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Selected factors of internationalisation and their impact on the SME perception of the market risk

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Abstract

Research background: Internationalisation of entrepreneurial activities provides an ample opportunity for the growth and sustainability of small and medium-sized enterprises (SMEs). When making their business activities international, SMEs are facing various obstacles. Investigating the key factors of internationalisation and their impact on SME decision making constitutes a key factor of the research work.

Purpose of the article: The main purpose of the paper is to examine the impact of selected factors of SME internationalisation on the positive perception of the market risk. Higher export costs, differences in legal environment, taxes, and linguistic and cultural differences were set to be the significant factors influencing the positive perception of the market risk. Bearing the main purpose in mind, the Visegrad Four (V4 — Czech Republic, Slovakia, Poland, Hungary) were examined.

Methods: The questionnaire in mother tongue of each country in online and paper form was used. The questionnaire consists of 77 questions divided into several sections. Likert five-point scale was used to allow the respondents to express their opinion. In total, 1585 responses were completed. A regression analysis was used to verify the statistical significance of the independent variables and to quantify the causal relationships (determining the direction and strength of the effect) on the dependent variable. As the variables are of one metric, a linear regression model (LRM) was selected to validate the hypothesis.

Findings & value added: The internationalisation of SME activities brings along many risks and barriers that SMEs need to overcome if they want to enter international markets. Many SMEs consider the barriers and restrictions to enter foreign markets to be severe. Therefore, they decide to do their business domestically. It was established in the research that only 30.2% of the respondents expanded their business activities internationally. The biggest impact on the positive assessment of the market risk was found to have linguistic and cultural differences. They do not have a negative effect on the positive perception of the market risk, so they do not hinder SMEs in their international expansion. The second most important was the factor of the export costs. The factor of possible increased costs is quite important for SMEs in making their decisions whether to expand internationally or not. This factor also shapes a positive approach to assessing the market risk by SMEs. In the research, SMEs confirmed that potential higher costs do not represent a major barrier for them in shaping their attitudes towards the market risk. The remaining factors being analysed, namely differences in legal environment and taxes, did not have a significant impact on the positive assessment of the market risk internationally. The practical implications can be found in new information about market risk in process of internationalisation provided from four selected countries.

Introduction

Internationalisation of SME business activities is an excellent opportunity for their future growth and sustainability in the market environment. However, entering foreign markets entails many obstacles that SMEs must overcome in order to succeed.

The primary reason for SMEs wanting to penetrate foreign markets is an economic one, i.e., they want their enterprises to grow and thrive. When expanding abroad, SMEs are to face not only globalisation challenges, but also EU integration requirements, such as various aspects of the European single market, tax policy, quotas, etc. On the other hand, the capacity of

SMEs to absorb internationalisation and globalisation tendencies varies; this depends on their readiness to enter foreign markets in terms of innovative production, commodity structure, and territorial structure of production, competitive readiness, etc. Macroeconomic factors (economic openness, government support for SMEs, quality of the business environment, effectiveness of the supporting infrastructure, government aid to SMEs innovative efforts, harmonisation of national legislation with EU legislation) also play a significant role in their entering foreign markets.

International markets, however, provide a number of opportunities. With tariff barriers removed, people, goods, services, and capital can move freely across Europe. Regarding the EU, legislative standards have been adopted to remove regulatory and legal barriers to SME internationalisation within the community (Saxunová & Nováčková, 2018).

Regarding the internationalisation of business activities, SMEs play a significant role. Therefore, they should be the centre of attention for national governments and the EU, as they are the backbone of the EU economy for their employment and innovation capacity.

There are many different programmes that try to support the SME internationalisation possibilities and processes (European Commission, 2014); only 15% of micro-businesses, 27% of medium-sized enterprises, 10% of non-internationally active enterprises, and 22% of SMEs operating internationally know about them in the European Union.

There is a strong relationship between internationalisation and innovation. Only 8% of domestic SMEs launched new products and services on the market. In case of internationally active SMEs, this part was more than three times higher. International SMEs also had more success in innovating processes (11% compared to 3% for SMEs operating only on domestic market).

