# SECTORAL VIEW ON FINANCIAL MANAGEMENT OF SMES. EMRPIRICAL RESEARCH IN V4 COUNTRIES

Ashigur Rahman<sup>1,a</sup>, and Jaroslav Belas<sup>2,b,\*</sup>

<sup>1</sup>ABC Company Ltd., New Jersey, Kennedy Street 23, United States of America 
<sup>2</sup>University of Unformation Technology and Management in Rzeszow, ul. Sucharskiego 2, 35-225
Rzeszow, Poland

<sup>a</sup>ashiqur12203@gmail.com <sup>b</sup>jbelas@wsiz.edu.pl

\*Corresponding author

Cite as: Rahman, A., Belas, J. (2024). Sectoral view on financial management of SMEs. Empirical research in V4 countries, Ekonomicko-manazerske spektrum, 18(2), 14-23.

Available at: dx.doi.org/10.26552/ems.2024.2.14-23

Received: 4 July 2024; Received in revised form: 8 September 2024; Accepted: 30 October 2024; Available online: 31 December 2024

### **Abstract:**

*Research background*: The importance of small and medium enterprises to the development of economic condition of developed and developing countries are so vital, yet SMEs are extremely vulnerable to default due economic and competitive pressure from the large firm.

*Purpose of the article*: The aim of paper was to define important factors of financial management of SMEs and compare answers of respondent in three the most important sectors in V4 countries.

*Methods:* The empirical research was conducted in June 2022 in the V4 countries. Data collection was carried out by the external agency MNFORCE using the "Computer Assisted Web Interviewing" (CAWI Research Method). The total number of respondents in the sample was 995. The statistical hypothesis was tested through descriptive statistics and Z-score at  $\alpha = 5\%$  significance level.

Findings & Value added: The results of the empirical research confirmed that SMEs in the V4 countries within the sample set of the top three sectors have a relatively positive attitude towards selected aspects of financial management. SMEs in each country presented an understanding of the basic attributes of financial management, a correct perception of financial risk and also the ability to manage financial risks appropriately. At the same time, these firms were relatively positive about the current financial performance of their firms and showed a considerable amount of business optimism. The best results were found in Hungary, followed by Poland, Slovakia and the Czech Republic in last place. Statistically significant differences in firms' attitudes within the most important SME business sectors were found only in Poland. The manufacturing sector was significantly more likely to agree with the statement that SMEs understand the most important aspects of financial management compared to the tourism and trade sector.

**Keywords:** small and medium-sized enterprise; financial management; business sectors; V4 countries

JEL Classification: D22; G23; L26

### 1. Introduction

The importance of small and medium enterprises (SMEs) to the development of economic condition of developed and developing countries are so vital, yet SMEs are extremely vulnerable to default due economic and competitive pressure from the large firm. It is accounted that in most of developing and developed countries about 99% of the businesses are operated under SMEs but in most cases, they are not able to sustain for the long run due to their poor financial management and inability to maintain enough free cash flow to use in the dire financial situation of the firms. A several studies argued that the SMEs are the major drivers for the socioeconomic growth and also it helps to increase gross domestic product as well as the national output of a country (Amoah, 2018; Lewandowska and Stopa, 2019; Belas et al., 2017).

Financial management is a purposeful process of managing and controlling a firm's financial resources and financial operations in order to achieve long-term and short-term financial stability, efficiency of spending and long-term sustainability of the firm in the marketplace.

In the context of financial management of small and medium-sized enterprises, important activities include managing financial risks, measuring and evaluating the firm's financial performance, and deciding on the use of equity and external capital and the most appropriate financing methods for the firm, including borrowing, issuing bonds, repaying existing debts, or using internal financial resources.

The financial management of SMEs has some specific features and challenges compared to the financial management of large companies, such as limited financial resources and limited access to bank financing, dependence on owners, rapid adaptation to change, simple information systems to support financial management, priority focus on cash-flow.

