Are there differences in business ethics within SMEs’ most important business sectors in the V4 countries? Empirical research

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Abstract
Business ethics represents an important aspect that influences each country’s socio-economic system, and is important to society, environment, and economy. The present article aims to define significant attributes of business ethics in the sector of small and medium-sized enterprises (SMEs) and compares their attitudes within the three most significant business sectors in the Visegrad Group countries (V4 countries: Czech Republic, Slovak Republic, Poland, and Hungary). An empirical study, focusing on the attitudes of small and medium-sized firms, was conducted in June 2022 in Visegrad Group countries through the reputable hired company MNFORCE, using the Computer Assisted Web Interviewing research method. The total number of respondents in the Visegrad Group countries was 1,398. Statistical hypotheses were tested using descriptive statistics, chi-square, and Z-score at a significance level of α = 5%. The most important conclusion of this research is that there are no significant differences in the approach of SMEs to business ethics based on the sector in which the companies operate. Some notable differences in attitudes among SMEs in Slovakia and the Czech Republic were identified, but these were marginal. Therefore, differences in the transformation process within selected economic sectors do not impact the formation of attitudes of small and medium-sized companies in business ethics. It is evident that business ethics is significantly determined primarily by the personal characteristics of the owner/manager of the company, and the specificities of individual sectors do not influence this field.

Keywords: small and medium-sized companies, business ethics, economic sectors, trade, services, production, tourism

Introduction
Business ethics represent an important aspect influencing the socio-economic system of every country. The ethical decision-making and behaviour of entrepreneurs have a significant impact on society, the environment, and the economy. Business ethics is focused on promoting integrity, responsibility, transparency, and justice in business activities.

Business ethics is key to building trustworthy and sustainable relationships between companies and their clients, employees, and society. It also contributes to creating a positive image of the company and strengthens the company’s competitive advantages in today’s challenging business environment.

Business ethics has historically been an element of business, especially for large companies that have had a major impact on the development of the socio-economic system in the developed world. Due to being under greater public scrutiny, the image of an ethical company is extremely important to these subjects.

Positive perception of an ethical profile brings them a range of benefits However, many authors also highlight the need for ethical entrepreneurship in the small and medium-sized enterprises (SMEs) segment (Van Wyk & Wenter, 2022; Mazharul & Alharthi, 2020; Ji et al., 2019; Turyakira, 2018; Arend, 2013; Zvarikova et al., 2023b; Belas et al., 2020; Belas Jr, et al., 2021).

Various sectors in which SMEs operate differ significantly in their specific characteristics, influenced by the area of their operation. For example, while the human factor and its quality

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clearly dominate in the trade and services sector, the production sectors are largely determined by the level of technological development, the automation of production processes, and their digitization (Androniceanu et al., 2023).

The present research focuses on exploring differences within the most significant business sectors of SMEs in the individual countries of the V4 group. The central focus is on the research problem, which aims to examine the attitudes and approaches of SMEs toward business ethics in various business sectors.

The uniqueness and excellence of this study lie in investigating SME owners/managers’ attitudes toward business ethics based on original empirical research conducted in the Visegrad Group countries (V4 countries: Czech Republic, Slovakia, Poland, and Hungary).

The structure of the article is as follows. The first chapter presents selected scientific opinions on the researched issue. The second chapter includes the goal, a description of the methodology, and a description of the data used in the preparation of the article. The subsequent chapter presents the research results and a discussion thereof. In conclusion, the basic findings of the research are formulated in an integrated form.

**Theoretical background**

Business ethics focuses on the values, principles, and norms governing the management and behaviour of companies. It involves moral decisions and attitudes that entrepreneurs, managers, and companies have in managing business activities and their relationships with customers, employees, suppliers, competitors, and the broader business environment. The key aspects of business ethics include integrity, responsibility, transparency, justice, and a commitment to sustainability and survival (Van Wyk & Wenter, 2022; Ogutu et al., 2023; Kozubikova et al., 2023; Al-Omoush et al., 2023; Sochulakova, 2023). Business ethics represents a commitment to follow high standards, respect laws and ethical codes, and consider the consequences of business activities on people, society, and the environment (Turyakira, 2018; Kot & Brzezinski, 2015). A company that implements the principles of business ethics seeks to do the right things in the right way (Fernandez et al., 2016; Mishchuk et al., 2020; Van Wyk and Venter, 2022; Quiddi & Habba, 2023).

