepreneurship

Many studies prove that companies must focus on more than profit maximization in today's highly competitive environment, as such an orientation can cost them a loss of competitive position. Business ethics seems to be one of the options that can help the company to achieve its goals (Enz et al., 2021; Turyakira, 2018), although Huang et al. (2022) claimed that business ethics and profit maximization are naturally at odds, as when considering morality, we must also take into account other input variables that have a negative impact on profit (Enz et al., 2022). On the other hand, Turyakira (2018) claimed that unethical behaviour can increase a company's costs many times over, as it can lead to problems with internal or external stakeholders and can even come into conflict with the law, which ultimately affects its reputation and financial results. A company that has implemented the principles of business ethics in its daily activities applies the principles of morality, either internally or externally, and tries to do the right things

in the right way (Fernandez et al., 2016; van Wyk & Venter, 2022). These measures are commonly known within the development of corporate social responsibility programs (Gallardo-Vázquez & Lizcano-Álvarez, 2020). Moreover, the positive impact of ethical principles in business has been proved in studies on business growth factors (Derun & Mysaka, 2021), innovations and business sophistication (Oliinyk et al., 2023). Most authors characterise business ethics as a set of rules, morals and values that should guide the behaviour of the company, the entrepreneur, or its employees (Turyakira, 2018). Enz et al. (2021), however, drew attention to the fact that companies that decide to implement the principles of business ethics in their daily activities often face the suspicion of buyers, especially in developing markets.

Although the elaboration of business ethics is an aim that is of interest to both scientists and practitioners, in both cases this interest is mainly focused on solving this issue in the context of large companies that implement it within the framework of formalised codes of business conduct (van Wyk and Venter, 2022), while the formalisation of procedures is one of the weaknesses of SMEs (Belas et al., 2020; Robinson, 2017).

## *2.2. The specifics of business ethics in the SME sector*

In the scientific literature, only limited scope is devoted to studying business ethics in SME conditions (Fassin et al., 2010; van Wyk & Wenter, 2022; Turyakira, 2018; Ji et al., 2019, etc.). However, the definition of business ethics is crucial for the SME environment, as SMEs are key to the global economy (Turyakira, 2018). Fernandez et al. (2016) claimed that even if studies deal with this issue, they are primarily oriented towards the ethical dilemmas that SMEs have to face and do not deal with the level of ethics. Van Wyk and Wenter (2022) conducted research within the developing economy of South Africa, which faces many ethical issues such as corruption, insufficient ethical awareness, or lack of ethical leadership. They researched SMEs from various industries and concluded that entrepreneurs perceive ethics in business mainly as representing transparency, credibility, responsible behaviour (toward internal and external stakeholders), integrity (represented by moral values) and doing the right thing. According to the authors, many entrepreneurs limit their understanding to the previous characteristics. In their research focused on SMEs, Sharma and Dudeja (2010) confirmed that 70% of entrepreneurs apply ethical principles in their decision-making. Still, only 43% of them implement these principles at a formalised level (e.g., through a code of ethics). Although SMEs are aware of the increasing pressure to implement business ethics in their business practice, one of the fundamental obstacles is that they cannot perceive the benefits of applying these principles due to the lack of a strategic vision (thinking) (Turyakira, 2018).

According to Belas et al. (2021), SMEs' more frequent exposure to risk is another disadvantage compared to large enterprises. Among the most common threats they have to face, the authors include a lack of managerial skills, an informal organisational structure, the entrepreneur's personality (which, as research shows, plays a significant role in business ethics), demographic factors (age, gender or education of the entrepreneur), personnel risks, legal risks, or risks arising from the market. Turyakira (2018) added that

their size, difficulties in accessing capital, dependence on word-of-mouth, and difficulties in reputation building are the main factors that make it more challenging for SMEs to compete. For the reasons mentioned above, SMEs more often encounter business ethics violations in their business activities and when trying to survive in a highly competitive environment (van Wyk & Venter, 2022; Syriati, 2022; Turyakira, 2018). Ji et al. (2019) claimed that SMEs often violate the principles of business ethics, especially in connection with corruption, bribery, or environmental pollution. In their study, the authors identified that the main motivators for the unethical behaviour of entrepreneurs include the desire for financial benefits and unfair behaviour on the part of institutions, which is especially typical in developing and transforming economies. To some extent, unethical behaviour is supported by the tolerance of stakeholders in the business environment and the perception that it is a feature of the labour markets of immature economies (Mishchuk et al., 2018). This is also supported by Cronje et al. (2017), who claimed that the financial situation largely influences the application of responsibility (and ethics) in the entrepreneur's decision-making. In addition, Ibañez and Fernandez (2021), based on a sample of 65 SMEs, stressed that actions such as establishing norms, considering employees' expectations, or making it clear that unethical behaviour is not acceptable require a significant amount of time and resources due to the size of the SME and the main challenges that these businesses have to face.