Good financial management is key to the long-term success and sustainability of a company because it helps ensure that the company has sufficient financial resources to fund its operations and growth, while minimizing financial risks that could threaten its existence.

In this paper, we examine the approach to financial management of SMEs in the three most important SME business sectors in the Visegrad Four countries (V4 countries) based on propositions that aptly describe this area.

### 2. Literature review

COVID-19 had a tremendous impact on the profitability of the firms, and which has subsided many business activities and specially SMEs were impacted more than the larger ones. Achim et al. (2022) showed that about 37% of the business activity declined in the context of Romania due to the global pandemic and among that 80% of the SMEs were largely impacted due to less sales. In this paper we would like to shade light in financial management of SMEs in V4 (Czech Republic, Slovakia, Hungary, and Poland) countries by focusing on a couple of main sectors such as manufacturing, services, trade, and tourism industries. Historically, these countries are heavily depended on the manufacturing or services but due to COVID-19, these sectors were significantly affected financially, and many businesses had to close due to lack of sales.

There are many studies in the financial literature highlighted that the failure of SMEs is not only related to the poor business performance or unable to generate enough sales but also it is significantly related to their owner/managers lack financial management skills (De Bruyckere et al., 2020; Cera et al., 2019; Rahman et al., 2017). There are handful of research shows that the owner managers lack of ability to manage credit risk, financial management and also their personality choices have significant impact on the business performance as well as their long term sustainability (Hudakova et al. 2018, Belas et al. 2018, Kljucnikov et al. 2016). It is quite

Sectoral view on financial management of SMEs.

Empirical research in V4 countries
Authors: Ashigur Rahman, Jaroslav Belas

common to see that the SMEs are not able to hire professional financial managers to manage the business, rather mostly done by the owners and hence it poses a risk on the firm long term financial sustainability (Bilan et al., 2017). In this paper the goal is to acquire the knowledge on how owners' managers in different sectors manage their financial risk and what are the most important aspect of long-term financial sustainability of SMEs in Czech Republic, Slovakia, Hungary, and Poland. In that regard:

A study by Karadag (2015) showed that 99.9% of the businesses in Turkey are categorized by SMEs but they face serious survival problems due to lack of proper financial management and to have skilled managers who understand the significance of financial risk. The study highlighted that the main causes of business failures are due limited knowledge of financial planning and access to finance when needed. It was also discussed in the paper that; the SME owners are not emphasizing working capital management for which SMEs are often bound to take loans or borrow money from local lenders with high interest rate. By borrowing with high interest rates SMEs often put the firm under immense credit risk and their propensity to default is significantly higher than the firms those maintains a good working capital management.

Dutescu et al. (2014) examined the importance of financial management of SMEs in tourism industries mainly SMEs operating in the hotel business in Romania. A total number of forty-two owners/mangers of SMEs participated in the survey where they are overwhelming suggested that the lack of profit management is the major issue for their business to sustain in the long run. It was also found that the business success is significantly depended on how the business was funded, it was showed that firms with owners funding are more likely to success as they don't need to pay high bank interest rate. It could be seen that bank high interest rate is a barrier for SMEs to grow and survive.

A similar study by Kengatharan and Suganya (2015) in the context of SMEs in Sri Lanka, those are mainly operated in the tourism industry showed that there is a significant difference between SMEs which can manage their working capital have less financial risk than those are not managing their working capital properly. It was also found that capital structure of the SMEs is extremely important for their survival chances and performance. They have suggested that it is better for the SMEs not to leverage their equity structure because high debt poses high capital costs and that could reduce the chance of long-term survival of SMEs.

A similar study was done by Wolmarans and Meintjes (2015) in South Africa by focusing on SMEs operated in trade, manufacturing and services industry. Their study confirms that SMEs with high propensity of bank finance and inability to manage working capital properly are more prone to default. The study also concludes that there are differences between opinion of owners/mangers in the SMEs in managing financial risk. It could be seen that; owners prefer more to manage the profitability of the business whereas the mangers are more willing to better management of working capital of SMEs.

