

“Financial risk management in the V4 Countries’ SMEs segment”

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FINANCIAL RISK MANAGEMENT IN THE V4 COUNTRIES' SMES SEGMENT

Abstract

The paper examines entrepreneurs' attitudes towards chosen problems of managing financial risk in the V4 countries' small and medium-sized enterprises. Financial risk has a significant effect on SMEs' operations and their sustainability in the market. Entrepreneurs' attitudes were quantified in terms of the defined aim, and a comparison of the differences in the intensity of these perceptions was made. An empirical investigation was accomplished in the V4 countries via an online questionnaire in 2020 (before the onset of the corona-crisis). A total of 1,585 valid questionnaires were obtained. The results were compared using Chi-squared and Z-score. Entrepreneurs in all V4 countries perceive financial risk correctly as an everyday part of their business activities. Their perceptions are very similar in all V4 countries. SMEs in the V4 countries evaluated the financial performance of their companies quite positively. Entrepreneurs in this research have a relatively high opinion of their financial risk management knowledge, which they presented accordingly. The research also revealed that Hungarian entrepreneurs, instead of those from the other three V4 countries, have a higher opinion of their financial risk capabilities. They highly evaluated their financial risk management knowledge and showed a higher self-confidence in managing financial risk.

Keywords

Czech Republic, entrepreneurs' attitudes, financial risk, Hungary, Poland, Slovakia, SMEs

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INTRODUCTION

SMEs play an important role in every market economy. They constitute a segment that contributes to eliminating most countries' economic and social challenges (Rozsa & Kmecová, 2020; Ključnikov et al., 2019; Koisoiva et al., 2017; Neagu, 2016). However, SMEs are generally considered to operate in complex systems with many independent entities (Salikin et al., 2014; Kwaku Amoah, 2018). Recently, complexity and uncertainty in enterprises' business environments, including that of SMEs, have resulted in increased exposure to risk. The importance of SMEs' contribution to the European economy cannot be overemphasized as this sector has been described as the catalyst to socio-economic development, fostering innovation and flexibility, creation of new jobs, employment, and increasing competitiveness, among others (Neagu, 2016; Korcsmáros & Šimova, 2018; Lewandowska & Stopa, 2019; Čepel et al., 2019).

There is a growing interest in SMEs and their operation; however, extant literature remains scanty on risk management in this subject area, and research is not univocal on implementations, methods, and practices (Ferreira de Araújo Lima et al., 2020) either. SMEs are exposed to four basic types of risks: operational, financial, strategic, and hazardous or pure risk (Ekwere, 2016; Písar & Bilková, 2019). Financial risk, however, occurs in different subtypes or forms such as capital risk, investment risk, market risk, interest risk, currency risk, and credit risk (Mutezo, 2013).

Endogenous and exogenous factors mediate the exposure of an SME to risks and possible failure, with a key challenge to ensure long-term viability, namely to foster the firms' ability to handle its financial risks (Domańska-Szaruga, 2020; Olah et al., 2019; Ferreira de Araújo Lima et al., 2020; Rahman & Zbrankova, 2019; Khan et al., 2019). The growth and development of SMEs partly depend on how financial risk management is well-practiced in the organization (Belas et al., 2015b; Dobrovič et al., 2019; Belas et al., 2020), as it has been identified, the poor capital structure of SMEs is a major reason for their exposure to financial risks (Zhao & Zeng, 2014). With the business expansion and active decision-making, the cost of acquiring new technologies, processes, and supplies is the largest source of financial risk (Ślusarczyk & Grondys, 2019).

Important factors constituting financial risks for SMEs will be examined in this article. The financial risk was defined as a decrease in a firm's financial performance due to external and internal factors, e.g., lack of loans, interest rate growth, exchange rate risks, etc. The paper compares the situation in the Visegrad group (V4) countries (Czech Republic, Slovakia, Poland, and Hungary) and evaluates the importance of SMEs' financial risk management in these countries. The V4 Group forms an important unit in the European economic system and SMEs are their main economic drivers. SMEs provide about 67% of total employment in the Czech Republic, 72% in Slovakia, 68% in Poland, 69% in Hungary, and 65% in Serbia (Olah et al., 2019).

This paper contributes to the body of knowledge in the sphere of financial risk management, especially in the context of the Visegrad group countries.

The remainder of the paper is structured as follows: section 1 describes the background of this study. Section 2 presents the theoretical/literature background on financial risk management. Section 3 introduces the research design and sampling size. Section 4 discusses the main findings. The study is concluded in the final section with recommendations for future research.

1. LITERATURE REVIEW

1.1. Adoption of financial risk

Financial risk is complete, as all types of business risks eventually evolve into financial risks.

“Financial risk refers to the possibility that a business's cash flow does not suffice to pay creditors and fulfill other financial responsibilities” (Guzman, 2015). The different forms of financial risks an SME may be exposed to include credit risk, market risk, and liquidity risk. Each risk may be further considered to comprise other forms of risks. For instance, credit risk may comprise default risk, settlement risk, sovereign risk, model risk, and other risks (Salikin et al., 2014; Hudáková & Dvorský, 2018). According to Zhao and Zheng (2014), financial risk characteristics include objectivity, uncertainty, comprehensiveness, and duality. Objectivity refers to the fact that financial risk is present anytime, anywhere. It is thus unavoidable, cannot be transferred, or eliminated by one's will.