Despite several measures taken by the European Union and national institutions and undeniable benefits of the internationalisation of entrepreneurial activities, there is still a high level of market risk for SMEs when entering the international market.

The paper examines the influence of significant factors on the positive perception of the market risk by entrepreneurs. Firstly, the obstacles for internationalisation of SMEs that can mean a market risk for SMEs when deciding to enter a foreign market were defined. The research gap can be seen in a new approach to market risk. The specific factors of market risks have not been analysed in detail. Higher export costs, differences in legal environment and taxes, and linguistic and cultural differences were set to be the significant factors influencing the positive perception of the market risk. It can be assumed that the positive perception of the market risk is

needed for SME international business activities. A robust sample size made up of V4 entrepreneurs ensures the research originality and exclusivity.

The paper has several sections. The theoretical part provides information on the current state of knowledge on the research issue. In addition, the key factors determining SME strategic decision to enter foreign markets are introduced in this section. The next part addresses the main goal of the research, methodology, questionnaire description, research sample, and scientific hypothesis. In the Results section, the key research findings are introduced. This part is followed by the section in which the research findings are compared with those from other studies. The Conclusion section summarises the key facts and conclusions.

Literature review

“Globalization, economic changes, shortening of a product’s lifecycle, enlarged production capabilities as well as competition in markets, the digitalization of industry and fast changing customer preferences are characteristics of the current world economy” (Hvolkova *et al.*, 2019). Ivanova *et al.* (2019) state that innovation and technological development have become the crucial source of economic growth of the society.

The internationalisation process is a natural development within globalisation, which brings new opportunities to expand on the foreign markets. To develop the ability to gain opportunities in global markets, companies transform their strategic sources (Brandl & Mudambi, 2014; Mura, 2019).

Some of the companies start their business with global tendencies. Some researchers named them “born global firms” (Cavusgil & Knight, 2015; Gruber & MacMillan, 2017; McDougall-Covin *et al.*, 2014). Their strategic management should include international consequences from the beginning. The rest of the companies have to analyse all the determinants of internationalisation of their business during their activities on the domestic market and implement appropriate management processes to hold all business risks under control. The right timing and rapidity of entering to the international market highly depend on entrepreneurs’ perceived risks (Chetty *et al.*, 2014).

The internationalisation process brings new challenges that can strengthen the business position and improve the financial position in the domestic market (Dvorsky *et al.*, 2019; Zahra & Hayton, 2008; Navarro-Garcia *et al.*, 2015). However, accepting of international opportunities also brings many barriers, which can be insurmountable, especially for SMEs.

SMEs face a lack of financial and personnel resources in comparison with large companies (Esteve-Perez & Rodriguez, 2013; Higon & Driffield, 2010; Love *et al.*, 2016; Ratten *et al.*, 2017). These obstacles are especially evident for SMEs operating in transboundary space (Bilan *et al.*, 2020) with immature principles of distributive policy and evident comparisons with labour sphere of neighbouring countries (Mishchuk *et al.*, 2018). To overcome them, SMEs steadily increase their activity in innovative factors' usage, involving ICT in sales processes in various areas (Domi *et al.*, 2019) and flexible financing models (Angelova *et al.*, 2018), including engaging of external funds (Pia̧tkowski, 2020). Kovarnik and Hamplova (2018) analysed the foreign trade determinants of enterprises from selected European countries. They concluded that SMEs face the unwillingness of banks to provide loans for the development of their foreign activities. Giannetti *et al.* (2008) state that the financial sources from importers are more expensive for SMEs, but it is easier to obtain them due to the administrative burden of bank. SMEs can perceive difficulties also in the area of human capital (Ključnikov *et al.*, 2016), technological knowledge (Karadeniz & Göçer, 2007), and social capital (Prashantham & Dhanaraj, 2010).

The SMEs' internationalisation covers the various dimensions that SMEs must face. The most important are the speed at which SMEs enter the foreign market, the intensity of export, and the scope achieved by it (Bilan *et al.*, 2017). Some researchers focused on the analysis of entrepreneurial characteristics to explain the export activities (Francioni *et al.*, 2015; Saeed & Ziaulhaq, 2018). In addition, the access to the international market is determined also by the entrepreneurial capabilities of the company and by different types of complexity (Rexhepi *et al.*, 2017).