Virglerova et al. (2016) examined the perception of financial risk of SMEs in the Czech Republic by doing a survey of 1,141 SME owners and managers conducting business in trade, manufacturing and services industries. They study found that about 75% of the SME owners responded that financial risk is the biggest risk of their business and only about 28.5% of the business owners understand how to manage financial risk. This shows that although managers understand the importance of financial risk management, but they are not skilled or trained to manage this risk in their businesses.

A later study was done by Lesakova et al. (2019) in the context of Slovakia those are producing engineering products. This sector is very important sector for the overall Slovak economic structure because they are specialized in tool manufacturing. The study was

conducted among 728 SMEs and most of them are in the small firms with employees around 10-49. The study reveals that SMEs have difficulty in profitability management due to high competition and as such it poses significant financial risk for the firm. They have also presented that SMEs those are operating under a well-trained financial manager performs better in the long run compared to SMEs operated by their owners. This finding is quite significant in understanding the proper training of financial manager in the survival of the SMEs.

Another study by Nunkoo et al. (2020) highlighted that the managerial capacity has a significant impact on the financial risk management of SMEs in the tourism industry of Mauritius. The study was conducted in 384 SMEs operating the tourism industry which is one of the biggest economic drivers of Mauritius. The study reveals that the managerial autonomous financial decision making has a significant positive impact on the financial performance of the SMEs. They have also shown that when a manager is not under pressure from the owners, they tend to make better financial choices and hence it improves financial risk management of the firms. The authors also showed that it is extremely vital for the mangers to be competent in decision making while not being forced to make any choices from the owners and that helps them to survive longer time in the business. They concluded that the skilled financial managers are the key drivers for the SMEs operating the tourism sectors and their success to a long-term performance.

A recent study by Belas et al. (2020) highlighted that the SMEs in the services sectors are significantly different in their financial performance and the opinions between owners' and mangers skills in operating the business. The study conducted in the Czech and Slovak Republic showed that owners are very actively managing their financial risk in Slovakia and on the other hand, owners in the Czech Republic has limited knowledge on financial risk management of the firm. The study further showed that financial risk management is the key to success for the SMEs, however not all SMEs can hire professional financial managers to better manage their business decision making due to lack of resources. The study did find that the owners in both countries agree on the performance of the businesses needs to be evaluated continuously and hence they can find any opportunities for improvements in business profitability.

## 3. Methodology

The aim of paper is to define important factors of financial management of SMEs and compare answers of respondent in three the most important sectors in V4 countries.

The empirical research, which aimed to survey the attitudes of SMEs, was conducted in June 2022 in the V4 countries. Data collection was carried out by the external agency MNFORCE using the "Computer Assisted Web Interviewing" (CAWI Research Method). The questionnaire could be completed by the owner or the top manager of the SME.

In the Czech Republic, the total number of respondents was 347. The structure of SMEs: 45.2% micro enterprises, 30.8% small enterprises and 23.9% medium enterprises. The largest number of firms were engaged in services 138 (39.8%) and manufacturing 72 (20.7%), followed by the following areas: 60 (17.3%) trade, 32 (9.2%) construction, 11 (3.2%) transport, 7 (2.0%) agriculture, 3 (0.9%) tourism, and 24 (6.9%) respondents indicated other business sector.

In the Slovak Republic, the total number of respondents was 322. The structure of respondents in terms of company size was as follows: 51.9% micro enterprises, 26.7% small enterprises and 21.4% medium enterprises. The largest number of firms were in services 129 (40.1%) and trade 79 (24.5%), followed by the following: 42 (13.0%) manufacturing, 37 (11.5%) construction, 7 (2.2%) transport, 3 (0.9%) agriculture, 3 (0.9%) tourism, and 22 (6.9%) respondents indicated other business sector.

Sectoral view on financial management of SMEs.