Uncertainty indicates that financial risk occurs only at a certain extent of time or stage and one cannot estimate it in advance. Therefore, enterprise managers are required to constantly bolster their awareness of risk and improve financial management to minimize the possibility of risk occurrence and mitigate its harmful effects. Considering comprehensiveness, financial risk is present in all enterprise financial management areas, including the raising, use, and distribution of capital. As per Hudakova et al. (2018), the highest intensity of SMEs' risk sources may be unpaid receivables, inability to pay liability, company debt, and small commercial profits. Managers are thus required to fully focus on all aspects of their operation, identify risks, and take effective arrangements to control the risk repercussion. Thus, effective risk management reduces the risk of operations (Emerling & Wojcik-Jurkiewicz, 2018). When managers do not frequently evaluate the risks, the most likely negative influence of such uncertainty is the resultant threat of loss (Zhao & Zheng, 2014).

Finally, duality explores the co-existence of loss and benefits. Corporate earnings and risk are in correlation, and risk is necessary for enterprises to obtain good profits. Hence, there is a positive relationship between the returns and risk of an enterprise. The greater the income, the greater the risk, while the smaller the returns, the smaller the risk. However, profits tend to be influenced by the complexity of enterprises' operating conditions, financial strategy, and technology innovation, among other factors. At the same time, an enterprise will be affected by the impact of its financial risk prevention strategy. Durica et al. (2019) introduces methods and principle of how to eliminate financial and corporate risks related to business failure, which are also confirmed by the research of Klietnik et al. (2018). Therefore, the more comprehensive the strength of an enterprise is, the more earnings they make. Hence, enterprises should correctly handle the relationship between income and risk, using financial risk management as a tool to increase the overall profitability of the enterprise.

Financial risk needs to be evaluated in terms of its effect on the enterprise, to make successful financial risk management decision since the risk is deemed an integral part of business operations (Oláh et al., 2019). Evaluating the impact of financial risk on small and medium-sized enterprises is of great value. The failure to regularly assess financial risk performance can result in the total collapse of an enterprise (Meyer & De Jongh, 2018; Oláh et al., 2019; Androniceanu et al., 2019). To take advantage of market opportunities, increase productivity, and avoid financial risk as much as possible, firms are encouraged to consider highly qualified, business literate manager, can manage enterprises using innovative knowledge-based systems (Mishchuk et al., 2016), although hiring and retention of skilled managers can be connected with some challenges (Bilan et al., 2020).

Dvorský et al. (2019) conducted a case study on the perception of economic risks in 895 SMEs in the Czech and Slovak Republics. Their results showed that the gender of entrepreneur and size of enterprises between Slovak and Czech entrepreneurs is a significant factor in evaluating the sources of economic risk, as is the development of the tax and insurance burden; weak availability of

the financial resources (loans, foundations); development of the interest rates; growing prices of all types of energy.

The long-term effect of financial risk on SMEs includes financial distress and bankruptcy; therefore, proper management is required to minimize this risk with appropriate investigations of factors influencing potential bankruptcy (Kovacova et al., 2019). The role that financial risk plays in SMEs has been considered essential. In SMEs, the creation of financial policies is normally the responsibility of the owners and the managers (Kozubíková et al., 2017). Thus, the adoption of financial risk management principles by SMEs reduces the potential for risks, helps the firm to compete in the industry against others, mitigates the chances of possible losses, and ensures long-term survival and sustainability of the firm (Ferreira de Araújo Lima et al., 2020; Klietnik et al., 2020; Mentel & Brożyna, 2015; Tamulevičienė & Androniceanu, 2020; Anyakoha, 2019). Therefore, the foregoing indicates that the growth and development of SMEs partly depends on how well financial risk management is practiced in the enterprise, and how well the funds or money of the organization are invested.

Research conducted by Terungwa (2012) emphasizes that SMEs have evolved from being financed by informal sectors, with most of the capital for the firm's operations being financed by the owners/managers. Currently, SMEs obtain support from the formal sector of the economy. This evolution has, therefore, changed the financial risk management practices of SMEs with an increasing focus on minimizing risk and optimizing resources (Halasi et al., 2019).

1.2. Management of financial risk in SMEs

Stanton (2012) defines risk management as a process by which an organization identifies and analyzes threats, examines alternatives and mitigates the threats before they hinder activities or processes of the said organization for improved financial performance. Risk management is one of the most important internal processes, not only in large companies but also in SMEs. Identifying the source of risk can be crucial in all companies. Without risk, there would be no motivation

to conduct business (Olah et al., 2019). “Financial risk management is a process of dealing with the uncertainties resulting from financial markets. It involves assessing the financial risks organizations face and developing management strategies consistent with internal priorities and policies” (Ejdys et al., 2019; Horcher, 2011; Malz, 2011).

Many SMEs do not apply risk management practices due to their limited resources, even though competent risk management reduces the risk of insufficient profit. Very often, SME owners do not pay attention to the implementation and development of risk management strategies and demonstrate an informal approach to their management, which significantly affects the level of generated profit (Ślusarczyk & Grondys, 2019). Hence, the approach SMEs adopted towards risk management is thus dependent on their attitude to sustainable development. At the same time, during the periods of company growth, the number of internal processes that need to be reorganized and adapted increases, so it is important for managers not to forget about tracking down payment delays. The moment the liquidity level reaches a critically low level, it may be too late to adjust the terms of payments. One of the main problems is the lack of financial risk management specialists (a professional in this matter) in the V4 countries, and company owners are forced to be responsible for managing the risks themselves (Virglerova, 2018).

Financial risk management (FRM) is a method of creating economic value in a firm. SMEs must create or adopt a risk management strategy and methodology. Similarly, to larger organizations, they lack the resources to react quickly to internal and external threats, and their vulnerability to the economic turbulence on the market is particularly significant. Interestingly, they play a more significant role than larger firms in creating workplaces and stabilizing the economy (Olah et al., 2019). Dvorský et al. (2020) add that the aspects of strategic management such as competitiveness and strategic risk management are important for SMEs’ stability.