Implementing business ethics is also motivated by companies aiming to utilize this framework to achieve their business goals (Enz et al., 2021; Turyakira, 2018; Wu et al., 2021, Belas & Rahman, 2023; Khan et al., 2023; Gallo et al., 2023). A significant specific factor for SMEs is that business ethics is significantly influenced by the personal characteristics of the owner of the company (Sunil, 2017; Vivier, 2013; Signori & Fassin, 2021, and other authors) and the quality of Human Resource Management (Navickas et al., 2023), because engaged employees better implement the management’s strategic vision of business ethics.

Various sectors in which SMEs operate differ significantly in their specific characteristics, influenced by the area of their business. These specific characteristics also affect the corporate governance system, and they may influence the perception and application of business ethics principles in the SME sector.

Among the most significant areas of SME business in terms of their prevalence are services, trade, manufacturing, and tourism (Lewandowska et al., 2023). Ogujiuba et al. (2023) identify the services sector as a pride of the global economy. The specific characteristics of services can be defined in the following areas. Services are typically intangible, cannot be stored, and their quality is not standardized as they are created in real-time and closely fixed to the service provider (Chi et al., 2023). Services are challenging to human labour, and their quality depends on the service provider. These specific characteristics make the service sector challenging to managing and providing. Service providers should understand these characteristics, and management should focus on satisfying the needs and expectations of customers, a significant precondition for the company’s competitive advantage.
SMEs play a significant role in the service sector as they complement the range of services and, with their innovativeness, better respond to changing customer needs (Tomášková & Kaňovská, 2022). In this context, León-Gómez et al. (2022) and Kumar et al. (2023) emphasize the need to develop business orientation, open innovation, and strategies that can provide new ways of improving the performance of companies operating in the service sector.

Business ethics in services includes integrity in client communication, consistency in service provision, willingness, and ability to solve customer complaints, and maintaining trustworthy customer relationships (Chi et al., 2023). Services often have a personal nature, which increases the importance of applying business ethics rules in this sector.

Trade is a fundamental form of economic activity involving acquiring, selling, or exchanging goods and services to make a profit. Trade is based on exchanging goods and services between individuals, companies, or countries. Trade contributes to economic prosperity by allowing efficient use of resources, specialization, and diversification of production. It also helps increase competition and innovation and provides customers with a greater variety of goods and services.

The dependence on the economic and political environment, the impact of environmental factors and the significant influence of globalization represent the most significant specific features of the trade sector (Aronica et al., 2021). Successful trade requires trust between buyers and sellers in building long-term relationships. Trade is determined by the economic environment, the political situation of the involved parties, exchange rates, and other factors. These external factors can affect the market situation and lead either to a boost in trading activity or to the emergence of various shocks that have a negative impact on trade. According to Higó and Bonvin (2023), investments in digitization can help SMEs improve their access to foreign markets and become more efficient. A similar positive influence of investments in SMEs’ digitalization on their profitability and competitiveness is revealed by Straková et al. (2022). In this context, Dura et al. (2022) state that SMEs that incorporated digital tools into their management activities could implement innovative strategies, allowing them to achieve twice the growth rate of other small businesses that did not adopt new technologies.

SMEs usually fill the space in business activities not covered by large companies and operate primarily within the domestic economy. With the ability to operate with lower fixed and variable costs, they can fill the business area in smaller territories or with a smaller range and bring short-term innovative products to the market. Effective monitoring of costs is essential for a company’s flexible decision-making system based on controlling (Potkany et al., 2022). In the conditions of SMEs, there is also considerable potential for generating savings in overhead costs, by using the principles of outsourcing and facility management. The results of the study by Potkany et al. (2021) support this argument.

Trade should take place according to ethical standards and laws. Companies should respect the rights of customers and employees, care for the environment, and adhere to fair business practices. The pillars of business ethics in trade should be fair business practices and responsibility toward customers, partners, and employees.

The basis of production is transforming input raw materials, and other inputs into final products that have value and are intended for sale. Production occurs in various economic sectors (industry, agriculture, energy, etc.). Each form of production may have different characteristics and processes depending on the manufactured products. Modern technologies, automation, digitization, and progressive production management systems are essential factors influencing manufacturers’ efficiency and competitive capability.