### *2.3. The role of gender, education, and the size of the enterprise in the implementation of business ethics*

According to the literature, the implementation of business ethics in SMEs is mainly associated with the entrepreneur/manager/owner, who sets the direction in their company with their ethical behaviour, acting as a role model. In the research of Robinson (2017), a strong correlation between the values of the entrepreneur and the company's values was confirmed, which is in line with the results of the study by Sharma and Dudeja (2010). Their conclusions were based on a sample of 117 SME enterprises and prove there are fewer external demands on small enterprises than on large ones, so human factors, values, and psychological variables play a more significant role in determining decisions. Since the organisational structure is often informal in nature and business ethics is not applied based on formal procedures, the entrepreneur is a role model for their employees. Fassine et al. (2010) even applied ethics directly to the given person, not the company. Therefore, if we compare business ethics in the environment of SMEs and large companies, many authors agree that the difference is mainly in the perception of ethics by entrepreneurs. In SME conditions, this influence is much more significant than in large companies, where business ethics is implemented within formalised codes (Robinson, 2017).

According to Syriati (2022), factors such as religion, environmental pressure, gender, and social customs significantly affect differences in the moral constructs of SME entrepreneurs. Specifically, the relationship between gender and the implementation of business ethics is currently being addressed by a growing body of research. These studies prove that

women behave more ethically in business than men (Knechel & Mintchik, 2022), which is mainly manifested in more transparent management, decision-making and behaviour. Sun et al. (2021) confirmed these results, and their study even claimed that the more women are represented in managerial positions, the higher the application of ethical principles in the company. Briano-Turrent (2022) argued that increasing the number of women in executive positions has a positive effect on the overall economic performance of the company, mainly due to the ethical functioning of the management and the adoption of ethical codes. Lefley et al. (2021) investigated business ethics in SMEs by implementing follow-up audits. They claimed that boards where women were well-represented had a higher degree of inclination to audit their investments. Moreover, the authors found that the larger the company, the higher the probability of conducting an audit. The results of research by Kassie (2021) show that not only the gender, but also the age and education level of entrepreneurs influence their decision-making in ethical dilemmas. Likewise, Bitros and Karayiannis (2010) pointed to the fact that the degree of ethical behaviour of an entrepreneur is determined by their family background, the entrepreneur's education (considering only primary and secondary education), and the company's size. Authors even claim that a low level of entrepreneurial morality could be positively influenced by better education. Cronje et al. (2017) focused on micro, small and medium-sized enterprises in their study, investigating the influence of ethics in the decision-making of entrepreneurs and finding that the level of education significantly influences the level of ethics achieved. The gender of the entrepreneur was also decisive, as the results show that women more frequently take morals and ethics into account in their decisions. On the contrary, Sharma and Dudeja (2010) confirmed only age as a significant factor in their study. Gender and education did not exhibit an influence on the application of business ethics in their study.

### **3. Aim, methodology, and data**

The aim of this paper is to define and compare significant attributes of business ethics according to company size and the gender and education level of entrepreneurs in the SME sector in the V4 countries.

Empirical research which was aimed at assessing the attitudes of small and medium-sized companies was carried out in June 2022 in the V4 countries (Czech Republic, Slovakia, Poland and Hungary).

The data collection was carried out by the renowned external company MNFORCE using Computer-Assisted Web Interviewing (CAWI research method) according to the questionnaire created by the research team. The questionnaire could be filled out by the owner or highest-ranking manager of a small or medium-sized enterprise (SME, hereinafter referred to as the respondent). The questionnaire was translated into the national language of the respondents for a better understanding of the formulated statements. The questionnaire contains control questions for verification of the consistency of respondent attitudes. The authors used an external agency because this approach has some benefits (e.g., data collection was undertaken in the same way and at the same time).

In the Czech Republic, the total number of respondents was 347. The structure of re-

spondents in terms of company size was as follows: 45.2% micro-enterprises, 30.8% small enterprises and 23.9% medium-sized enterprises. Of the Czech respondents, 47.3% were women and 52.7% were men. The educational level of respondents was as follows: 18.2% of respondents reported primary or secondary education without graduation, 52.2% of respondents with graduation, 9.2% a bachelor's degree, 18.7% a master's/engineering degree, and 1.7% a doctoral degree.