Kim and Vonortas (2014) suggest a significant need for the adoption of financial risk management in SMEs, which is likely to reduce their chances of fading out in operations, and rather supports their survival. The authors examined ten European

countries: Croatia, the Czech Republic, Denmark, France, Germany, Greece, Italy, Portugal, Sweden, and the UK regarding risk management and recommended that financial risk management is one that requires effective management practices of SME managers. Modern-day risk management systems must be flexible and dynamic and must have sufficient ability to adapt rapidly to a quickly changing environment (Olah et al., 2019; N. Meyer & D. Meyer, 2019).

SMEs operate in very competitive markets, which require accurate investment decision mechanisms (Kozubíková et al., 2017). They are influenced greatly by financial relations with market infrastructure (Belás et al., 2015a). Reducing uncertainty and strengthening duality significantly reduces financial risk. The ability of SME managers to conduct accurate and comprehensive market research reduces financial decision-making errors, minimizing possible financial risks (Zhao & Zeng, 2014).

A better assessment of the macroeconomic environment, internal control mechanisms, a healthy capital structure, the enhancing of risk consciousness, and mitigation mechanisms ultimately ensure the long-term viability and sustainability of small and medium-sized enterprises. Greasley et al. (2019) add that the still-growing stream of innovative suppliers also plays a significant role. Consequently, since good financial governance is a requirement for assessing bank credit, SMEs can attract credits from larger financial institutions in case of well-managed finances (Irwin & Scott, 2010).

2. AIMS

This paper aimed to present and quantify entrepreneurs’ attitudes towards the defined financial risk factors and discover differences between the V4 countries.

3. METHOD AND HYPOTHESES

An empirical investigation was carried out in the SME segment between October 2019 and April 2020 in the V4 countries (Czechia, Slovak Republic, Poland, and Hungary) via an online questionnaire.

Using the method of random sampling, the following selection was made: 8,250 enterprises in the Czech Republic, 10,100 enterprises in Slovakia, 7,680 enterprises in Poland, and 8,750 enterprises in Hungary. The Cribis database was used to select enterprises in the Czech Republic and Slovakia, the Central Statistical Office of Poland database in Poland, and the Budapest Chamber of Commerce and Industry database in Hungary. The average response rate was 5.5% in Czechia, 3.8% in Slovakia, 4.7% in Poland, and 4.6% in Hungary.

The total number of questionnaires received was 454 in Czechia, 368 in Slovakia, 364 in Poland, and 399 in Hungary. Business owners or top managers represented the respondents completing the questionnaires: 354 owners and 100 managers in Czechia, 285 owners and 83 top managers in Slovakia, 251 business owners and 113 managers in Poland, and 272 owners and 127 managers in Hungary. A short test revealed that the business owners' and managers' attitudes were very similar; therefore, they will be referred to as entrepreneurs from now on.

In the Czech Republic, the respondents' structure was as follows: the largest number of respondents was micro-enterprises, which employ from 0 to 9 employees. Their share in the total number of respondents was 63.88%. They were followed by small enterprises employing from 10 to 49 employees with a total share of 23.57% and the smallest number of respondents were medium-sized enterprises employing from 50 to 149 employees (12.55%). In terms of the length of business, 73.79% of respondents reported working in the business sector for more than 10 years; the remaining companies have been in business for less than 10 years. In Slovakia, most respondents who participated in the research were micro-enterprises (58.69%), followed by small enterprises (28.80%) and medium-sized enterprises (12.5%). In Slovakia, companies operating in the business sector over 10 years predominated among the respondents (71.47%). In Poland, the sample of respondents was mostly covered by micro-enterprises (78.85%). In terms of business length, companies doing business for more than 10 years predominated (54.67%). In Hungary, the structure of respondents was as follows: the largest number of respondents were micro-enterprises (67.17%), followed by small enterprises (18.29%) and medium-sized enterprises

(14.54%). Again, companies doing business for more than 10 years predominated (63.16%).

The aim was to secure answers from a minimum of 350 respondents in each country.

The paper examines entrepreneurs' attitudes towards the following statements:

- ST1: I consider financial risk as part of every-day business.
- ST2: I evaluate the financial performance of our (my) company positively.
- ST3: I understand the most crucial aspect of financial risk.
- ST4: I can adequately manage the financial risk in my (our) company.

Entrepreneurs evaluated their attitudes with the help of a five-point Likert scale.

Based on the results of many years of research in the SME segment, the following statistical hypotheses were formulated:

- H1: Over 70% of the entire Visegrad group countries' entrepreneurs fully agree with the statement coded as ST1.*
- H1a: Here it is supposed that such a positive attitude of Czech entrepreneurs can be somewhat similar to the attitude revealed by their colleagues in other countries of the V4 group.*
- H2: Over 70% of the surveyed V4 countries' entrepreneurs agree with the statement ST2.*
- H2a: Here are reasons to believe that such positive opinions of Czech entrepreneurs are much alike with businesspeople's attitudes other V4 countries.*
- H3: Over 70% of the surveyed business persons in all the V4 members confirm they agree with ST3.*
- H3a: Here, too, it can be confirmed that the positive views of Czech entrepreneurs are over-*

all the same as those of their counterparts in other V4 countries.

H4: Almost three-quarters of all the surveyed entrepreneurs within the V4 countries confirm their agreement with the statement ST4.

H4a: Positive attitude of the entrepreneurs in the Czech Republic is rather close to the attitude revealed by their colleagues in three other V4 countries.