Many authors focus on the analysis of obstacles that complicate access to international markets. The barriers can be divided into internal and external export difficulties (Paul & Gupta, 2014; Tamulevičienė & Androniceanu, 2020), macrolevel and microlevel (Cardoza *et al.*, 2015; Cahen *et al.*, 2016), barriers arising out of human resources (Freeman *et al.*, 2012; Rozsa *et al.*, 2019; Bertan, 2020), inadequate social capital resources (Elg *et al.*, 2015), and insufficient marketing (Chisholm & Nielsen, 2009). Such barriers, in their turn, can be generated by inefficient public administration and essential share of informal economy (Mishchuk *et al.*, 2020), which is a ubiquitous obstacle for development in entrepreneurial environment. To mitigate this and other barriers in entrepreneurial surrounding, some countries started to implement the best governance practice and issued national governance codes (Bosáková *et al.*, 2019). Pavlák (2018) defined the major obstacles in the case of Czech SMEs as high costs of internationalisation, administrative obstacles, lack of information about foreign markets, and

insufficient capital for expansion. Musteen *et al.* (2014) state that SMEs need foreign market knowledge to be successful in the international market.

While access to the international market entails many obstacles and risks of failure, the market risk can be decreased by entering on the new market. Market risk is one of the most important risks perceived by SMEs (Gavurova *et al.*, 2018; Kim & Vonortas, 2014). Dvorsky *et al.* (2018) concluded that country of SMEs is a statistically significant factor in the evaluation of market risk and its source. They identified sources of market risk as follows: stagnation of the market, losing customers, unreliability of suppliers, and strong competition. The importance of market risk management is a very current topic analysed currently in many scientific papers (see, e.g., Belas *et al.*, 2020; Dvorsky *et al.*, 2020; Khan *et al.*, 2019; Vichova *et al.*, 2020) as well as due to the changes caused by the pandemic situation (El Baz & Ruel, 2021; Kumar *et al.*, 2021).

Virglerova *et al.* (2020) found out that there is a statistically significant difference in the way how SMEs consider legal risks between Czech Republic and other analysed countries (Slovakia, Hungary, Poland, and Ukraine). They conclude that more than 50% of SMEs in these countries manage legal risks in an appropriate way. Half of the entrepreneurs asked in the research agreed that often repeated legislative changes have a negative impact on their operations.

Large companies that are globally diversified are able to bear the risk of failure to enter the single market than a newly internationalised SME. Due to diversification, the risks are imperfectly correlated (Polishchuk *et al.*, 2019; Gatti, 2013). Diversification of markets is linked to lower systematic risk and lower cost of debt (Lindner *et al.*, 2016). The process of internationalisation is a way for companies to search for new resources and capabilities to exceed their competitive shortcomings (Adomako *et al.*, 2019; Musteen & Datta, 2011). Companies use internationalisation as a way to gain knowledge and learn to become globally competitive, even in their home locations (Banerjee *et al.*, 2015; Cuervo-Cazurra *et al.*, 2018). Vahlne and Johnsson (2017) state that exporting helps to strengthen the position of companies in the business network to reduce uncertainty, and they can gain knowledge easier. Companies that enter the foreign market improve their performance in terms of productivity. This process was marked as learning-by-exporting by Bai *et al.* (2017). The international market offers a low-cost way how companies gain new resources and learn capabilities in technology and skills to overcome their competitive disadvantages (Luo & Tung, 2007, Luo & Rui, 2009; Ray *et al.*, 2017). Li and Fleury (2020) state that companies active on the international market develop their capabilities through learning from local business actors. They also discuss the im-

portance of handling environmental uncertainties and risks linked to this process. Kumaraswamy *et al.* (2012) analysed the companies of developed economics and their entry to the market of emerging economics. They concluded that these firms bring knowledge and help to the local firms to upgrade their competencies. However, for SMEs, obtaining knowledge on the international markets and implementation of different strategies is important because an error can rapidly endanger the company's performance (Bouveret-Rivat *et al.*, 2020).