SMEs focus on complementary product ranges, often acting as subcontractors to larger companies. Business ethics in this sector should balance the business’s economic goals and its responsibility to society and the environment. Proper application of business ethics principles can create a credible company image, increase competitiveness, and ensure long-term sustainability in this industry (Máté et al., 2022).
Tourism is a significant sector in the global context (Surya et al., 2022; Amoah et al., 2023; Cárdenas-García & Alcalá-Ordoñez, 2023; Yuan et al., 2023, and other authors). It involves people’s mobility for recreation, leisure, exploration of new places, cultures, natural beauty, history, and the experience of new adventures. Tourism represents a primary income-generating activity for many countries worldwide. Tourism has several specific characteristics that differentiate it from other sectors of the economy. It is based on people’s mobility, has a temporary nature (people return home after the trip), is seasonal, diverse in tourists’ needs, is strictly service-oriented and experience-oriented, and currently strongly emphasises sustainability (Sharma et al., 2023). In this context, Surya et al. (2022) emphasises that SMEs in the tourism sector play an essential role in supporting transportation, crafts and products, services, restaurants, and other economic enterprises. Investments in tourism infrastructure represent a crucial step in developing tourist destinations and stimulating regional development, as Amoah et al. (2023) highlighted. These authors recommend that SMEs should prioritise the involvement of the local community and the creation of networks with key stakeholders in the context of competitive sustainability. They also note that service quality and tourist satisfaction are the foundation of long-term tourism development, and SMEs should focus on it with maximum intensity. However, tourism development can also cause significant environmental degradation (Cárdenas-García & Alcalá-Ordoñez, 2023), so the environmental impacts of tourism development need to be carefully analysed.

SMEs in tourism are expanding the range of services and attractions. Expanding the offer is very important in this sector, given the extremely diverse desires and needs of tourists. Tourist services are often provided on an individual basis and are therefore not of interest to large companies.

Business ethics in tourism includes a commitment to environmental protection (Cárdenas-García & Alcalá-Ordoñez, 2023), respect for local cultures and customs, and support for sustainable tourism. Entrepreneurs in this sector are responsible for minimising the negative impacts of mass tourism, supporting local communities’ development, connecting tourism with other social systems (Li, 2023), and, above all, ensuring environmental sustainability in tourism development (Song et al., 2023). The tourism sector is known for its significant share of casual work and therefore faces challenges such as the attributes of decent work, that is, adequate working hours, fair wages, social protection, and gender equality non-discrimination (Santos, 2023). Increasing business ethics can effectively address these issues in the tourism industry.

This study examines significant factors in business ethics concerning the three most important business sectors in the individual V4 countries.

Research question: Are there significant differences in the attitudes of SMEs towards business ethics depending on the sector in which they operate?

Aim, methodology, and data
The article aims to define significant attributes of business ethics in the sector of small and medium-sized enterprises (SMEs) and to compare attitudes within three key business sectors in the V4 countries.

Empirical research, focused on assessing the attitudes of small and medium-sized enterprises, was conducted in June 2022 in the V4 countries. Data collection was carried out by the external agency MNFORCE, utilizing the Computer-Assisted Web Interviewing (CAWI) research method. The questionnaire could be completed by the owner or top manager of a small or medium-sized enterprise (SME), here and after referred to as the respondent.

In the Czech Republic, the total number of respondents was 347. The structure of respondents based on company size was as follows: 45.2% micro-enterprises, 30.8% small enterprises, and 23.9% medium-sized enterprises. The majority of businesses operated in the service sector (39.8%) and manufacturing (20.7%), followed by trade (17.3%),
construction (9.2%), transportation (3.2%), agriculture (2.0%), tourism (0.9%), and 6.9% of respondents indicated other business sectors.

In Slovakia, the total number of respondents was 322. The structure of respondents based on company size was 51.9% micro-enterprises, 26.7% small enterprises, and 21.4% medium-sized enterprises. The majority of businesses operated in the service sector (40.1%) and trade (24.5%), followed by manufacturing (13.0%), construction (11.5%), transportation (2.2%), agriculture (0.9%), tourism (0.9%), and 6.9% of respondents indicated other business sectors.

In Poland, the total number of respondents was 381. The structure of respondents based on company size was 47.2% micro-enterprises, 27.8% small enterprises, and 25.0% medium-sized enterprises. The majority of businesses operated in tourism (28.9%) and manufacturing (20.5%), followed by trade (14.7%), services (12.8%), construction (8.1%), transportation (3.4%), agriculture (4.5%), and 7.1% of respondents indicated other business sectors.