This paper's results stem from the already classical research methods, namely descriptive statistics, Chi-squared, and Z-score (at 5% significance level). More specifically, Chi-squared was used to quantify the differences in the responses overall. Then, Z-score was applied to calculate the differences in the positive attitudes among the entrepreneurs in question. Finally, statistically significant differences have been calculated with the help of a free calculator available online (see www.socscistatistics.com).

4. RESULTS

The research results and their statistic parameters are listed in Tables 1-4.

The agreement rate for ST1 ranges from 77.53% (Czech Republic: the highest agreement rate) to

70.33% (Poland: the lowest agreement rate). The average agreement rate for ST1 was 74.54%.

Using the Chi-squared method, it was determined that the overall structure of responses from the Czech entrepreneurs differs from the attitudes of the Slovak, Polish, and Hungarian entrepreneurs (p -value = 0.0004/0.0043/<0.0001).

The Z-score testing values validated that Czech entrepreneurs' positive attitudes are similar to those of Slovak and Hungarian entrepreneurs, except between Czech and Polish entrepreneurs' attitudes. Czech entrepreneurs consented to the ST1 statement on a much higher level.

According to statistical data, based on scientific research results, one can state that *H1* was confirmed. The results did not confirm the validity of the statistical hypothesis *H1a*.

The average rate of positively evaluating own company's financial performance was 66.90%. Hungarian entrepreneurs gave the highest positive evaluation of their own companies' financial performance, while Polish entrepreneurs the lowest.

Significant differences were discovered (except for Slovak and Polish attitudes).

Table 1. Evaluation of financial risk in the V4 countries

Source: Own research.

ST1: I consider financial risk as part of everyday business	Czech Republic (CR) 454	Slovakia (SR) 368	Poland (PL) 364	Hungary (HU) 399	Z-score/p-value CR/SR CR/PL CR/HU SR/PL SR/HU PL/HU
1. Strongly agree	173	92	95	82	0.6892
2. Agree	179	189	161	213	0.0193
1+2 together: %/number	77.53/352	76.36/281	70.33/256	73.93/295	0.2187
3. Neither agree nor disagree	69	62	68	73	0.0658
4. Disagree	23	22	31	26	0.4354
5. Strongly disagree	10	3	9	5	0.2670
Chi-squared/p-value: CR/SR = 20.422/0.0004 CR/PL = 15.181/0.0043 CR/HU = 33.982/<0.0001 SR/PL = 7.072/0.1321 SR/HU = 2.488/0.6467 PL/HU = 8.356/0.0794					

Table 2. Evaluation of own company's financial performance in the V4 countries

Source: Own research.

ST2: I evaluate the financial performance of our (my) company positively	Czech Republic (CR) 454	Slovakia (SR) 368	Poland (PL) 364	Hungary (HU) 399	Z-score/p-value
					CR/SR CR/PL CR/HU SR/PL SR/HU PL/HU
1. Strongly agree	105	64	78	87	0.2801
2. Agree	200	170	150	209	0.1738
1+2 together: %/number	67.18/305	63.59/234	62.64/228	74.19/296	0.0251
3. Neither agree nor disagree	103	76	70	77	0.7872
4. Disagree	31	51	46	22	0.0015
5. Strongly disagree	15	7	20	4	0.0006
Chi-squared/p-value: CR/SR = 15.410/0.0039 CR/PL = 11.292/0.0235 CR/HU = 10.033/0.0399 SR/PL = 9.3723/0.0524 SR/HU = 18.639/0.0009 PL/HU = 28.111/<0.0001					

The research revealed differences in the attitudes of entrepreneurs. Hungarian entrepreneurs valued their own companies' financial performance much higher than their Czech, Slovak, and Polish counterparts.

Hence, in line with the data presented above, based on scientific research results, one can state that *H2* was not confirmed. The results did not confirm the validity of the statistical hypothesis *H2a*.

Entrepreneurs in this research had a relatively high opinion of their knowledge of managing financial risk. The Hungarian entrepreneurs ranked the highest (84.21%), while the Polish entrepreneurs ranked the lowest (70.60%). The average agreement rate was 76.03%.

The research revealed differences in the attitudes of entrepreneurs. It also showed that the Hungarian entrepreneurs, compared to their peers from the other V4 countries, had a higher level of consent

Table 3. Evaluation of financial risk management knowledge in the V4 countries

Source: Own research.

ST3: I understand the most crucial aspect of financial risk	Czech Republic (CR) 454	Slovakia (SR) 368	Poland (PL) 364	Hungary (HU) 399	Z-score/p-value
					CR/SR CR/PL CR/HU SR/PL SR/HU PL/HU
1. Strongly agree	153	76	100	92	0.3077
2. Agree	193	193	157	244	0.0703
1+2 together: %/number	76.21/346	73.10/269	70.60/257	84.21/336	0.0036
3. Neither agree nor disagree	85	86	68	50	0.4533
4. Disagree	17	12	25	9	0.0002
5. Strongly disagree	6	1	14	4	<0.0001
Chi-squared/p-value: CR/SR = 21.569/0.0002 CR/PL = 11.657/0.0201 CR/HU = 29.652/<0.0001 SR/PL = 24.893/<0.0001 SR/HU = 18.803/0.0009 PL/HU = 33.504/<0.0001					

Table 4. Evaluation of own financial risk management skills in the V4 countries

Source: Own research.