Empirical research in V4 countries
Authors: Ashigur Rahman, Jaroslav Belas

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 enterprises. The largest number of firms were in tourism 110 (28.9%) and manufacturing 78 (20.5%), followed by the following: 56 (14.7%) trade, 49 (12.8%) services, 31 (8.1%) construction, 13 (3.4%) transport, 17 (4.5%) agriculture, and 27 (7.1%) respondents indicated other business sector.

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 enterprises. The largest number of firms were in tourism 110 (31.6%) and trade 69 (19.8%), followed by the following: 52 (14.9%) services, 34 (9.8%) manufacturing, 23 (6.6%) transport, 19 (5.5%) agriculture, 13 (3.5%) construction, and 29 (8.3%) respondents indicated other business sector.

In this article, we will assess respondents' attitudes according to the three most important business sectors in the V4 countries. In the Czech Republic, these will be the following sectors of the economy: services, manufacturing and trade. In Slovakia, services, trade and manufacturing. In Poland, tourism, manufacturing and trade. In Hungary, tourism, trade and services.

On the basis of previous research and qualitative analysis of the literature, statements have been established that appropriately characterize the importance of business ethics in SME entrepreneurship:

ST1: I understand the most important aspect of a company's financial management.

ST2: I consider the financial risk to be a part of the daily life of a company.

ST3: I can adequately manage financial risks in our company.

ST4: I examine the financial performance of our company positively.

ST5: Our company will survive on the market in the next five years.

Based on the method of expert estimation, we set the following statistical hypotheses:

H1: The average level of agreement with the ST1 statement is above 80% for all V4 counties. There are no statistically significant differences in respondents' positive attitudes by the three most important sectors across the V4 countries when evaluating ST1.

H2: The average level of agreement with the ST2 statement is above 80% for all V4 counties. There are no statistically significant differences in the positive attitudes of respondents by the three most important sectors across the V4 countries when evaluating ST2.

H3: The average level of agreement with the ST3 statement is above 80% for all V4 counties. There are no statistically significant differences in respondents' positive attitudes by the three most important sectors across the V4 countries when assessing ST3.

H4: The average level of agreement with the ST4 statement is above 80% for all V4 counties. There are no statistically significant differences in respondents' positive attitudes by the three most important sectors across the V4 countries when assessing ST4.

H5: The average level of agreement with the ST5 statement is above 80% for all V4 counties. There are no statistically significant differences in respondents' positive attitudes by the three most important sectors across the V4 countries when assessing ST5.

The statistical hypothesis was tested through descriptive statistics and Z-score at  $\alpha = 5\%$  significance level. If the p-value is greater than or equal to 0.05 the null hypothesis is confirmed. If the p-value is less than 0.05 the null hypothesis is rejected. Calculations were made using available software on the internet (Z Score Calculator, 2023). If a p-value less than 0.05 occurs more than 30% of the time, we consider the null hypothesis to be unconfirmed.

### 4. Results and Discussion

The following tables present the results of the research, including the verification of each scientific hypothesis.

Table 1: Results of the ST1 by the most important sectors in the V4 countries

ST1: I understand the most	CR	SR	PL	HU	
important aspect of a company's	S/M/Tr	S/Tr/M	T/M/Tr	T/Tr/S	
financial management.	138/72/60	129/42/79	110/78/56	110/69/52	
1. I completely agree	48/22/17	48/15/34	52/45/32	53/47/30	
2. I agree	67/34/28	62/22/36	52/33/17	47/18/19	
Total 1+2	115/56/45	110/37/70	104/78/49	100/65/49	
Percentage of positive responses	83/78/ <b>75</b>	85/88/89	94/100/87	91/94/94	
Average value in %	79	87	94	93	

Note: Czech Republic - CR; Slovak Republic - SR; Poland - PL; Hungary - HU; services - S; trade - Tr;

manufacturing - M; tourism - T

Source: own research

Table 2: Statistical calculations of ST1 by the most important sectors in the V4 countries