In Hungary, the total number of respondents was 348. The structure of respondents based on company size was 50.0% micro-enterprises, 28.2% small enterprises, and 21.8% medium-sized enterprises. The majority of businesses operated in tourism (31.6%) and trade (19.8%), followed by services (14.9%), manufacturing (9.8%), transportation (6.6%), agriculture (5.5%), construction (3.5%), and 8.3% of respondents indicated other business sectors.

The present article evaluates respondents’ attitudes in the three most significant business sectors in each V4 country. These sectors were selected in each V4 country based on the frequency of their occurrence in the empirical research. The applied approach appropriately supports the main objective of the paper, because in the context of the used methodology it is more appropriate to focus on a representative sample of respondents in terms of their number and it is not necessary to follow the importance of the sector according to economic categories. In the Czech Republic, these sectors are services, manufacturing, and trade (a total of 270 respondents). In Slovakia, the sectors are services, trade, and manufacturing (a total of 250 respondents). In Poland, the sectors are tourism, manufacturing, and trade (244 respondents). In Hungary, the sectors are tourism, trade, and services (231 respondents). The sample includes 995 respondents.

Based on previous research and qualitative analysis of relevant literature, statements characterizing the importance of business ethics in SMEs were formulated as follows:

ST1: I consider ethics in business necessary.
ST2: I consider the ethical consequences of my decisions in managing the company.
ST3: I feel good when behaving ethically in business.
ST4: Our company promotes rules of ethical behaviour in business.

Statistical hypotheses were established using the expert estimation method:

H1: There are no statistically significant differences in the overall structure of responses and positive attitudes of respondents in the three most significant sectors in each V4 country when evaluating ST1.
H2: There are no statistically significant differences in the overall structure of responses and positive attitudes of respondents in the three most significant sectors in each V4 country when evaluating ST2.
H3: There are no statistically significant differences in the overall structure of responses and positive attitudes of respondents in the three most significant sectors in each V4 country when evaluating ST3.
H4: There are no statistically significant differences in the overall structure of responses and positive attitudes of respondents in the three most significant sectors in each V4 country when evaluating ST4.

Statistical hypotheses were tested using descriptive statistics, chi-square, and Z-score at a significance level of $\alpha = 5\%$. The null hypothesis is confirmed if the p-value is higher or equal to 0.05. If the p-value is less than 0.05, the null hypothesis is rejected. Calculations were
performed using freely available software on the internet (Chi-Square Calculator, 2023; Z Score Calculator, 2023).

**Results and discussion**

The following tables present the research results, including the verification of individual scientific hypotheses.

**Tab. 1: The research results of ST1 according to the most significant sectors in V4 Countries**

<table>
<thead>
<tr>
<th>ST1: I consider ethics in business necessary.</th>
<th>CR S/P/Tr</th>
<th>SR S/P/Tr</th>
<th>PL T/P/Tr</th>
<th>HU T/Tr/S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. strongly agree</td>
<td>138/72/60</td>
<td>129/42/79</td>
<td>110/78/56</td>
<td>110/69/52</td>
</tr>
<tr>
<td>2. agree</td>
<td>56/36/27</td>
<td>57/16/34</td>
<td>38/26/13</td>
<td>31/14/15</td>
</tr>
<tr>
<td>Total 1+2</td>
<td>126/65/55</td>
<td>121/39/74</td>
<td>102/73/52</td>
<td>107/67/50</td>
</tr>
<tr>
<td>Percentage of positive answers</td>
<td>90/91/92</td>
<td>94/93/94</td>
<td>93/94/93</td>
<td>97/97/96</td>
</tr>
<tr>
<td>3. neither agree nor disagree</td>
<td>12/6/5</td>
<td>7/1/4</td>
<td>3/5/2</td>
<td>3/2/2</td>
</tr>
<tr>
<td>4. disagree</td>
<td>0/1/0</td>
<td>1/2/1</td>
<td>3/0/1</td>
<td>0/0/0</td>
</tr>
<tr>
<td>5. strongly disagree</td>
<td>0/0/0</td>
<td>0/0/0</td>
<td>2/0/1</td>
<td>0/0/0</td>
</tr>
</tbody>
</table>

Source: own research.