ST4: I can adequately manage the financial risk in my (our) company	Czech Republic (CR) 454	Slovakia (SR) 368	Poland (PL) 364	Hungary (HU) 399	Z-score/ p -value
					CR/SR CR/PL CR/HU SR/PL SR/HU PL/HU
1. Strongly agree	116	72	70	73	0.6527
2. Agree	204	182	162	246	0.0404
1+2 together: %/number	70.48/320	69.02/254	63.74/232	79.95/319	0.0015
3. Neither agree nor disagree	106	89	88	58	0.1310
4. Disagree	19	23	33	19	0.0005
5. Strongly disagree	9	2	11	3	<0.0001
Chi-squared/ p -value:					
CR/SR = 8.969/0.0619					
CR/PL = 12.079/0.0168					
CR/HU = 27.319/<0.0001					
SR/PL = 9.192/0.0564					
SR/HU = 15.468/0.0038					
PL/HU = 30.320/<0.0001					

to the ST3 statement, indicating that they highly value their financial risk management skills.

In line with the research results displayed in Table 3, based on scientific research results, one can state that *H3* was confirmed. The results did not confirm the validity of the statistical hypothesis *H3a*.

The ST4 statement aimed to discover how entrepreneurs evaluate their ability to properly manage financial risk in their companies. The highest self-confidence was shown by the Hungarian entrepreneurs, as 79.95% agreed with the ST4 statement. The lowest agreement rate was achieved by the Polish entrepreneurs (63.74%).

The research revealed differences in the attitudes of entrepreneurs (except for Slovak and Polish responses).

The results showed the presence of differences between Hungarian entrepreneurs' attitudes and those from the other V4 countries, and the difference is also prevalent between the attitudes of the Czechs and Poles.

Based on the results of scientific research, one can state that *H4* was not confirmed. The results did not confirm the validity of the statistical hypothesis *H4a*.

5. DISCUSSION

It was revealed within the research that the average agreement rate with the ST1 statement (I consider financial risk as part of the everyday business) was 74.54%. It was also revealed that the positive attitudes of entrepreneurs were similar. The average rate of positively evaluating their company's financial performance was 66.90%. The entrepreneurs had a relatively high opinion of their financial risk management knowledge, as the average agreement rate for ST3 was as high as 76.03%. 71% of the entrepreneurs claimed that they could not properly manage financial risk. The research also revealed that the Hungarian entrepreneurs significantly differed from the other entrepreneurs in ST2, ST3, and ST4.

However, when analyzing the results presented above, it is important to keep in mind that respondents only stated their own opinion regarding the questions under scrutiny. There is no information about the actual state of their awareness, competencies, management skills, or the SMEs' actual financial performance in the study to back their statements up. For this reason, the difference in responses of Hungarian entrepreneurs from those of their peers from other V4 countries might not lie in the factual difference in their financial risk management practice, but in their perception of their knowledge and competencies and their

firm's situation. Nonetheless, since attitudinal research always incorporates biases stemming from personal perception and national, cultural differences, the data are analyzed to represent the actual state of the art of financial risk management of SMEs in analyzed countries.

The presented results of the empirical research provide hope for a higher quality approach to financial risk management in the SME sector, which is a basic condition of SMEs' growth and market sustainability. However, it can be assumed that the "corona-crisis" will stop this process, and it will take time before the enterprises resume utilizing their acquired knowledge and skills.

Uncertainty is a major factor in the decision-making processes of SMEs. Thus, equal uncertainty and randomness are present in the development of conditions for business activities, during these activities, and within their outcome. The SMEs' involvement in the financial markets and the utilization of various financial instruments establishes a basis for financial risk (Pereira et al., 2015; Virglerová et al., 2016). Financial risk is thus evident in SMEs' operations as they are major players in the financial markets through how capital is raised, used, and distributed with-

in the enterprise. Inherently, there is a relationship between the direct business operations of an entity and the amount of debt a business owes, which directly affects the level of financial risk. The higher the debt owed by a business, the more likely its non-payment of financial obligations will be, considering that financial risk indicates a possibility that an entity's cash flow is not adequate to pay creditors and fulfill other financial responsibilities (Guzman, 2015; Virglerová et al., 2016).

Given the foregoing, when financial risk is not evaluated from time to time, there is an increased chance of risk, which leads to losses in portfolio values (Christensen et al., 2015). Economic and financial risks in risk management include the risks affecting the company's economic performance. Hence, risk must be seen as an important factor affecting most SMEs' economic performance in the V4 countries. Moreover, literature also warns that disregarding the importance of financial risk might lead to improper financial management resulting in losses, indebtedness, and liquidity challenge. It concludes that setting up proper systems of internal financial management policies can eliminate most of these setbacks (Wolmarans & Meintjes, 2018).

CONCLUSION

This paper aimed to present and quantify entrepreneurs' attitudes towards the defined financial risk factors and discover differences between the V4 countries.

It is possible to present basic conclusions based on the research introduced. Entrepreneurs in all V4 countries perceive financial risk correctly as an integral part of their business activities. Their perceptions are very similar in all V4 countries. SMEs in the V4 countries evaluated the financial performance of their companies quite positively. Hungarian entrepreneurs have a higher opinion of their companies, compared to entrepreneurs from the other V4 countries. However, all entrepreneurs in this research have a relatively high opinion of their financial risk management knowledge, which they presented accordingly.

The research also revealed that Hungarian entrepreneurs, as opposed to those from the other three V4 countries, have a higher opinion of their financial risk knowledge. They highly evaluated their financial risk management knowledge, and indicated a higher self-confidence in managing financial risk.

Here one would also like to note that this study has two major limitations. Data collection was taking place during a rather favorable phase of economic development in V4. Thus, in the observations, many respondents happened to be very optimistic in assessing potential financial risks and the related risk factors. Secondly, the overall number of the surveyed respondents could have been higher. The authors

managed to get representative samples in all the countries in question, yet, they have reasons to believe that even a slightly changed sample of respondents would have produced rather different opinions. However, one also has to admit that this potential difference in the final results is a typical dilemma for any empirical research involving surveying.