Z score: p-value				
CR: S/M; S/Tr; M/Tr	0.3271	0.1707	0.7114	
SR: S/M; S/Tr; M/Tr	0.6455	0.4965	0.9362	
PL: T/M; T/Tr; M/Tr	0.0357	0.1096	0.0013	
HU: T/Tr; T/S; Tr/S	0.4237	0.4654	0.9920	

Source: own research

The results of the empirical research showed that the percentage of positive responses to the ST1 statement varies from 75% (the level of agreement with the ST1 statement in the trade sector in the Czech Republic) to 100% (the level of agreement with the ST1 statement in the manufacturing sector in Poland). The average level of agreement with the statement varies from 79% (Czech Republic) to 94% (Poland) in the V4 countries. The average agreement rate for all V4 countries is 88%. Statistically significant differences were found only in Poland. The manufacturing sector was significantly more likely to agree with the statement that SMEs understand the most important aspects of financial management compared to the tourism and trade sector. The number of p-values lower than 0.05 is at 17%. H1 was confirmed.

Table 3: Results of the ST2 by the most important sectors in the V4 countries

ST2: I consider the financial risk to	CR	SR	PL	HU
be a part of the daily life of a	S/M/Tr	S/Tr/M	T/M/Tr	T/Tr/S
company.	138/72/60	129/42/79	110/78/56	110/69/52
1. I completely agree	35/18/21	44/12/29	42/38/25	44/32/30
2. I agree	70/45/26	68/27/38	54/32/21	53/32/17
Total 1+2	105/63/47	112/39/67	96/70/46	97/64/47
Percentage of positive responses	<b>76</b> /87/78	87/ <b>93</b> /85	87/90/82	88/ <b>93/</b> 90
Average value in %	80	88	86	90

Source: own research

Table 4: Statistical calculations of ST2 by the most important sectors in the V4 countries

Z score: p-value				
CR: S/M; S/Tr; M/Tr	0.0500	0.7279	0.1585	
SR: S/M; S/Tr; M/Tr	0.2891	0.6818	0.2005	
PL: T/M; T/Tr; M/Tr	0.6031	0.3735	0.2041	
HU: T/Tr; T/S; Tr/S	0.3222	0.6745	0.6384	

Source: own research

The percentage of positive responses to statement ST1 is between 76% (the level of agreement with statement ST2 in the service sector in the Czech Republic) and 93% (the level of agreement with statement ST2 in the trade sector in Slovakia and Hungary). The average

level of agreement with the statement ranges from 80% (Czech Republic) to 90% (Hungary) in the V4 countries. The average agreement rate for all V4 countries is 86%. Statistically significant differences were indicated only in the Czech Republic (p-value has a borderline value). The manufacturing sector was significantly more likely to agree with the statement that SMEs perceive financial risk as an inevitable part of doing business compared to the service sector. H2 was confirmed.

Table 5: Results of the ST3 by the most important sectors in the V4 countries

ST3: I can adequately manage	CR	SR	PL	HU
financial risks in our company.	S/M/Tr	S/Tr/M	T/M/Tr	T/Tr/S
	138/72/60	129/42/79	110/78/56	110/69/52
1. I completely agree	32/16/11	25/12/25	38/30/24	50/35/28
2. I agree	71/41/33	81/22/40	56/40/21	49/31/18
Total 1+2	103/57/44	106/34/65	94/70/45	99/66/46
Percentage of positive responses	<b>75</b> /79/73	82/81/82	85/90/80	90/ <b>96</b> /88
Average value in %	76	82	85	91

Source: own research

Table 6: Statistical calculations of ST3 by the most important sectors in the V4 countries

Z score: p-value				
CR: S/M; S/Tr; M/Tr	0.4654	0.8493	0.4295	
SR: S/M; S/Tr; M/Tr	0.8572	0.9840	0.8572	
PL: T/M; T/Tr; M/Tr	0.3843	0.4009	0.1236	
HU: T/Tr; T/S; Tr/S	0.1707	0.7642	0.1362	

Source: own research

The results of the empirical research showed that the percentage of positive responses to the ST3 statement varies from 75% (the level of agreement with the ST3 statement in the trade sector in the Czech Republic) to 96% (the level of agreement with the ST3 statement in the trade sector in Hungary). The average level of agreement with the statement ranges from 76% (Czech Republic) to 91% (Hungary) in the V4 countries. The average agreement rate for all V4 countries is 83%. No statistically significant differences were found in any of the V4 countries. H3 was confirmed.