Notes: Czech Republic – CR; Slovak Republic – SR; Poland – PL; Hungary – HU; services – S; trading – Tr; production – P; tourism – T

In the most significant business sectors within the V4 countries, SMEs demonstrated a high level of agreement with the statement that they consider ethics in business important. The average agreement rate varied from 91% (Czech Republic) to 97% (Hungary). Similar values were observed in Slovakia (94%) and Poland (93%).

*H1 was confirmed.* There are no statistically significant differences in the overall structure of responses and the positive responses of respondents to ST1 within the sample in individual V4 countries. None of the values in Table 2 are lower than the test criterion (0.05).

**Tab. 2: Statistical calculations of ST1 according to the most significant sectors in the V4 countries**

<table>
<thead>
<tr>
<th>Chi-square/Z score:</th>
<th>CR: S/P; S/Tr; P/Tr</th>
<th>SR: S/P; S/Tr; P/Tr</th>
<th>PL: T/P; T/Tr; P/Tr</th>
<th>HU: T/Tr; T/S; Tr/S</th>
</tr>
</thead>
<tbody>
<tr>
<td>p-value:</td>
<td>0.6449/0.8026</td>
<td>0.8459/0.9362</td>
<td>0.9490/0.7795</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.6927/0.8259</td>
<td>0.9861/0.9681</td>
<td>0.9342/0.8650</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.9434/0.8181</td>
<td>0.6337/0.9761</td>
<td>0.7886/0.8650</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.7012/0.9442</td>
<td>0.9219/0.7039</td>
<td>0.8516/0.7718</td>
<td></td>
</tr>
</tbody>
</table>

Source: own research.

**Tab. 3: The research results of ST2 according to the most significant sectors in V4 countries**

<table>
<thead>
<tr>
<th>ST2: I consider the ethical consequences of my decisions in managing the company.</th>
<th>CR S/P/Tr</th>
<th>SR S/P/Tr</th>
<th>PL T/P/Tr</th>
<th>HU T/Tr/S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. strongly agree</td>
<td>53/26/22</td>
<td>51/15/24</td>
<td>49/42/21</td>
<td>67/39/24</td>
</tr>
<tr>
<td>2. agree</td>
<td>69/37/27</td>
<td>70/22/47</td>
<td>51/28/30</td>
<td>39/27/26</td>
</tr>
<tr>
<td>Total 1+2</td>
<td>122/63/49</td>
<td>121/37/71</td>
<td>100/70/51</td>
<td>106/66/50</td>
</tr>
<tr>
<td>Percentage of positive answers</td>
<td>88/87/82</td>
<td>94/88/90</td>
<td>91/90/91</td>
<td>96/96/96</td>
</tr>
<tr>
<td>4. disagree</td>
<td>1/1/0</td>
<td>0/2/0</td>
<td>2/0/0</td>
<td>0/0/0</td>
</tr>
</tbody>
</table>
Empirical research proved a significantly high level of agreement with the statement that SMEs incorporate ethics into their managerial decisions. The average agreement rate ranged from 86% (Czech Republic) to 96% (Hungary). Similar values were found in Slovakia (91%) and Poland (91%).

**H2 was confirmed.** There are no statistically significant differences in the overall structure of responses and the positive responses of respondents to ST2 within the sample in individual V4 countries. None of the values in Table 4 are lower than the test criterion (0.05).

Tab. 4: Statistical calculations of ST2 according to the most significant sectors in the V4 countries

|                      | Chi-square/Z score: | p-value: | CR: S/P; S/Tr; P/Tr | 0.9704/0.8493 | 0.7665/0.2041 | 0.9000/0.3524 | SR: S/P; S/Tr; P/Tr | 0.7520/0.2263 | 0.6701/0.3030 | 0.9238/0.7642 | PL: T/P; T/Tr; P/Tr | 0.6397/0.7872 | 0.8126/0.9761 | 0.829/0.7949 | HU: T/Tr; T/S; Tr/S | 0.9685/0.8103 | 0.4458/0.9442 | 0.8639/0.8887 |
|----------------------|----------------------|----------|---------------------|---------------|---------------|---------------|---------------------|---------------|---------------|---------------|---------------------|---------------|---------------|---------------|---------------------|---------------|---------------|
|                      |                      |          |                     |               |               |               |                     |               |               |               |                     |               |               |               |                     |               |               |
| Source: own research.|

The research showed a high level of agreement with the statement that owners/managers of SMEs feel positive about ethical behaviour in their business. The average agreement rate with ST3 ranged from 87% (Czech Republic) to 94% (Hungary). Similar values were found in Slovakia (88%) and Poland (89%).