The total number of respondents was 322 in the Slovak Republic. The structure of respondents in terms of company size was as follows: 51.9% micro-enterprises, 26.7% small enterprises and 21.4% medium-sized enterprises. Of the Slovak respondents, 52.8% were women and 47.2% were men. The educational level of respondents was as follows: 9.3% of respondents reported primary or secondary education without graduation, 50.9% of respondents with graduation, 5.9% a bachelor's degree, 31.1% a master's/engineering degree, and 2.8% a doctoral degree.

In Poland, the total number of respondents was 381. The structure of respondents in terms of company size was as follows: 47.2% micro-enterprises, 27.8% small enterprises and 25.0% medium-sized enterprises. Of the Polish respondents, 51.2% were women and 48.8% were men. The educational level of respondents was as follows: 1.8% of respondents reported primary or secondary education without graduation, 33.9% of respondents with graduation, 19.2% a bachelor's degree, 42.5% a master's/engineering degree, and 2.6% a doctoral degree.

In Hungary, the total number of respondents was 348. The structure of respondents in terms of company size was as follows: 50.0% micro-enterprises, 28.2% small enterprises and 21.8% medium-sized enterprises. Of the Hungarian respondents, 54.9% were women and 45.1% were men. The educational level of respondents was as follows: 2.0% of respondents reported primary or secondary education without graduation, 41.7% of respondents with secondary education graduation, 32.8% a bachelor's degree, 22.4% a master's/engineering degree, and 1.1% a doctoral degree.

In this study, we will evaluate the respondents' attitudes towards a set of statements in the individual V4 countries according to the company's age and the gender and education of the entrepreneur. Based on previous research and a qualitative literature analysis, the following statements were established that characterise the importance of business ethics in SMEs:

ST1: I consider ethics in business to be important.

ST2: When managing the company, I consider the ethical consequences of my decisions.

ST3: I feel good when I behave ethically in business.

ST4: Our company enforces the rules of ethical conduct in business.

Based on the expert estimation method, we established the following statistical hypotheses (SH):

SH: There are no statistically significant differences in the overall structure of the answers and in the positive answers of the respondents to (SH1: ST1; SH2: ST2; SH3: ST3; SH4: ST4) according to the size of the company and the gender and educational level of the respondents in the individual V4 countries.

Statistical hypotheses were verified by descriptive statistics, the chi-squared test and Z-score at the  $\alpha = 5\%$  significance level. The null hypothesis was confirmed if the p-value was higher or equal to 0.05. If the p-value was lower than 0.5, the null hypothesis was rejected. Calculations were made using software that is freely available on the Internet (Chi-Square Test Calculator, n.d.; Z Score Calculator, n.d.).

#### 4. Results and Discussion

The following tables show the research results, including verifying individual scientific hypotheses.

**Table 1.** Research results and statistical calculations of ST1 according to company size and the gender and education level of respondents in individual V4 countries

ST1: I consider ethics in business to be important.	Micro/ SME CR: 157/190 SR: 167/155 PL: 180/201 HU: 174/174	Males/ Females CR:183/164 SR: 152/170 PL: 186/195 HU: 157/191	SE/UE CR: 244/103 SR: 194/128 PL: 136/245 HU: 152/196	Z-score: p-value Micro/SME Males/Females SE/UE
1. Strongly agree	77/76 90/85 113/108 128/110	65/88 79/96 108/113 118/120	116/37 101/74 81/140 105/133	CR: 0.1362 0.1052 0.5892
2. Agree	60/99 60/63 52/74 38/59	95/64 62/61 66/60 35/62	102/57 76/47 40/86 43/54	SR: 0.0536 0.8887 0.2713
3. Neither agree nor disagree	20/14 14/6 11/13 8/5	22/12 8/12 9/15 4/9	25/9 15/5 13/11 4/9	PL: 0.7039 0.0989 0.2846
4. Disagree	0/1 3/1 3/4 0/0	1/0 3/1 2/5 0/0	1/0 2/2 2/5 0/0	HU: 0.3953 0.2891 0.3371
5. Strongly disagree	0/0 0/0 1/2 0/0	0/0 0/0 1/2 0/0	0/0 0/0 0/3 0/0	
<b>Chi-square: p-value:</b>				
Micro/SMEs	CR: 0.1205	SR: 0.3581	PL: 0.4855	HU: 0.1408
Males/Females	<b>CR: 0.0146</b>	SR: 0.8328	PL: 0.5078	HU: 0.1330
SE/UE	CR: 0.1553	SR: 0.6297	PL: 0.2262	HU: 0.7753

**Source:** own research. *Note:* Micro – means micro-enterprise (from 0 to 9 employees), SME – small and medium-sized enterprise (from 10 to 249 employees), SE – respondents with secondary education, UE – respondents with university education.