Table 7: Results of the ST4 by the most important sectors in the V4 countries

2m4 7 4 3 4 4 1	an.	~ n		
ST4: I examine the financial	CR	SR	PL	HU
performance of our company	S/M/Tr	S/Tr/M	T/M/Tr	T/Tr/S
positively.	138/72/60	129/42/79	110/78/56	110/69/52
1. I completely agree	28/22/12	27/8/22	33/34/24	45/34/29
2. I agree	78/35/33	72/28/36	59/40/23	45/27/18
Total 1+2	106/57/45	99/36/58	92/74/47	90/61/47
Percentage of positive responses	77/79/ <b>75</b>	77/86/73	84/ <b>95</b> /84	82/88/90
Average value in %	77	79	88	87

Source: own research

Table 8: Statistical calculations of ST4 by the most important sectors in the V4 countries

Z score: p-value				
CR: S/M; S/Tr; M/Tr	0.6965	0.7795	0.5687	
SR: S/M; S/Tr; M/Tr	0.2150	0.5892	0.1211	
PL: T/M; T/Tr; M/Tr	0.0183	0.9601	0.0349	
HU: T/Tr; T/S; Tr/S	0.2380	0.1585	0.7263	

Source: own research

The results of the empirical research showed that the percentage of positive responses to the ST4 statement varies from 77% (the level of agreement with the ST4 statement in the manufacturing sector in the Czech Republic) to 88% (the level of agreement with the ST4 statement in the manufacturing sector in Hungary). The average level of agreement with the

statement ranges from 77% (Czech Republic) to 88% (Poland) in the V4 countries. The average agreement rate for all V4 countries is 83%. Statistically significant differences were found in Poland, where the manufacturing sector was significantly more likely to agree with the statement that they perceive the financial performance of their firms positively compared to the trade and tourism sector. The number of p-values below 0.05 is at 17%. H4 was confirmed.

Table 9: Results of the ST5 by the most important sectors in the V4 countries

ST5: Our company will survive on	CR	SR	PL	HU
the market in the next five years.	S/M/Tr	S/Tr/M	T/M/Tr	T/Tr/S
•	138/72/60	129/42/79	110/78/56	110/69/52
1. I completely agree	44/24/19	40/14/23	37/39/25	52/41/25
2. I agree	65/36/22	52/20/38	54/34/18	43/19/23
Total 1+2	109/59/41	92/34/61	91/73/43	95/60/48
Percentage of positive responses	79/82/ <b>68</b>	71/81/77	83/ <b>94</b> /77	86/87/92
Average value in %	76	76	85	88

Source: own research

Table 10: Statistical calculations of ST5 by the most important sectors in the V4 countries

Z score: p-value				
CR: S/M; S/Tr; M/Tr	0.6101	0.1074	0.0688	
SR: S/M; S/Tr; M/Tr	0.2187	0.3472	0.6312	
PL: T/M; T/Tr; M/Tr	0.0278	0.3576	0.0050	
HU: T/Tr; T/S; Tr/S	0.9124	0.2713	0.3472	

Source: own research

The percentage of positive responses to ST5 varies from 68% (the level of agreement with ST5 in the trade sector in the Czech Republic) to 94% (the level of agreement with ST5 in the manufacturing sector in Poland). The average level of agreement with the statement ranges from 76% (Czech Republic and Slovakia) to 88% (Hungary) in the V4 countries. The average agreement rate for all V4 countries is 81%. Statistically significant differences were found in Poland, where the manufacturing sector was significantly more likely to agree with the statement that their company will survive the next five years compared to the trade and tourism sector. The number of p-values below 0.05 is at 17%. H5 was confirmed.