**H3 was confirmed.** There are no statistically significant differences in the overall structure of responses and the positive responses of respondents to ST3 (with one exception) within the sample in individual V4 countries.

Tab. 5: The research results of ST3 according to the most significant sectors in V4 countries

<table>
<thead>
<tr>
<th>ST3: I feel good when behaving ethically in business.</th>
<th>CR</th>
<th>SR</th>
<th>PL</th>
<th>HU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S/P/Tr</td>
<td>S/P/Tr</td>
<td>T/P/Tr</td>
<td>T/Tr/S</td>
</tr>
<tr>
<td>1. strongly agree</td>
<td>138/72/60</td>
<td>129/42/79</td>
<td>110/78/56</td>
<td>110/69/52</td>
</tr>
<tr>
<td>2. agree</td>
<td>63/28/21</td>
<td>62/15/34</td>
<td>63/51/29</td>
<td>66/39/28</td>
</tr>
<tr>
<td>Total 1+2</td>
<td>121/65/49</td>
<td>120/34/71</td>
<td>101/72/46</td>
<td>104/67/48</td>
</tr>
<tr>
<td>Percentage of positive answers</td>
<td>88/90/82</td>
<td>93/81/90</td>
<td>92/92/82</td>
<td>94/97/92</td>
</tr>
<tr>
<td>3. neither agree nor disagree</td>
<td>15/6/10</td>
<td>9/8/8</td>
<td>4/5/4</td>
<td>5/2/2</td>
</tr>
<tr>
<td>4. disagree</td>
<td>2/0/1</td>
<td>0/0/0</td>
<td>3/0/4</td>
<td>0/0/2</td>
</tr>
<tr>
<td>5. strongly disagree</td>
<td>0/1/0</td>
<td>0/0/0</td>
<td>2/1/2</td>
<td>1/0/0</td>
</tr>
</tbody>
</table>

Source: own research.

Tab. 6: Statistical calculations of ST3 according to the most significant sectors in the V4 countries

| Chi-square/Z score: | p-value: | CR: S/P; S/Tr; P/Tr | 0.6234/0.5755 | 0.5531/0.2627 | 0.6776/0.1499 | SR: S/P; S/Tr; P/Tr | 0.2193/0.0232 | 0.9217/0.4237 | 0.7305/0.1676 | PL: T/P; T/Tr; P/Tr | 0.7157/0.9045 | 0.4727/0.0643 | 0.2741/0.0735 | HU: T/Tr; T/S; Tr/S | 0.8647/0.4179 | 0.9137/0.5823 | 0.9372/0.2301 |
|----------------------|----------|---------------------|---------------|---------------|---------------|---------------------|---------------|---------------|---------------|---------------------|---------------|---------------|---------------|---------------------|---------------|---------------|
|                      |          |                     |               |               |               |                     |               |               |               |                     |               |               |               |                     |               |               |
| Source: own research.|

The research showed a high level of agreement with the statement that owners/managers of SMEs feel positive about ethical behaviour in their business. The average agreement rate with ST3 ranged from 87% (Czech Republic) to 94% (Hungary). Similar values were found in Slovakia (88%) and Poland (89%).

**H3 was confirmed.** There are no statistically significant differences in the overall structure of responses and the positive responses of respondents to ST3 (with one exception) within the sample in individual V4 countries.
Within the research, statistically significant differences were found in Slovakia. SMEs operating in the service sector agreed more with this statement than manufacturing companies (p-value = 0.0232; the percentage of positive responses in the service sector was 93%, while in the manufacturing sector, it was only 81%). A particular trend can be observed in Poland, where the calculated values are significantly close to the test criterion value. Entrepreneurs in tourism and production significantly agreed with ST3 more than entrepreneurs in trade (the percentage of positive responses was 92%/92%/82%). Nevertheless, we consider this hypothesis confirmed.