One of the directions for future studies in this direction would be revealing recent changes in the entrepreneurial attitudes within the V4 countries, which took place due to the COVID-19 pandemic and lockdown.

AUTHOR CONTRIBUTIONS

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REFERENCES

- Akhmadeev, R., Morozova, T., Voronkova, O., & Sitnov, A. (2019). Targets determination model for VAT risks mitigation at B2B marketplaces. *Entrepreneurship and Sustainability Issues*, 7(2), 1197-1216. [http://doi.org/10.9770/jesi.2019.7.2\(28\)](http://doi.org/10.9770/jesi.2019.7.2(28))
- Androniceanu, A., Gherghina, R., & Ciobanasu, M. (2019). The interdependence between fiscal public policies and tax evasion. *Administrative Management Public*, 32, 32-41. Retrieved from https://www.researchgate.net/publication/333341679_The_interdependence_between_fiscal_public_policies_and_tax_evasion
- Anyakoha, C. (2019). Job analysis as a tool for improved organizational performance of SMEs in Lagos, Nigeria. *Central European Journal of Labour Law and Personnel Management*, 2(1), 7-16. <https://doi.org/10.33382/cejllpm.2019.02.01>
- Belás, J., Chochořáková, A., & Gabčová, L. (2015a). Satisfaction and loyalty of banking customers: a gender approach. *Economics and Sociology*, 8(1), 176-188. Retrieved from <https://www.semanticscholar.org/paper/Satisfaction-and-Loyalty-of-Banking-Customers-%3A-a-Bel%C3%A1s-Chochol%C3%A1kov%C3%A1/f16de32382e2d14d127a-3b7acc80d2c52ea7e9fc>
- Belas, J., Gavurova, B., Cepel, M., & Kubak, M. (2020). Evaluation of economic potential of business environment development by comparing sector differences: Perspective of SMEs in the Czech Republic and Slovakia. *Oeconomia Copernicana*, 11(1), 135-159. <https://doi.org/10.24136/oc.2020.006>
- Belás, J., Ključnikov, A., Vojtovič, S., & Sobeková-Májková, M. (2015b). Approach of the SME Entrepreneurs to Financial Risk Management in Relation to Gender and Level of Education. *Economics and Sociology*, 8(4), 32-42. <https://doi.org/10.14254/2071-789X.2015/8-4/2>
- Bilan Y., Mishchuk, H., Roshchuk, I., & Joshi, O. (2020). Hiring and retaining skilled employees in SMEs: problems in human resource practices and links with organizational success. *Business: Theory and Practice*, 21(2), 780-791. <https://doi.org/10.3846/btp.2020.12750>
- Christensen, B. J., Nielsen, M. Ø., & Zhu, J. (2015). The impact of financial crisis on the risk-return. Trade off and the leverage effect. *Economic Modelling*, 49, 407-418. <https://doi.org/10.1016/j.econmod.2015.03.006>
- Čepel, M., Dvorsky, J., Gregova, E., & Vrbka, J. (2020). Business environment quality model in the SME segment. *Transformations in Business and Economics*, 19(1), 262-283. Retrieved from https://www.researchgate.net/publication/340807777_Business_Environment_Quality_Model_in_the_SME_Segment
- Domańska-Szaruga, B. (2020). Maturity of risk management culture. *Entrepreneurship and*