The sources of market risk in process of internationalisation of SMEs (such as higher export costs, differences in legal environment, taxes, and language and culture differences) have not been analysed. The current information about obstacles of internationalisation process that can lead to the market risks should be analysed in detail to help state agencies to focus their attention and assistance more effectively. To gain this information, empirical research is needed.

Research method

Aim and data gathering

The purpose of the paper is to examine the impact of essential factors of internationalisation on the positive market risk perception in the SME segment. The essential factors include higher export costs, differences in legal environment, taxes, language, and culture.

Primary data collection on SMEs was performed from August 2019 to April 2020 in the Visegrad Four countries (hereinafter referred to as V4 countries; CR — Czech Republic, SR — Slovak Republic, PL — Poland, HU — Hungary). Data were gathered through an online questionnaire, which was filled in by SME owners or top managers. Contact information on SMEs was obtained from the following databases: Cribis (CR, SR); Central Registration and Information on Business (PL); and Hungarian Chamber of Commerce and Industry (HU).

Samples in each V4 country (region) were obtained by taking the following steps: i.e. the size of SME population by headcount was determined (up to 249 employees); ii. each SME was assigned a serial number (in alphabetical order); iii. random numbers were generated using the Randbetween Math function (function range: the lowest value — 1, the highest value — total number of SMEs); iv. respondents were assigned to randomly generated numbers; v. finding SME contact information (phone number or email).

An email asking for filling in the online questionnaire was sent to SMEs. The total number of SMEs contacted was as follows: (CR — 8,250 businesses, SR: 10,100 businesses, PL: 7,680 businesses, HU: 8,750 businesses). The survey received a 5% response rate on average.

In total, there were 1,585 duly filled in questionnaires by SME respondents (sample). Around 1% of all questionnaires were not filled in correctly and were excluded from the survey data. Major errors included multiple submissions to a survey from the same respondent, contradictory responses to different questions, and errors made by inattentive respondents. The sample size (applying “sample size analysis”) is 666 respondents (99% confidence level, 5% margin of error). The sample size ($n = 1585$) more than doubled the requirements for respondent frequency ($n = 666$).

Questionnaire

The questionnaire was made up of several consecutive sections. The first section contained 10 respondent-related demographic questions (gender, age, education, relationship to the enterprise, and the relationship between education and entrepreneurial activity) and SME-related questions (business location, how long the enterprise has been operating in the business environment, industry, legal form, and size of the business). Next, statements on SMEs’ internationalisation followed (see Table 1, which provides the list of independent variables). The statements were randomly formulated (to check response consistency). Respondents had to choose one option out of five on each variable: 1 — completely agree, 2 — agree, 3 — I do not take a position, 4 — disagree, 5 — completely disagree (Likert five-point scale). The questionnaire also contained a control question that prevented the questionnaire from being completed automatically by a computer.

The reliability of the questionnaire (independent variables) was verified according to the Cronbach’s alphas (CAs). The Cronbach’s alpha results confirmed the reliability (CAs > 0.90). The test of validity of the questionnaire confirmed stronger relationships between variables and factors.

Formulation of statistical hypotheses and methods

The following hypothesis was formulated:

H: There is a statistically significant positive causal effect of the independent variable (X1 — H_X1, X2 — H_X2, X3 — H_X3 and X4 — H_X4) on the dependent variable (Y).

For more information about independent variables, see Table 1.

A regression analysis was used to verify the statistical significance of the independent variables and to quantify the causal relationships (determining the direction and strength of the effect) on the dependent variable. As the variables are of one metric, a linear regression model (LRM) was selected to validate the hypothesis. Positive responses to independent variables should lead to a positive response to the dependent variable. The LRM does not predict the dependent variable in the future but to verify the significance of the effect of independent variables on the dependent variable. The dependencies between variables were i. calculated with used pairwise coefficients of correlation (r); ii. presented in the correlation matrix; and iii. verified with t-test (see Table 3). Regression coefficients (β_0, \dots, β_4) were estimated by the least square method. The statistical significance of regression coefficients was verified t-test. If the P -value of the t-test is lower than the level of significance ($\alpha = 0.05$), an independent variable is considered as significant (according to Arnold, 1980). The formula of linear regression function is:

$$Y = \beta_0 + \beta_1 \times X1 + \beta_2 \times X2 + \beta_3 \times X3 + \beta_4 \times X4 + \varepsilon_n \quad (1)$$

where:

Y	dependent variable;
β_0	intercept,
$\beta_1; \dots; \beta_4$	estimates of regression coefficients;
$X1, \dots, X4$	independent variables;
ε_n	error term.

