

A model of measurement of the quality of business environment in SME segment

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Abstract. This paper presents a theoretical and methodological model of measurement of the quality of business environment in the segment of Small and Medium-Sized Enterprises (SMEs) and introduces an I_{QSM} index. The paper presents the way of selection and definition of the important factors that form business environment, the analysis of their interconnections and quantification of their influence. According to the results of the application of the created model we can state that the conditions for doing business in the Czech Republic are quite challenging. The value of I_{QSM} for the Czech Republic is at the lower end of the range of possible values. We found that Czech entrepreneurs quite negatively evaluate the government's approach and its attempts to develop suitable conditions for doing business, the attitude of the financial market players in providing the opportunities of external financing for their entrepreneurial activities, current level of business risks, but are satisfied with the attitude of their surroundings to their business activities.

Keywords: Small and Medium-Sized Enterprises, the business environment, quality measuring model, approach of the state to entrepreneurship, commercial banks, corruption

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INTRODUCTION

Small and medium-sized enterprises (SMEs) are of great importance for the world economy, because they promote competitive dynamics of economic systems and directly or indirectly effect large companies, especially in the field of the growth of efficiency and innovation (Pavelková et al., 2009). These companies determine in significant way the status and evolution of important macroeconomic indicators, especially the level of GDP and employment.

SMEs play a major role in the economic system of the Czech Republic. The share of SMEs on the total number of active enterprises reached the level of 99.84% in 2014, and their share on value added gets above 53%. In comparison to SMEs some Eastern European countries, like Belarus, where state enterprises employ more than 80% of all work force (Ključnikov, 2014), Czech SMEs are the most important employer in the country. SMEs sector employs almost 60% of all employees in the Czech Republic (Ministry of Industry and Trade of the Czech Republic, 2015).

According to the European Commission (2015) performance of Czech SMEs stagnates since 2008. The pattern of development in employment in Czech SMEs has closely resembled the EU-wide trend in this area. In 2014, employment in SMEs stood slightly below the 2008 level. Czech SMEs did not recover from the crisis in a similar way as the average of EU SME. The value added of the Czech small businesses stood considerably below pre-crisis levels for the entire 2008-14 period. In 2014, Czech SME value added hovered at approximately 90 % of the 2008 level and was forecasted to remain below the pre-crisis level until 2016.

According to the initiative called Small Business Act the Czech Republic is more or less at the EU average level in such fields as entrepreneurship, access to finance, the single market, skills and innovation, but is significantly below the average in the area of the second chance, "Green light to Small and Medium-Sized Enterprises", flexible management, state support, public procurement and internationalization (European Commission, 2015).

Quality business environment is a prerequisite for a long-term competitiveness and growth of every market economy. In its broadest sense, the business environment reflects the quality of economic conditions and preconditions of economic activities of enterprises. Belanová (2014) states that quality business environment creates conditions for long-term sustainable economic growth, and is a basic prerequisite for business development and growth of competitiveness of the country on an international scale.

In this paper we examine the issue of measurement of the quality of business environment in SME segment. The first chapter presents the important factors that form business environment. The next section introduces our own methodological approach and self-created model of measurement of the quality of business environment, including the analysis of interconnections and quantification of their influence of the selected factors, and the limits and boundaries of the presented model. Results and discussion are presented in the third part of the paper.

THEORETICAL PART

The development of SMEs is generally considered to be a major factor of economic growth, regardless of the economic maturity of the country (Pavelkova et al., 2009 Májková, 2012, Fetisovová et al., 2012).

Every enterprise is largely influenced by the external environment in the process of implementation of its business activities. Synek et al. (2006) define the environment of the company as the volume of external forces, factors and relationships between these attributes. The authors report that environmental influence on business is usually very strong, while the possibility of the company to influence its surroundings is limited.

The quality of business environment, an essential basis for SMEs development, is determined by a number of various external and internal factors, which generally act with different levels of intensity and in mutual connection.

A large number of Czech authors examines business environment from different angles. Bartoš et al. (2015) examines selected aspects of the business environment in the SME segment, and states that business environment is sensitive to the commercial banks approach to financing of their needs. Hamplová and Provazníková (2015) analyse business conditions in the Czech Republic and focus their attention on the identification of non-market factors, including mainly institutional and administrative load, which influence entrepreneurship on the level of SMEs. Chládková (2015) focused her research on the opportunities, threats, strengths and weaknesses of the business environment, and reported competition as the most important threat for the entrepreneurs in this region.

Belás et al. (2015a) examined the influence of the objective motivational factors, status in the society, relationship to the state, level of the corruption, approach to loan financing, and business optimism in the business environment of the Czech Republic and Slovakia, and found that entrepreneurs negatively perceive the relationship between surroundings and their activities, the relationship of the state to the business and corruption that they encounter while performing their business activities, and criticize the approach of financial institution to SME in financing of their needs.

The role of the State as the principal element, which sets up the external factors of business environment, cannot be underestimated. State is responsible for such substantial elements of corporate surroundings, as legislative conditions and their application in business practice, social aspects and overall economic environment (Synek et al., 2006; Májková, 2012; Kubátová and et al., 2012; Kaplanova, 2016; Virglerova et al., 2016).

Due to the fact that entrepreneurs usually have an opposite vision of the ways of the management of the economy, the relationship between the State and entrepreneurs is complicated in long-term horizon. Negative evaluation of State's approach towards their needs and interests is typical for the entrepreneurs. They usually criticize bureaucratic burden for doing business (Entrepreneur CZ, 2013), inoperative systems of business support, poor quality of an educational system (g82, 2013) and particularly the influence of corruption on the business environment (Transparency International, 2014; g82, 2013).