Tab. 7: The research results of ST4 according to the most significant sectors in V4 countries

<table>
<thead>
<tr>
<th>ST4: Our company promotes rules of ethical behaviour in business.</th>
<th>CR S/P/Tr</th>
<th>SR S/P/Tr</th>
<th>PL T/P/Tr</th>
<th>HU T/Tr/S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. strongly agree</td>
<td>56/27/22</td>
<td>49/16/30</td>
<td>51/40/28</td>
<td>61/45/29</td>
</tr>
<tr>
<td>2. agree</td>
<td>58/37/23</td>
<td>67/18/41</td>
<td>48/27/19</td>
<td>42/22/20</td>
</tr>
<tr>
<td>Total 1+2</td>
<td>114/64/45</td>
<td>116/34/71</td>
<td>99/67/47</td>
<td>103/67/49</td>
</tr>
<tr>
<td>Percentage of positive answers</td>
<td>83/90/75</td>
<td>90/81/90</td>
<td>90/86/84</td>
<td>94/97/94</td>
</tr>
<tr>
<td>3. neither agree nor disagree</td>
<td>19/6/13</td>
<td>12/7/6</td>
<td>7/9/3</td>
<td>6/2/1</td>
</tr>
<tr>
<td>4. disagree</td>
<td>2/0/1</td>
<td>1/1/1</td>
<td>2/2/1</td>
<td>1/0/0</td>
</tr>
<tr>
<td>5. strongly disagree</td>
<td>0/0/1</td>
<td>0/0/1</td>
<td>2/0/5</td>
<td>0/0/2</td>
</tr>
</tbody>
</table>

Source: own research.

Tab. 8: Statistical calculations of ST4 according to the most significant sectors in the V4 countries

<table>
<thead>
<tr>
<th>Chi-square/Z score:</th>
<th>p-value:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR: S/P; S/Tr; P/Tr</td>
<td>0.3560/0.2301</td>
</tr>
<tr>
<td>SR: S/P; S/Tr; P/Tr</td>
<td>0.5612/0.1236</td>
</tr>
<tr>
<td>PL: T/P; T/Tr; P/Tr</td>
<td>0.5988/0.3898</td>
</tr>
<tr>
<td>HU: T/Tr; T/S; Tr/S</td>
<td>0.5850/0.3030</td>
</tr>
</tbody>
</table>

Source: own research.

The research demonstrated a significant level of agreement with the statement that owners/managers of SMEs promote the principles of business ethics in their companies. The average agreement rate with ST4 ranged from 83% (Czech Republic) to 95% (Hungary). Similar values were found in Slovakia (87%) and Poland (87%).

\textit{H4 was confirmed.} There are no statistically significant differences in the overall structure of responses and the positive responses of respondents to ST4 (with one exception) within the sample in individual V4 countries.

Statistically significant differences were found in the Czech Republic within the research. SMEs operating in the service sector agreed more with this statement than commercial firms (p-value = 0.0366; the percentage of positive responses in the service sector was 83%, and in the trade sector, it was 75%). Nevertheless, this hypothesis was confirmed.

The research results can be summarized in the following areas:

The average agreement rate with statements ST1 to ST4 in the sample ranged from 83% to 97% in individual V4 countries. The lowest agreement rate was found in the Czech Republic. On the contrary, the highest level of agreement is recorded in Hungary (this is true for all ethical claims). However, these quantitative indicators can be considered as a positive signal in the field of business ethics in the SME sector. These claims are compatible with our results from previous research (Zvarikova et al., 2023a).
Based on the results of the empirical research, we can answer the scientific question defined at the beginning of this study. Research has shown that there are no significant differences in the ethical attitudes of SMEs depending on the sector in which they do business.

The empirical research confirmed what could be reasonably assumed, namely that various business sectors are unlikely to impact SMEs’ business ethics significantly. The main reason for this assertion is that production processes, technological factors, and the handling of various goods and services are not decisive factors that could shape the ethical attitudes of entrepreneurs. In this context, it is worth highlighting that the owner of the company or the CEO is usually the bearer and enforcer of business ethics in the SME sector. Thus, corporate ethics is dependent on his/her personal attitude, which reflects a number of factors that influence his/her personality such as moral values, character traits, country culture, family background, and so on (Sunil, 2017; Vivier, 2013; Signori & Fassin, 2021 and other authors). Business owners typically set the rules for business ethics in the SME environment (Vivier, 2013). In this regard, their approach to business ethics is dominant, and their position is irreplaceable.

Our previous research demonstrated that gender and the entrepreneur’s education significantly determine attitudes in the field of business ethics. Women tend to have a more positive relationship with this issue than men, and respondents with higher education also show a more positive approach to business ethics (Belas et al., 2020). In another study, we found that the company’s size can influence the formation of business ethics. The bigger the company, the more positive the attitudes towards business ethics (Zvaríková et al., 2023b).