The results of the empirical research confirmed that the positive attitude towards the issue of financial management of the firm is above 80% in the V4 countries within the sample set of the three most important SME business sectors.

The best results were measured in Hungary, where the average value of positive responses to ST1 to ST5 was 90%, followed by Poland (88%), Slovakia (82%) and the last place was the Czech Republic (78%).

Business owners and managers declared a relatively high level of optimism in area of financial management. In the Czech and Slovak Republics, firms' optimism is lower. In Poland and Hungary, it reaches extreme values. The highest values were found in the manufacturing sector. Future research could focus on verifying these attitudes.

SMEs have shown in this empirical research that they have positive attitudes towards selected aspects of financial management. There is no doubt that the perception of financial management as an essential part of the daily managerial activities in a firm determines the increased interest in the use of financial risk management techniques. The intensity of positive attitudes of SMEs in the V4 countries can be the subject of optimistic considerations in this area and presents positive trends in the development and sustainability of these firms.

SMEs also presented a high level of trust in their ability to manage financial risks. Similar to the H1 results, we found that the results in the Czech and Slovak Republics were less optimistic than in Poland and Hungary.

Sectoral view on financial management of SMEs.

Empirical research in V4 countries
Authors: Ashigur Rahman, Jaroslav Belas

SMEs demonstrated a conservative attitude when assessing the financial performance of their own firm. The rate of positive responses is lower than for previous responses. It is clear that the day-to-day business activities and the business environment in which SMEs operate determines their attitude towards this area.

SMEs' belief in the future of their own company was also assessed more carefully in all V4 countries. The best results were presented by Polish SMEs operating in manufacturing. In this sector, 94% agreed with the statement that their company will survive on the market in the next five years.

The presented results are different compared to the findings by Hudakova et al. (2018), Belas et al. (2018), Kljucnikov et al. (2016), Bilan et al. (2017), and Karadag (2015). On the other hand, the results of our empirical research follow and complement the conclusions of the study by Virglerova et al. (2016).

### 5. Conclusions

The aim of paper was to define important factors of financial management of SMEs and compare answers of respondent in three the most important sectors in V4 countries. The empirical research yielded some interesting findings. The results of the empirical research confirmed that SMEs in the V4 countries within the sample set of the three most important sectors have a relatively positive attitude towards selected aspects of financial management. SMEs in each country presented an understanding of the basic attributes of financial management, a correct perception of financial risk and also the ability to manage financial risks appropriately. At the same time, these firms were relatively positive about the current financial performance of their firms and showed a considerable amount of business optimism.

The best results were found in Hungary, followed by Poland, Slovakia and the Czech Republic in last place. Statistically significant differences in firms' attitudes within the most important SME business sectors were found only in Poland. The manufacturing sector was significantly more likely to agree with the statement that SMEs understand the most important aspects of financial management compared to the tourism and trade sector. At the same time, the manufacturing sector agreed significantly more with the statement that they perceive the financial performance of their firms positively compared to the trade and tourism sector. The Polish manufacturing sector was also significantly more likely to agree with the statement that their firm will survive the next five years compared to the trade and tourism sector.

This research has some limitations. The empirical research was conducted in the V4 region. Therefore, future research would need to expand the research area to more European countries. However, it can be assumed that the results of this research will contribute to a rather extensive discussion in this area.