*H1 was confirmed.* There were no statistically significant differences in the overall structure of the answers or in the positive answers of the respondents to ST1 according to the size of the company, or the gender and education level of the respondents in all V4 countries. The only exception was the comparison of companies by gender, where we found statistically significant differences in the structure of respondents' answers.

From the point of view of positive answers, a specific indication of a trend can be seen in Slovakia, where larger companies agreed more intensively with ST1, and in Poland, where men agreed more with ST1 than women. However, these differences were not statistically significant.

**Table 2.** Research results and statistical calculations of ST2 according to company size and the gender and education level of respondents in individual V4 countries

ST2: When managing the company, I consider the ethical consequences of my decisions.	Micro/ SME CR: 157/190 SR: 167/155 PL: 180/201 HU: 174/174	Males/ Females CR:183/164 SR: 152/170 PL: 186/195 HU: 157/191	SE/UE CR: 244/103 SR: 194/128 PL: 136/245 HU: 152/196	<b>Z-score:</b> <b>p-value</b> Micro/SME Males/Females SE/UE
1. Strongly agree	56/64 59/64 84/88 102/81	49/71 54/69 91/81 93/90	92/28 74/49 61/111 80/103	CR: <b>0.0238</b> <b>0.0226</b> 0.1336
2. Agree	70/105 95/77 81/84 64/85	99/76 83/89 8/84 58/91	120/55 100/72 55/110 66/83	SR: 0.6892 0.3628 0.1260
3. Neither agree nor disagree	30/20 12/13 11/25 8/7	33/17 13/12 13/23 6/9	31/19 18/7 17/19 5/10	PL: 0.0629 <b>0.0164</b> 0.1499
4. Disagree	1/1 1/1 2/1 0/1	2/0 2/0 0/3 0/1	1/1 2/0 2/1 1/0	HU: 1.0000 0.5287 0.9442
5. Strongly disagree	0/0 0/0 2/3 0/0	0/0 0/0 1/4 0/0	0/0 0/0 1/4 0/0	
<b>Chi-square: p-value:</b>				
Micro/SMEs	CR: 0.1624	SR: 0.7933	PL: 0.2890	HU: 0.2514
Males/Females	<b>CR: 0.0123</b>	SR: 0.8393	PL: 0.1535	HU: 0.2467
SE/UE	CR: 0.3117	SR: 0.5377	PL: 0.3695	HU: 0.9619

**Source:** own research. *Note:* Micro – micro-enterprise (from 0 to 9 employees), SME – small and medium-sized enterprise (from 10 to 249 employees), SE – respondents with secondary education, UE – respondents with university education.

*H2 was not confirmed.* The research showed statistically significant differences in the overall structure of answers (men/women in the Czech Republic) and the positive answers of respondents to ST2 according to company size and the gender and education level of respondents in individual V4 countries. We also found statistically significant differences in respondents' positive answers. In the Czech Republic, larger enterprises agreed more intensively with ST2 than micro-enterprises. When comparing genders, we encountered ambiguous results: in the Czech Republic, women more intensively agreed with ST2; in Poland, the opposite was true.

**Table 3.** Research results and statistical calculations of ST3 according to company size and the gender and education level of respondents in individual V4 countries

ST3: I feel good when I behave ethically in business.	Micro/ SME CR: 157/190 SR: 167/155 PL: 180/201 HU: 174/174	Males/ Females CR:183/164 SR: 152/170 PL: 186/195 HU: 157/191	SE/UE CR: 244/103 SR: 194/128 PL: 136/245 HU: 152/196	<b>Z-score:</b> <b>p-value</b> Micro/SME Males/Females SE/UE
1. Strongly agree	60/75 77/69 101/100 114/84	51/84 61/85 109/92 99/99	100/35 85/61 70/131 82/116	CR: <b>0.0232</b> 0.0854 0.7795
2. Agree	67/95 74/70 56/77 50/78	100/62 72/72 64/69 53/75	108/54 88/56 45/88 62/66	SR: 0.8259 0.1471 0.5157
3. Neither agree nor disagree	27/18 16/15 14/18 7/8	28/17 18/13 8/24 3/12	32/13 21/10 17/15 6/9	PL: 0.8026 <b>0.0019</b> 0.1707
4. Disagree	3/1 0/1 6/4 3/2	3/1 1/0 3/7 1/4	3/1 0/1 4/6 2/3	HU: 0.6599 <b>0.0293</b> 0.4777
5. Strongly disagree	0/1 0/0 3/2 0/2	1/0 0/0 2/3 1/1	1/0 0/0 0/5 0/2	
<b>Chi-square: p-value:</b>				
Micro/SMEs	CR: 0.2352	SR: 0.9987	PL: 0.5132	<b>HU: 0.0258</b>
Males/Females	<b>CR: 0.0004</b>	SR: 0.3748	<b>PL: 0.0242</b>	HU: 0.1018
SE/UE	CR: 0.6433	SR: 0.8866	PL: 0.2423	HU: 0.6678

**Source:** own research. *Note:* Micro – micro-enterprise (from 0 to 9 employees), SME – small and medium-sized enterprise (from 10 to 249 employees), SE – respondents with secondary education, UE – respondents with university education.