Our research is incompatible with the results achieved by Lašáková et al. (2021). The likely reason is the comparison of different sectors and companies of different sizes. The authors state that “there are significant differences among companies in the sphere of unethical behaviour. Results suggested that, in general, the industry sector, membership in professional networks, and company age were associated with significant variance in the perceived incidence of unethical practices, whereas the company ownership (public/private) was rather isomorphic in this respect”. The authors also present some other thought-provoking ideas, such as “professional networks could be conceptualized as protective umbrellas against unprincipled business practice”, and they emphasize the need to pay attention to young companies that grow too rapidly in the initial stage of their development.

Ji et al. (2018) examined deviant business behaviour in SMEs. According to the authors, two key sources of personal tension are materialism and trust in institutional justice. Materialistic owners of SMEs may engage in deviant behaviour to gain related materialistic benefits. Anger towards institutions can prompt SME owners to participate in everyday-life business deviance because it satisfies the desire for revenge and reduces cognitive abilities to solve business problems. The authors also highlight that individuals with high ethical standards do not attempt to justify their suspicious behaviour in solving ethical dilemmas. Arend (2013) notes that SMEs are, on the one hand, dependent on their good “ethical standing” because they need to survive. They must gain and maintain the trust of their customers, supply chain partners, and local communities. On the other hand, they face the temptation to compromise ethics to survive in a challenging economic environment.

Interesting results are presented by Kirchmayer et al. (2019). According to the authors, the public sector in Slovakia lags behind the private sector in terms of ethical leadership. Private organisations scored significantly higher in the overall level of ethical leadership. In this context, Remišová and Lašáková (2020) state that entrepreneurs tend to resign themselves to a proactive approach to developing business ethics and lack ethical self-reflection in relation to corruption in particular.

Werner (2021) emphasizes that SME owners/managers can engage in ethical activities based on their personal values and beliefs. They may also depart from profit maximization and engage in profit satisfaction due to a strong identification with their social and cultural context. On the
other hand, a study by Islam and Alharthi (2020) suggests that the ethical commitment of top management and the creation of a stimulating ethical climate support overall company performance. For long-term survival, SMEs should start developing strategies and procedures that stimulate ethical values. Through appropriate ethical practices, SMEs can enhance their societal image and build trust among socially conscious and engaged stakeholders.

Conclusion

The article aimed to define significant attributes of business ethics in the segment of small and medium-sized enterprises (SMEs) and compare attitudes within the three most significant business sectors in each Visegrad Group country (V4 country).

Within the research, the scientific question was formulated: *Are there significant differences in the attitudes of SMEs toward business ethics based on the sector in which they operate?* Additionally, four statements were defined to delineate the field of business ethics appropriately.

The results of the empirical research led to a relatively clear conclusion that there are no significant differences in the sphere of business ethics regarding the sectors in which SMEs operate. The approach of SMEs to selected attributes of business ethics is very similar within the sample (the three most significant sectors in each V4 country). Companies consider business ethics important, consider the ethical consequences of their decisions when managing the company, and advocate for rules of ethical business conduct, which gives them a sense of satisfaction.

The research revealed some significant differences in the attitudes of SMEs in Slovakia and the Czech Republic. The service sector in Slovakia significantly agreed more with the statement that ethics in business brings a good feeling (compared to the manufacturing sector). Similarly, the service sector in the Czech Republic significantly agreed more with the statement that their companies advocate rules of ethical behaviour in business (compared to commercial companies). However, these trends cannot be considered significant.

The limitations of this research can be seen in the limited yet representative sample of respondents, as the study focused on V4 countries. It can also be assumed that the worsened international geopolitical situation (war in Ukraine) and the deteriorating economic situation (enormous rise in energy prices, high inflation, and other factors) could have influenced the attitudes of SMEs. We expect these impacts to be manageable, as SMEs predominantly focus on the domestic market, and governments inform SMEs about planned support and compensation well in advance. The results of this research are expected to contribute to the discussion in the field of business ethics in SMEs.

Future research in this area will primarily focus on a more detailed examination of the indicated trends and compare current data with information from a favourable phase of economic development.

References


Z SCORE CALCULATOR. [online] [Retrieved November 31, 2023] Available at: https://www.socscistatistics.com/tests/ztest/default2.aspx