- Sustainability Issues*, 7(3), 2060-2078. [https://doi.org/10.9770/jesi.2020.7.3\(41\)](https://doi.org/10.9770/jesi.2020.7.3(41))
11. Dobrovič, J., Kmeco, L., Gallo, P., & Gallo Jr., P. (2019). Implications of the Model EFQM as a Strategic Management Tool in Practice: A Case of Slovak Tourism Sector. *Journal of Tourism and Services*, 10(18), 47-62. <https://doi.org/10.29036/jots.v10i18.91>
 12. Dvorský, J., Petráková, Z., Khan, K. A., Formánek, I., & Mikoláš, Z. (2020). Selected Aspects of Strategic Management in the Service Sector. *Journal of Tourism and Services*, 20(11), 109-123. <https://dx.doi.org/10.29036/jots.v11i20.146>
 13. Dvorský, J., Petráková, Z., & Polách, J. (2019). Assessing the Market, Financial, and Economic Risk Sources by Czech and Slovak SMEs. *International Journal of Entrepreneurial Knowledge*, 7(2), 30-40. Retrieved from https://www.researchgate.net/publication/338469327_Assessing_the_Market_Financial_and_Economic_Risk_Sources_by_Czech_and_Slovak_SMEs
 14. Durica, M., Podhorska, I., & Durana, P. (2019). Business failure prediction using cart-based model: A case of Slovak companies. *Ekonomicko – manazerske spektrum*, 13(1), 51-61. <https://dx.doi.org/10.26552/ems.2019.1.51-61>
 15. Ejdyš, J., Ginevicius, R., Rozsa, Z., & Janoskova, K. (2019). The Role of Perceived Risk and Security Level in Building Trust in E-government Solutions. *E+M Ekonomie a Management*, 22(3), 220-235. <https://doi.org/10.15240/tul/001/2019-3-014>
 16. Ekwere, N. (2016). Framework of Effective Risk Management in Small and Medium Enterprises (SMEs): a Literature Review. *Bina Ekonomi*, 20(1), 23-46. Retrieved from <https://www.neliti.com/publications/27804/framework-of-effective-risk-management-in-small-and-medium-enterprises-smess-a-l>
 17. Emerling, I., & Wojcik-Jurkiewicz, M. (2018). The risk associated with the replacement of traditional budget with performance budgeting in the public finance sector management. *Ekonomicko – manazerske spektrum*, 12(1), 55-63. <https://doi.org/10.26552/ems.2018.1.55-63>
 18. Ferreira de Araújo Lima, P., Crema, M., & Verbano, C. (2020). Risk management in SMEs: A systematic literature review and future directions. *European Management Journal*, 38(1), 78-94. <https://doi.org/10.1016/j.emj.2019.06.005>
 19. Faisal, A. M., & Singh, K. S. (2019). Implementing Lean Technique by using Value Stream Mapping (VSM) in a Labour-intensive Small and Medium Enterprise (SME): Case Study of Goods Manufacturing Company. *International Journal of Research in Engineering, IT and Social Sciences*, 9(Issue Special), 567-572.
 20. Graessley, S., Horak, J., Kovacova, M., Valaskova, K., & Poliak, M. (2019). Consumer Attitudes and Behaviors in the Technology-Driven Sharing Economy: Motivations for Participating in Collaborative Consumption. *Journal of Self-Governance and Management Economics*, 7(1), 25-30. <https://doi.org/10.22381/JSME7120194>
 21. Guzman, O. (2015). *Differences Between Business Risk and Financial Risk*. Retrieved from <https://askanydifference.com/difference-between-business-risk-and-financial-risk/>
 22. Halasi, D., Schwarcz, P., Mura, L., & Roháčiková, O. (2019). The impact of EU support resources on business success of family-owned businesses. *Potravinarstvo Slovak Journal of Food Sciences*, 13(1), 846-853. <https://doi.org/10.5219/1167>
 23. Hudáková, M., & Dvorský, J. (2018). Assessing the risks and their sources in dependence on the rate of implementing the risk management process in the SMEs. Equilibrium. *Quarterly Journal of Economics and Economic Policy*, 13(3), 543-567. <https://doi.org/10.24136/eq.2018.027>
 24. 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. <https://doi.org/10.7441/joc.2018.04.04>
 25. Irwin, D., & Scott, J. M. (2010). Barriers faced by SMEs in raising bank finance. *International Journal of Entrepreneurial Behavior and Research*, 16(3), 245-259. <https://doi.org/10.1108/13552551011042816>
 26. Kim, Y., & Vonortas, N. S. (2014). Managing risk in the formative years: Evidence from young enterprises in Europe. *Technovation*, 34(8), 454-465. <https://doi.org/10.1016/j.technovation.2014.05.004>
 27. Khan, K. A., Čera, G., & Nėtek, V. (2019). Perception of the Selected Business Environment Aspects by Service Firms. *Journal of Tourism and Services*, 10(19), 111-127. <https://doi.org/10.29036/jots.v10i19.115>
 28. Klietnik, T., Misankova, M., Valaskova, K., & Svabova, L. (2018). Bankruptcy prevention: new effort to reflect on legal and social changes. *Science and Engineering Ethics*, 24(2), 791-803. <https://doi.org/10.1007/s11948-017-9912-4>
 29. Klietnik, T., Valaskova, K., Lazaroiu, G., Kovacova, M., & Vrbka, J. (2020). Remaining Financially Healthy and Competitive: The Role of Financial Predictors. *Journal of Competitiveness*, 12(1), 74-92. <https://www.cjournal.cz/files/356.pdf>
 30. Ključnikov, A., Civelek, M., Čech, P., & Kloudová, J. (2019). Entrepreneurial orientation of SMEs' executives in the comparative perspective for Czechia and Turkey. *Oeconomia Copernicana*, 10(4), 773-795. <https://doi.org/10.24136/oc.2019.035>
 31. Koiso, E., Habanik, J., Virglerova, Z., & Rozsa, Z. (2017). SMEs financing as an important factor of business