*H3 was not confirmed.* The research confirmed that there are statistically significant differences in the overall structure of answers (Hungary in terms of company size; Czech

Republic and Poland in terms of gender), and there are also statistically significant differences in the positive answers of respondents to ST3 according to company size and the gender and education level of respondents in individual V4 countries. In the Czech Republic, larger companies agreed more intensively with ST3. In Poland and Hungary, more men than women agreed with this statement.

Differences in respondents' positive attitudes according to their education level were not detected.

**Table 4.** Research results and statistical calculations of ST4 according to company size and the gender and education level of respondents in individual V4 countries

ST4: Our company enforces the rules of ethical conduct in business.	Micro/ SME CR: 157/190 SR: 167/155 PL: 180/201 HU: 174/174	Males/ Females CR:183/164 SR: 152/170 PL: 186/195 HU: 157/191	SE/UE CR: 244/103 SR: 194/128 PL: 136/245 HU: 152/196	Z-score: p-value Micro/SME Males/Females SE/UE
1. Strongly agree	57/64 65/64 89/86 109/86	48/73 55/74 94/81 98/97	92/29 77/52 63/112 89/106	CR: <b>0.0014</b> <b>0.0183</b> <b>0.0160</b>
2. Agree	58/101 83/70 62/83 53/72	91/68 75/78 72/73 50/75	113/46 93/60 50/95 52/73	SR: 0.5552 0.2891 0.9761
3. Neither agree nor disagree	36/21 16/18 19/26 8/12	37/20 20/14 16/29 7/13	31/26 20/14 18/27 8/12	PL:0.9601 <b>0.0063</b> 0.7188
4. Disagree	5/3 2/1 6/2 1/3	6/2 1/2 3/5 2/2	7/1 3/0 4/4 2/2	HU: 0.4295 0.1499 0.6241
5. Strongly disagree	1/1 1/2 4/4 3/1	1/1 1/2 1/7 0/4	1/1 1/2 1/7 1/3	
<b>Chi-square: p-value:</b>				
Micro/SMEs	<b>CR: 0.0092</b>	SR: 0.8352	PL: 0.2833	HU: 0.0779
Males / Females	<b>CR: 0.0057</b>	SR: 0.4647	<b>PL: 0.0493</b>	HU: 0.2251
SE/UE	<b>CR: 0.0343</b>	SR: 0.9720	PL: 0.5492	HU: 0.8669

**Source:** own research. *Note:* Micro – micro-enterprise (from 0 to 9 employees), SME – small and medium-sized enterprise (from 10 to 249 employees), SE – respondents with secondary education, UE – respondents with university education.

*H4 was not confirmed.* The research showed that there are statistically significant differences in the overall structure of the answers and in the positive answers of the re-

spondents to ST4 according to the size of the company and the gender and education level of respondents in the individual V4 countries.

When evaluating this question, it can be concluded that the attitudes of Czech respondents differed most significantly from those in other V4 countries. The overall structure of Czech respondents' answers was statistically significantly different when compared according to the size of the company and the gender and education level of the respondents.

We found that larger firms showed stronger agreement with ST4, women more strongly agreed with ST4 compared to men, and less-educated respondents agreed more strongly with ST4.

The research results can be summarized in the following areas.

The average rate of agreement with statements ST1 to ST4 was 90% in all V4 countries, which is a positive signal in the field of business ethics.

An interesting finding was that the intensity of agreement with statements ST1 to ST3 was higher than that of agreement with ST4. This means that SMEs in the V4 countries confirmed with a higher degree of intensity that they consider ethics to be important. They admitted that they consider business ethics when managing the company and feel good when they behave ethically in implementing business activities. On the other hand, they declared a lower intensity of ethical behaviour in their personal lives.

The last time we conducted similar empirical research was in 2020, where 454 respondents in the Czech Republic and 368 in Slovakia were consulted. In that study, "90% of Czech entrepreneurs and 88% of Slovak entrepreneurs within the SME sector agreed that they should take into account the moral and ethical consequences of their decisions." The structure of the attitudes of entrepreneurs was very similar in both countries (Belas et al., 2020).

It is obvious that the business activities of SMEs must not be separate from compliance with the ethical aspects of the business. Business without ethics would cause SMEs to become difficult to control and would justify their ethically inappropriate behaviour in their business activities (Syariati, 2022).