The negative effects of multi-collinearities between dependent variables were verified by the variance influence factor (VIF). VIF value of independent variable less than 5 indicates that the negative effect of multi-collinearity is rejected (O'Brien, 2007). The Shapiro-Wilk test (S-W test) was used to verify the normal distribution of errors (de Waal, 1977), and Bartlett's test (BT) was used to verify the assumption of homoscedasticity. These assumptions were confirmed if the p -values of the S-W test and BT

were greater than α (Stewart, 1987). The characteristic of the data set (data are not time-series) indicates that the assumption of autocorrelation need not be verified (Li & Valliant, 2011). Linear regression modelling was processed using SPSS Statistics.

The structure of respondents

The paper researches the attitudes of respondents to the export of their products and services. It was found that 478 respondents did export their products and services (30.2% of 1585 respondents in total).

Demographic information about the respondents exporting their products and services: (n = 478):

- respondent nationality – 34.1% CR, 22.4% SR, 22.8% HU, 20.7% PL;
- gender: 76.4% males, 23.6% females;
- educational attainment – 28.7% secondary education (with or without school leaving examinations), 11.3% tertiary education (Bachelor degree), 52.3% tertiary education (MA/MSc degree), 7.7% tertiary education (PhD degree);
- age – up to 35 years of age (19.5%), 35–45 years (27.6%), 45–55 years (31.6%), 55 years of age and above (21.3%);
- relationship between education and entrepreneurial activity – yes, there is a relationship: 42.1% (I do business in what I have a degree and qualifications in), yes, there is a relationship, but to some extent only: 31.6% (some business processes relate to my field of study), no relationship: 26.4%;
- relationship to the enterprise – managers (38.1%), owners (61.9%); company size (headcount) – micro company (40.2%), small company (24.5%), medium-sized company (35.4%).

Results

Table 2 lists the descriptive characteristics of variables (X1, ..., X4; Y) in terms of respondent attitudes.

The dependencies between variables (Y and X_i ; $i = 1, 2, 3, 4$) are present in the correlation matrix (CM; see Table 3).

The results (see Table 3) confirmed medium strong positive correlation between independent variables ($r \in <0.311; 0.691>$). The all pairwise correlations shown in Table 3 are statistically significant. The most positive strong dependence is between X2 and X3 ($r = 0.691$). The dependencies

between Y and X_i ($i = 1, 2, 3, 4$) obtain values from 0.132 to 0.182. The most positive strong dependence is between Y and X_3 ($r = 0.182$).

The causal relationships between dependent and independent variables (formulated in Table 4) are shown in Table 4.

The empirical results (see Table 4) showed that the regression model with the linear relationships between Y and X_i ($i = 1, 2, 3, 4$) variables is statistically significant (F -ratio: p -value = 3.4E-5). The LRM has the statistically significant variables: X_1 (t-Stat.: p -value = 0.044; $\alpha = 5\%$) and X_4 (t-Stat.: p -value = 0.027; $\alpha = 5\%$). Also, the LRM has not statistically significant independent variables: X_2 (t-Stat.: p -values = 0.465) and X_3 (t-Stat.: p -value = 0.074). The regression function with a linear trend is:

$$Y = 1.907 + 0.083 \times X_1 - 0.037 \times X_2 + 0.090 \times X_3 + 0.092 \times X_4 + \varepsilon_n \quad (2)$$

where:

Y	dependent variable;
β_0	intercept,
$\beta_1; \dots; \beta_4$	estimates of regression coefficients;
X_1, \dots, X_4	independent variables;
ε_n	error term.