- environment in Slovak Republic Regions. *Montenegrin Journal of Economics*, 13(2), 129-140. <https://doi.org/10.14254/1800-5845/2017.13-2.8>
32. Korcsmáros, E., & Šimova, M. (2018). Factors affecting the business environment of SMEs in Nitra region in Slovakia. *Oeconomia Copernicana*, 9(2), 309-331. <https://doi.org/10.24136/oc.2018.016>
33. Kozubíková, L., Dvorský, J., Cepel, M., & Balcerzak, A. P. (2017). Important characteristics of an entrepreneur in relation to risk taking: Czech Republic case study. *Journal of International Studies*, 10(3), 220-233. <https://doi.org/10.14254/2071-8330.2017/10-3/16>
34. Kozubíková, L., Homolka, L., & Kristalas, D. (2017). The Effect of Business Environment and Entrepreneurs' Gender on Perception of Financial Risk in The Smes Sector. *Journal of Competitiveness*, 9(1), 36-50. <https://doi.org/10.7441/joc.2017.01.03>
35. Kovacova, M., Kliestik, T., Valaskova, K., Durana, P., & Juhaszova, Z. (2019). Systematic review of variables applied in bankruptcy prediction models of Visegrad group countries. *Oeconomia Copernicana*, 10(4), 743-772. Retrieved from <https://ideas.repec.org/a/pes/ieroec/v10y-2019i4p743-772.html>
36. Kwaku Amoah, S. (2018). The Role of Small and Medium Enterprises (SMEs) to Employment in Ghana. *International Journal of Business and Economics Research*, 7(5), 151. <https://doi.org/10.11648/j.ijber.20180705.14>
37. 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. <https://doi.org/10.24136/eq.2019.025>
38. Malz, A. M. (2011). *Financial risk management: models, history, and institutions*. John Wiley & Sons. Retrieved from <https://www.amazon.com/Financial-Risk-Management-History-Institutions/dp/0470481803>
39. Mentel, G., & Brożyna, J. (2015). Compatibility of market risk measures. *Journal of International Studies*, 8(2), 52-62. <https://doi.org/10.14254/2071-8330.2015/8-2/5>
40. Meyer, N., & Meyer, D. F. (2019). Examining the impact of entrepreneurial activity on employment and economic growth: The case of the Visegrad countries. *Polish Journal of Management Studies*, 20(1), 277-292.
41. Meyer, N., & De Jongh, J. (2018). The Importance of Entrepreneurship as a Contributing Factor to Economic Growth and Development: The Case of Selected European Countries. *Journal of Economics and Behavioral Studies*, 10(4(J)), 287-299. [https://doi.org/10.22610/jeb.s.v10i4\(j\).2428](https://doi.org/10.22610/jeb.s.v10i4(j).2428)
42. Mishchuk, H., Bilan, Y., & Pavlushenko, L. (2016). Knowledge management systems: issues in enterprise human capital management implementation in transition economy. *Polish Journal of Management Studies*, 14(1), 163-173. Retrieved from https://www.researchgate.net/publication/312251951_Knowledge_management_systems_Issues_in_enterprise_human_capital_management_implementation_in_transition_economy
43. Mutezo, A. (2013). Credit rationing and risk management for SMEs: The way forward for South Africa. *Corporate Ownership and Control*, 10(2B, CONT1), 153-163. http://www.virtusinterpress.org/IMG/pdf/10-22495_cocv10i2c1art1.pdf
44. Neagu, C. (2016). The importance and role of small and medium-sized businesses. *Theoretical & Applied Economics*, 23(3), 331-338. Retrieved from <https://www.semanticscholar.org/paper/The-importance-and-role-of-small-and-medium-sized-Neagu/ee3c627eec49094ecdcf7f2e113e60c87a101365>
45. Oláh, J., Virglerova, Z., Popp, J., Kliestikova, J., & Kovács, S. (2019). The assessment of non-financial risk sources of SMEs in the V4 countries and Serbia. *Sustainability*, 11(17), 1-19. <https://doi.org/10.3390/su11174806>
46. Pisar, P., & Bilkova, D. (2019). Controlling as a tool for SME management with an emphasis on innovations in the context of Industry 4.0. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 14(4), 763-785. <https://doi.org/10.24136/eq.2019.035>
47. Rahman, A., & Zbrankova, H. (2019). Female borrowers and credit constraints in SME loan market: An analyses from the Visegrad countries. *Polish Journal of Management Studies*, 20(2), 426-440. Retrieved from <http://yadda.icm.edu.pl/baztech/element/bw-meta1.element.baztech-eace98c7-2db2-40dc-884f-5b0d3dd99134>
48. Rozsa, Z., & Kmecová, I. (2020). Cybervetting prospective employees of SMEs. *Journal of International Studies*, 13(1), 295-309. Retrieved from <https://search.proquest.com/openview/335d1430eb2ab7e22b2114c74984e2cd/1?pq-origsite=gscholar&cbl=4560798>
49. Salikin, N., Wahab, N. A., & Muhammad, I. (2014). Strengths and Weaknesses among Malaysian SMEs: Financial Management Perspectives. *Procedia - Social and Behavioral Sciences*, 129, 334-340. <https://doi.org/10.1016/j.sbspro.2014.03.685>
50. Ślusarczyk, B., & Grondys, K. (2019). Parametric Conditions of High Financial Risk in the SME Sector. *Risks*, 7(3), 84. <https://doi.org/10.3390/risks7030084>
51. Stanton, H. (2012). *Why some firms thrive while others fail*. New York: Oxford University. Retrieved from <https://www.amazon.com/Some-Firms-Thrive-While-Others/dp/0199915997>

52. Tamulevičienė, D., & Androniceanu, A. (2020). Selection of the indicators to measure an enterprise's value and its changes in the controlling system for medium-sized enterprises. *Entrepreneurship and Sustainability Issues*, 7(3), 1440-1458. [https://doi.org/10.9770/jesi.2020.7.3\(1\)](https://doi.org/10.9770/jesi.2020.7.3(1))
53. Terungwa, A. (2012). Risk Management and Insurance of Small and Medium Scale Enterprises (Smes) in Nigeria. *International Journal of Finance and Accounting*, 1(1), 8-17. <https://doi.org/10.5923/j.ijfa.20120101.02>
54. Virglerova, Z. (2018). Differences in the Concept of Risk Management in V4 Countries. *International Journal of Entrepreneurial Knowledge*, 6(2). <https://doi.org/10.37335/ijek.v6i2.81>
55. Virglerová, Z., Kozubíková, L., & Vojtovic, S. (2016). Influence of selected factors on financial risk management in SMEs in the Czech Republic. *Montenegrin Journal of Economics*, 12(1), 21-36. Retrieved from https://www.researchgate.net/publication/304078016_Influence_of_selected_factors_on_financial_risk_management_in_SMEs_in_the_Czech_Republic
56. Wolmarans, H. & Meintjes, Q. (2015). Financial management practices in successful small and medium enterprises (SMEs). *The Southern African Journal of Entrepreneurship and Small Business Management*, 7(11), 88-116. <https://doi.org/10.4102/sajesbm.v7i1.8>
57. Zhao, S., & Zeng, M. (2014). Theory of SMEs financial risk prevention and control. *Icemct*, 514-517. <https://doi.org/10.2991/icemct-14.2014.126>