According to some authors, the ethical approach to business is primarily determined by the personal attitude of the entrepreneur, which reflects a number of factors such as their own moral values and character traits, the culture of the country where the entrepreneur operates, and their family background (Fuller & Tian, 2006; Sunil, 2017; Vivier, 2013; Signori & Fassin, 2023 and other authors). Business owners should set the rules of business ethics in the environment of SMEs (Vivier, 2013), and their position is irreplaceable in this process (Mayanja & Perks; 2017).

When analysing the overall structure of the answers, we found statistically significant differences in relation to the size of the company (the attitudes of micro-enterprises differed from those of small and medium-sized enterprises), but also in terms of the gender and education level of the respondents.

When analysing the positive answers, we found that the most frequent differences occurred in terms of gender and company size. The differences in SMEs' attitudes from the educational point of view were minimal.

The most frequent differences in the structure of all responses and the positive responses of SMEs were found in the Czech Republic. Some differences were found in the case of Poland and Hungary. It is an interesting fact that in the case of Slovakia, no differences in the attitudes of SMEs were found.

Our research is compatible with claims that SMEs pay attention to profit maximization and attach great importance to business ethics (Enz et al., 2021; Turyakira, 2018; Arend, 2013).

Several previous studies have shown that the application of business ethics in business is more often associated with women, which confirmed the conclusions of selected authors who claim that women behave more ethically in business compared to men (e.g., Knechel & Mintchik, 2022; Sun et al., 2021; Briano-Turrent, 2022). However, the results of this research were not clear-cut. It could be assumed that this trend is less evident in the developed countries of Europe.

Our previous research found “that women were more aware of business ethics than their male counterparts, as were those entrepreneurs who possessed a higher education over those with a secondary education” (Belas et al., 2020).

The size of the company represents an important criterion for defining differences in the approaches of SMEs to business activities, which are manifested primarily in their economic attitudes. According to Belas and Sopková (2016), larger companies in the SME segment are more innovative, active and autonomous than microenterprises. In the field of business ethics, we only found an indication of the trend that larger companies have a more positive attitude towards business ethics in the Czech Republic. This trend was not detected in the other V4 countries. In this context, Zsigmond et al. (2021) stated that there is a directly proportional relationship between ethical institutions and the company's size, which creates more appropriate conditions for applying business ethics in larger companies.

Some authors, such as Bitros and Karayiannis (2010) and Cronie et al. (2017), have emphasised that the entrepreneur's level of education determines the degree of their ethical behaviour. On the other hand, Sharma and Dudeja (2010) did not confirm the influence of education on the application of business ethics in their study. Different cultures produce a different view of this topic. In this research, the trend of education level influencing the implementation of business ethics in SMEs was minimal.

## 5. Conclusion

The aim of the article was to define and compare important attributes in business ethics according to company size and the gender and education level of entrepreneurs in the SME segment in the V4 countries.

As a part of this research, we stated four areas that define the field of business ethics.

The primary conclusions from this research can be formulated as follows. The level of business ethics in the V4 countries is high. According to our findings, SMEs consider business ethics important; they consider the ethical consequences of their decisions when managing their company and enforce the rules of business ethics in real life.

We found partial differences in the overall structure of the responses of SMEs in terms of company size, the gender of the respondents and their education. The research showed statistically significant differences in SMEs' positive attitudes toward business ethics in the Czech Republic, Poland, and Hungary. No differences in the positive attitudes of SMEs were found in Slovakia. The Czech Republic most often showed differences in the overall structure of answers and also in the structure of positive answers. The research questions (RQ1, RQ2, RQ3) were partially supported.

The research indicates a particular trend regarding company size, but this needs to be more convincing and robust. The bigger the company, the more positive the attitudes towards business ethics. When evaluating attitudes by gender, we did not find a clear trend. While women had a more positive attitude towards business ethics issues in the Czech Republic, in Poland and Hungary it was men who showed more positive attitudes towards this topic.

Thus, the results of our research can expand the limited research on business ethics in the context of SMEs, not to mention the criteria that we took into account when comparing the perception of business ethics – gender, education and company size – as we divided companies according to their size into micro-enterprises, small enterprises and medium-sized enterprises.

The limits of this research can be seen in the limited, albeit representative, sample of respondents. The fractured international political situation caused by the war in Ukraine, the worsening security situation in the world, and the retrograded economic situation, manifested by extreme increase in energy prices and inflation, could affect the attitudes of SMEs. We expect that these impacts could be manageable since SMEs are mainly oriented towards the internal market, and governments have informed SMEs well in advance about upcoming compensation and support. These research results will enrich the knowledge base in applying business ethics in the segment of SMEs.