Negative effects of multicollinearity are not present in the LRM (see Table 4; a column with the VIF values). The variance of the error term in the LRM is constant. Homoscedasticity was confirmed (BT: p -value = 0.284). The normal distribution of error term was confirmed for LRM by S-W test (p -value = 0.139). Hypotheses H_{X1} and H_{X4} were confirmed. Hypotheses H_{X2} and H_{X3} were rejected.

Discussion

The research findings show that the proposed linear model of causal relationships is statistically significant (p -value of F -ratio = 3.4E-05).

Independent variables X_1 (higher export costs are not a barrier to the export of our products) and X_4 (linguistic and cultural differences are not a barrier to the export of our products) are statistically significant determinants affecting positive perception of the market risk (Y : I consider the market risk (insufficient sales for my company) to be reasonable).

Linguistic and cultural differences were found to have the strongest effect on the positive assessment of the market risk (p -value = 0,027, $\beta = 0.092$). It can be said that these differences do not hinder SMEs in their expansion abroad. It can be a sign that SMEs can manage these two factors

of market risk effectively. This factor positively influences the positive assessment of the market risk by enterprises operating internationally.

The second most important factor was established to be the export costs. It can be inferred that a possible increase in costs plays a central role in SME decision-making in terms of their international expansion. Moreover, it also shapes their attitudes to the level of the market risk. The research confirmed that possible higher costs do not represent a major barrier for SMEs in shaping their positive perception towards the market risk.

Tax differences in the countries where SMEs expanded are not significant (p -value = 0.074, β = 0.090) in terms of SME positive perception of the market risk.

Similarly, differences in legal environments represent an insignificant factor (p -value = 0.465, β = - 0.037). SMEs claim that this factor is not a big obstacle to the export of their products.

The research outcomes follow the findings by Brandl and Mudambi (2014) and Mura (2019), which particularly highlight the new opportunities for the SMEs operating internationally.

The findings somewhat contradict the research outcomes referring to insurmountable barriers and risks of SME in process of entering into international markets (Esteve-Perez & Rodriguez, 2013; Higon & Driffield, 2010; Love *et al.*, 2016; Ratten *et al.*, 2017).

The findings also contradict the research by Pavlák (2018), which highlights high costs of internationalisation as a risk for companies. On the other hand, the research findings support the claims of authors who argue that international markets offer opportunities for enterprises to gain new resources in low-cost ways that can minimise another type of risks related to internationalisation (Luo & Tung, 2007; Luo & Rui, 2009; Ray *et al.*, 2017).

Additionally, the research results are contradictory to the arguments by Musteen *et al.* (2014), which underscore the importance of foreign market knowledge before entering international markets. This knowledge helps decline lack of success. Furthermore, Polak (2019) states that it is important to understand cultural differences to be effective on international market and minimise risks of company failure. His study was made on Czech companies exporting products to China.

The research findings are in harmony with the statements made by the European Commission (2014). The factors that SMEs indicate as hindering internationalisation are lack of adequate information; other laws and regulations in the foreign country; lack of capital sources; lack of adequate public support; trade barriers in the foreign market; the cost of or difficulties with

paperwork needed for transport; and cultural differences (including business culture).

The findings are also aligned with the conclusions of the research study by Hajduová *et al.* (2021). The study established that it is easier for competitive and innovative enterprises to penetrate foreign markets. The competitiveness of enterprises influences the impact of many processes and mechanisms. For the competitiveness of companies, the focus on innovation in area of research, production, management, and financial activities is very important. These activities help manage the risks of failure in foreign markets.

Conclusions

The research goal was to examine the influence of significant factors of internationalisation on the positive perception of the market risk by SMEs. Higher export costs, differences in legal environment and taxes, and linguistic and cultural differences were set to be the significant factors influencing the right (appropriate) perception of the market risk.

The internationalisation of SME activities brings along a number of risks and barriers that SMEs have to overcome if they want to enter international markets. Many SMEs consider the barriers and restrictions to enter foreign markets to be severe. Therefore, they decide to do their business domestically. The research found that only 30.2% of the respondents expanded their business activities internationally.

The biggest impact on the positive assessment of the market risk was found to have linguistic and cultural differences. It can be concluded that these differences do not have a negative effect on the positive perception of the market risk; thus, they do not hinder SMEs in their international expansion.