**Author contributions:** All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

**Funding:** This research received no external funding.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author.

**Conflicts of Interest:** The authors declare no conflict of interest.

#### References

- Achim, M. V., Safta, I. L., Vaidean V. L., Mureşan, G. M. & Borlea. N. S. (2022). The impact of covid-19 on financial management: evidence from Romania. *Economic Research-Ekonomska Istrazzivanja*, 35(1), 1807-1832.
- Amoah, K. S. (2018). The Role of Small and Medium Enterprises (SMEs) to Employment in Ghana. *International Journal of Business and Economics Research*, 7(5).
- Belas, J., Amoah, J., Petrakova, Z., Kliuchnikava, Y. & Bilan, Y. (2020). Selected Factors of SMEs Management in the Service Sector. *Journal of Tourism and Services*, 11(21), 129-146.
- Belas, J., Rahman, A., & Rahman. T. (2017). Financial Constraints on Innovative SMEs: Empirical evidence from the visegrad countries. *Engineering Economics*, 28(5), 552-563.
- Belas, J., Smrcka, L., Gavurova, B., & Dvorsky, J. (2018). The Impact of Social and Economic Factors in the Credit Risk Management of SME. *Technological and Economic Development of Economy*, 24(3), 1215-1230.
- Bilan, Y., Gavurova, B., Stanislaw, G., & Tkacova, A. (2017). The Composite Coincident Indicator (CCI) for Business Cycles. *Acta Polytechnica Hungarica*, 14(7), 71-90.
- Cera, G. Meco, M., Cera, E., & Maloku, S. (2019). The effect of institutional constraints and business network on trust in government: an institutional perspective. *Administratie si Management Public*, (33), 6-19.
- De Bruyckere, S., Verplancke, F., Everaert, P., Sarens, G., & Coppens, C. (2020). The Importance of Mutual Understanding Between External Accountants and Owner–Managers of SMEs. *Australian Accounting Review*, 30(1), 4-21.
- Dutescu, A., Popa, A. F., & Ponorica, A. G. (2014). Sustainability of the Tourism Industry, Based on Financial Key Performance Indicators. *Amfiteatru Economics*, *16*, 1048-1062.
- Hudakova, M., Masar, M., Luskova, M., & Patak M. R. (2018). The Dependence of Perceived Business Risks on the Size of SMEs. *Journal of Competitiveness*, 10(4), 54-69.
- Karadag, H. (2015). Financial management challenges in Small and Medium-Sized enterprises: A strategic management approach. *Emerging Markets Journal*, *5*(1), 35-47.
- Kengatharan, L. & Suganya, J. (2015). Financial management practices and performance of SMEs in Srilanka: evidence from Jaffna district. *International Journal of Accounting and Business Finance*, 61(1), 61-72.
- Kljucnikov, A., Belas, J., & Smrcka, L. (2016). The role of risk-taking and competitive aggressiveness in management of SMEs. *Polish Journal of Management Studies*, 14(1), 129-139.
- Lesakova, L., Ondrusova, A. & Vinczeova, M. (2019). Factors determining profitability of SMEs in selected industry of mechanical engineering in the Slovak Republic-The empirical study. *E+M Ekonomie a Management*, 22(2), 144-160.
- Lewandowska, A., & Stopa, M. (2019). Do SME's innovation strategies influence their effectiveness of innovation? Some evidence from the case of Podkarpackie as peripheral region in Poland. *Equilibrium*. *Quarterly Journal of Economics and Economic Policy*, 14(3), 521-536.
- Nunkoo, R., Teeroovengadum, V., Seetanahm B. & Pooloo A. (2020). Determinants of Tourism small and medium enterprises financial performance. *Development Southern Africa*, *37*(5), 809-824.
- Rahman, A., Belas, J., Kliestik, T., & Tyll, L. (2017). Collateral requirements for SME loans: empirical evidence from the Visegrad countries. *Journal of Business Economics and Management*, 18(4), 650-675.
- Virglerova, Z., Kozubikova L. & Vojtovic, S. (2016). Influence of selected factor on financial risk management in SMEs in the Czech Republic. *Montenegrin Journal of Economics*, 12(1), 21-36.
- Wolmarans, H. & Meintjes, Q. (2015). Financial management practices in successful small and medium enterprises (SMEs). *The South African Journal of Entrepreneurship and Small Business Management*, 7(1), 88-116.
- Z Score Calculator. (2023). Social Science Statistics. https://www.socscistatistics.com/tests/ztest/zscorecalculator.aspx