Future research should aim to recognise motives for applying business ethics tools in SMEs, mainly from the perspectives of gender and company size, as they were identified as important factors. Although education was not identified as such a significant factor, the field of education could be another interesting factor to study.

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## Literature

1. Arend, R.J. (2013). Ethics-focused dynamic capabilities: A small business perspective. *Small Business Economics*, 41, 1–24. <https://doi.org/10.1007/s11187-012-9415-2>
2. Belas, J., Khuramm, A. K., Maroušek, J., & Rozsa, Z. (2020). Perceptions of the importance of business ethics in SMEs: A comparative study of Czech and Slovak entrepreneurs. *Ethics & Bioethics*, 10(1–2), 96–106. <https://doi.org/10.2478/ebce-2020-0010>

3. Belas, J. Jr., Zvarikova, K., Marousek, J., & Metzker, Z. (2021). The perception of significant aspects of personnel risk in the management of SMEs. *Ekonomicko-manazerske spektrum*, 15(2), 1–12. <https://dx.doi.org/10.26552/ems.2021.2.1-12>
4. Belas, J., & Sopkova, G. (2016). A model of entrepreneurial orientation. *Transformation in Business & Economics*, 15(2B,38B), 630–645. <http://www.transformations.knf.vu.lt/38b/article/amod>
5. Bitros, G. C., & Karayiannis, A. D. (2010). Entrepreneurial morality: some indications from Greece. *European Journal of International Management*, 4(4), 333–361. <http://dx.doi.org/10.1504/EJIM.2010.033606>
6. Briano-Turrent, G. D. (2022). Female representation on boards and corporate ethical behavior in Latin American companies. *Corporate Governance – An International Review*, 30(1), 80–95. <https://doi.org/10.1111/corg.12416>
7. *Chi-Square Test Calculator*. (n.d.). Social Science Statistics. Retrieved January 31, 2023. <https://www.socscistatistics.com/tests/chisquare2/default2.aspx>
8. Cronje, L., Ferreira, E. J., & van Antwerpen, S. (2017). Responsible business practices: Aspects influencing decision-making in small, medium and micro-sized enterprises. *African Journal of Business Ethics*, 11(1), 23–42. <https://doi.org/10.15249/11-1-143>
9. Derun, I., & Mysaka, H. (2021). Contemporary drivers of business growth: Evidence from US public companies. *Journal of International Studies*, 14(4), 39–55. <https://doi.org/10.14254/2071-8330.2021/14-4/3>
10. Enz, C., Škodová Parmová, D., & Wolf, P. (2021). Importance of ethical competence for the sales management of small and medium-sized financial sales organisations. *Deturope – Central European Journal of Regional Development and Tourism*, 13(1), 121–152. <https://www.deturope.eu/pdfs/det/2021/01/07.pdf>
11. Fassin, Y., van Rossem, A., & Buelens, M. (2010). Small-business owner-managers' perceptions of business ethics and CSR-related concepts. *Journal of Business Ethics*, 98(3), 425–453. <https://doi.org/10.1007/s10551-010-0586-y>
12. Fernandez, J. L., & Camacho, J. (2016). Effective elements to establish an ethical infrastructure: An exploratory study of SMEs in the Madrid region. *Journal of Business Ethics*, 138, 113–131. <https://doi.org/10.1007/s10551-015-2607-3>
13. Fuller, T., & Tian, Y. (2006). Social and symbolic capital and responsible entrepreneurship: An empirical investigation of SME narratives. *Journal of Business Ethics*, 67, 287–304. <https://doi.org/10.1007/s10551-006-9185-3>
14. Gallardo-Vázquez, D., & Lizcano-Álvarez, J. L. (2020). CSR-related competitiveness and legitimacy in MSMEs. *Economics and Sociology*, 13(1), 52–73. <https://doi.org/10.14254/2071-789X.2020/13-1/4>
15. Huang, X., Chau, K. Y., Tang, Y. M., & Iqbal, W. (2022). Business ethics and irrationality in SME during COVID-19: Does it impact on sustainable business resilience? *Frontiers in Environmental Sciences*, 10, 870476. <https://doi.org/10.3389/fenvs.2022.870476>
16. Ibañez, J. C., & Fernandez, J. L. (2021). Ethical infrastructure on small and medium enterprises: Actionable items to influence the perceived importance of ethics. *Business and Society Review*, 126(3), 339–361. <https://doi.org/10.1111/basr.12240>
17. Ji, J., Dimitratos, P., Huang, Q., & Su, T. (2019). Everyday-life business deviance among Chinese SME owners. *Journal of Business Ethics*, 155, 1179–1194. <https://doi.org/10.1007/s10551-017-3542-2>
18. Kassie, B. (2021). The effect of demographic factors on ethical dilemma: empirical evidence from certified public accountancy firms in Ethiopia. *African Journal of Accounting Auditing and Finance*, 7(3), 205–224. <https://doi.org/10.1504/ajaaf.2021.10038651>
19. Knechel, W. R., & Mintchik, N. (2022). Do personal beliefs and values affect an individual's "fraud tolerance"? Evidence from the World Values Survey. *Journal of Business Ethics*, 177(2), 463–489. <https://doi.org/10.1007/s10551-020-04704-0>