Based on the outcomes of the empirical research, the second most important was the factor of the export costs. It follows that the factor of possible increased costs is fairly important for SMEs in making their decisions of whether or not to expand internationally. This factor also shapes a positive approach to assessing the market risk by SMEs. In the research, SMEs confirmed that potential higher costs do not represent a major barrier for them in shaping their attitudes towards the market risk.

The remaining factors being analysed did not have a significant impact on the positive assessment of the market risk internationally.

The results provide new information about perceiving of risks and obstacles related to internationalisation process of SMEs. These findings can

be useful for the state agencies that help domestic companies to enter foreign markets. The agencies can focus their help on the areas that are considered by SMEs as an obstacle in the process of internationalisation.

However, some limitations of the research should be noted. The conclusions were drawn based on the attitudes of 1,585 entrepreneurs from V4 countries. Even though the research had a representative sample of respondents, the results only enrich the research issue, because the research was conducted under good economic conditions in all the countries in question. It can, however, be assumed that the trends in the field are different now that the economies of the world are affected by the COVID-19 pandemic. On the other hand, it can be presumed that the post-crisis economic recovery will be vigorous, and SMEs will recover, despite some losses incurred, and will revert to their pre-pandemic performance levels.

The future research will focus on detailed market risk related to the internationalisation during pandemic situation in Europe. During this time, specific market risks must be managed not only by domestic companies but even more by foreign companies, which must find a way how to overcome this period on a non-domestic market.

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Annex

Table 1. Formulation of dependent and independent variables

Item	Factors of Internationalisation – Independent variables (Xi)
X1	Higher export costs are not a barrier to the export of our products.
X2	Differences in legal environment are not a barrier to the export of our products.
X3	Differences in taxes are not a barrier to the export of our products.
X4	Linguistic and cultural differences are not a barrier to the export of our products.
Y	Positive market risk assessment – Dependent variable (Y) I consider the market risk (lack of sales for my company) to be reasonable.

Table 2. Descriptive characteristics of variables

Xi	N	Mean	MIN	MAX	Me	SD	Skewness	Kurtosis	Variance
X1	478	2.736	1	5	3.000	1.260	-0.880	0.324	1.587
X2	478	2.688	1	5	2.000	1.231	-0.893	0.347	1.515
X3	478	2.577	1	5	2.000	1.227	-0.761	0.466	1.507
X4	478	2.146	1	5	2.000	1.153	0.015	0.891	1.329
Y	478	2.467	1	5	3.000	0.961	0.143	0.586	0.924

Note: N – Number of respondents; SD – Standard deviation; MIN – Minimum; MAX – Maximum. Me – Median.

Table 3. The correlation matrix between variables

CM	Y	X1	X2	X3	X4
Y	1				
X1	0.176***	1			
X2	0.132**	0.526***	1		
X3	0.182***	0.499***	0.691***	1	
X4	0.173***	0.311***	0.384***	0.404***	1

Note: * Statistically significant correlation on $\alpha = 0.05$; ** Statistically significant correlation on $\alpha = 0.01$; *** Statistically significant correlation on $\alpha = 0.001$.

Table 4. Verification of the impact of independent variable on the dependent variable

Regression characteristics				
Multiple correlation coefficient	0.230	Adjusted Coefficient of determination	0.045	
Coefficient of determination	0.053	Standard error	0.940	
Analysis of variance (ANOVA)				
	Degrees of freedom	Sum of Squares	Mean Squares	F- ratio
Regression	4	23.379	5.845	6.620
Residual	473	417.585	0.883	p-value
Total	477	441.964		3.4E-05

Table 4. Continued

Independent variable	Regression coefficient (β_i)	Regression equation		t-Stat (p-value)	VIF
		Standard error	t-Stat		
Intercept	1.907	0.124	15.408	0.000	
X1	0.083	0.041	2.018	0.044*	1.466
X2	-0.037	0.051	-0.731	0.465	2.122
X3	0.090	0.051	1.788	0.074	2.082
X4	0.092	0.042	2.219	0.027*	1.238

Note: * Statistically significant independent variable ($\alpha = 0.05$).