20. Lefley, F., Maresova, P., & Hamplova, E. (2021). The influence of gender-diverse boards on post-audit practices: A UK SME study. *Engineering Economist*, 67(2), 112–130. <https://doi.org/10.1080/0013791X.2021.2000685>
21. Mayanja, J., & Perks, S. (2017). Business practices influencing ethical conduct of small and medium-sized enterprises in Uganda. *African Journal of Business Ethics*, 11(1), 43–62. <https://doi.org/10.15249/11-1-130>
22. Mazharul Islam, M., & Majed Alharthi, M. (2020). Relationships among Ethical Commitment, Ethical Climate, Sustainable Procurement Practices, and SME Performance: An PLS-SEM Analysis. *Sustainability*, 12(23), 10168. <https://doi.org/10.3390/su122310168>
23. Mishchuk, H., Yurchyk, H., & Bilan, Y. (2018). Shadow incomes and real inequality within the framework of leadership and social change. In W. Strielkowski & O. Chigisheva (eds), *Leadership for the Future Sustainable Development of Business and Education* (pp. 89–101). Springer, Cham. [https://doi.org/10.1007/978-3-319-74216-8\\_10](https://doi.org/10.1007/978-3-319-74216-8_10)
24. Oliinyk, O., Mishchuk, H., Vasa, L., & Kozma, K. (2023). Social responsibility: Opportunities for Integral assessment and analysis of connections with business innovation. *Sustainability*, 15(6), 5608. <https://doi.org/10.3390/su15065608>
25. Robinson, B. M. (2017). Inculcating ethics in small and medium-sized business enterprises: A South African leadership perspective. *African Journal of Business Ethics*, 11(1), 63–81. <https://doi.org/10.15249/11-1-132>
26. Sharma, T., & Dudeja, M. (2010). Business ethics in SMEs: An empirical study of selected units of Haryana. *International Journal of Indian Culture and Business Management*, 7(3), 307–323. <https://doi.org/10.1504/IJICBM.2013.056210>
27. Signori, S., & Fassin, Y. (2023). Family members' salience in family business: An identity-based stakeholder approach. *Journal of Business Ethics*, 183, 191–211. <https://doi.org/10.1007/s10551-021-04998-8>
28. Sun, F. C., Dutta, S., Zhu, P. C., & Ren, W. T. (2021). Female insiders' ethics and trading profitability. *International Review of Financial Analysis*, 74, 101710. <https://doi.org/10.1016/j.irfa.2021.101710>
29. Sunil, S. (2017). Role of exemplars in ethical decision-making in small and medium enterprises (SMEs). *Research in Ethical Issues in Organisations*, 17, 21–35. <https://doi.org/10.1108/S1529-209620170000017004>
30. Syariati, A. (2022). SMEs' performance in Indonesia: The nexus of notable ethics-strategic Behavior Constructions. *Psychology Research and Behavior Management*, 15, 3039–3052. <https://doi.org/10.2147/PRBM.S382273>
31. Turyakira, P. K. (2018). Ethical practices of small and medium-sized enterprises in developing countries: Literature analysis. *South African Journal of Economic and Management Sciences*, 21(1), a1756. <https://doi.org/10.4102/sajems.v21i1.1756>
32. Vivier, E. (2013). 'A tough line to work through': Ethical ambiguities in a South African SME. *African Journal of Business Ethics*, 7(2), 68–78. <http://dx.doi.org/10.15249/7-2-42>
33. van Wyk, I., & Venter, P. (2022). Perspectives on business ethics in South African small and medium enterprises. *African Journal of Business Ethics*, 16(1), 81–104. <https://doi.org/10.15249/16-1-285>
34. *Z Score Calculator for 2 Population Proportions*. (n.d.). Social Science Statistics. Retrieved January 31, 2023. <https://www.socscistatistics.com/tests/ztest/default2.aspx>
35. Zsigmond, T., Machová, R., & Korcsmáros, E. (2021). The Ethics and Factors Influencing Employees Working in the Slovak SME Sector. *Acta Polytechnica Hungarica*, 18(11), 71–190. <https://doi.org/10.12700/APH.18.11.2021.11.10>