Correct perception of the social status of entrepreneurs by their surroundings (society, government, financial markets) in the socio-economic system is essential for the economic growth of the country. According to the survey by GfK (2013), only 55% of all respondents had a positive perception of entrepreneurs, which is quite typical for post-Soviet countries. Respondents also claimed that the level of respect that do entrepreneurs present in relation to their customers is lower than in the past. Taking into consideration that fact that media have an important role in shaping of the attitude of society towards the business environment, it is socially and economically desirable to elevate the role of entrepreneurs in the society and more intensively discuss these topics on public.

Due to the fact that SMEs usually have difficulties in accessing the capital markets, banks play a key role in SMEs financing. SMEs usually have low value of equity, suffer from a greater intensity of information asymmetry and have a minimum internal cash flow (Dierkes et al., 2013; Fetisovová et al., 2012; Májková, 2012), and all these factors determine their lower attractiveness for commercial banks. While three quarters of Czech entrepreneurs in the segment of SMEs perceive the intense action of financial risk, their ability to properly manage financial risks in the segment of SMEs is not at an appropriate level (Belás et al., 2015c).

The existence of objective and subjective business risks significantly determines the quality of business environment for SMEs. Business risks (market, production, personnel, legal, security etc.) are integrated in the *financial risk*, and market risk currently seems to be the most important one (Belás et al., 2015b).

Business environment is also determined by a series of internal factors, including the personality of the entrepreneur. Creativity, risk acceptance and independence are the most important characteristics that predispose one to become an entrepreneur (Knorr et al., 2013). The results of our previous research showed that risk acceptance, perseverance, responsibility and expertise are among the most important characteristics of entrepreneurs (Belas et al., 2014a; Kozubíková et al., 2015).

Measurement of the quality of the business environments is a widely discussed topic addressed by research teams all over the World. Several ways of its measurement are presented in the academic literature. Probably the oldest form of measurement of the quality of the business environments in different countries is the competitiveness index of the countries presented in the report on global competitiveness (Global Competitiveness Report), which is published by World Economic Forum (WEF) since 1979. Competitiveness Index tells about the prospects of the country to achieve sustainable economic growth in the medium term, evaluates the quality of public institutions, government policies and other factors that determine the level of productivity in the country. According to the results of the Global Competitiveness Report 2013 - 2014, the Czech Republic was placed on the 46th place. Among the countries of the V4 region, the first place was taken by Poland, which took the 42nd place among all evaluated countries. Slovak Republic ended up on 78th position, and Hungary occupied the 63rd place (Belanová, 2014).

The World Bank annually compares the regulation of business environment in the world economies through the ranking called Doing Business, which provides objective measures of business regulations for local firms in 185 economies and selected cities at the subnational level. The rank of each country is determined on the basis of indicators, which monitor different phases SMEs life cycle of SMEs, beginning from the establishment of the company acquiring building permits, receiving the bank loans, enforcement of contracts up to the closing of legal entities. The aim of this project is to provide a reasonable basis for understanding and improving the regulatory environment for business. The latest report, published in 2016, puts Singapore, New Zealand and Denmark on the first three places, while the order of the V4 countries is as follows: Poland on 25th place (moved up 20 positions since 2014), Slovak Republic on 29th place (moved up 20 positions since 2014), the Czech Republic on 36th place (moved up 39 positions since 2014) and Hungary on 42th place (moved up 12 positions since 2014), while the highest improvement was presented by the Czech Republic (The World Bank, 2016).

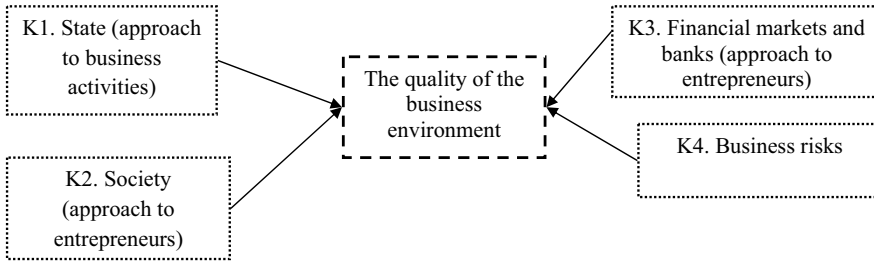
Korner et al. (2002) introduced a model of measuring of the quality of the respective business environments in the four Visegrad countries using five indicators - Corruption Perception Index, Aggregate Governance Indicators, Capture Index, Opacity Index and Corporate Governance Risk index. This model was applied only in 2002, when according to their results the quality of the business environment in Hungary was generally perceived as the best, followed by the Czech Republic and Poland, with comparable results, and was found lagging in Slovakia.

The aim of our research team was to ascertain the views of the Czech entrepreneurs and create our own model for measurement of the quality of business environment for SMEs, focused on the factors, which are the most important for the entrepreneurs themselves.

AIM, METHODOLOGY, DATA

This part of the paper presents out theoretical and methodological model of measurement of the quality of business environment in the segment of Small and Medium-Sized Enterprises (SMEs) and introduces an I_{QSME} index. While working with the important factors that form business environment, we analyse their interconnections and quantify their influence.

Based on the theoretical analysis of relevant literary sources we have created a structural model of the quality of business environment (Pic. 1). We have identified four basic individual elements of a model, which determine the quality of business environment, marked as K1, K2, K3, K4.



Pic. 1 Quality model of the business environment for SMEs

Source: own processing.

The theoretical model of the quality of business environment can be written in the form of the following equation:

$$IQ_{SME} = \sum_{i=1}^4 \phi IFK_{in} \tag{1}$$

where

I_{QSME} – index of the quality of business environment for the SME, whose values should fall within an interval between -0.4375 and 0.5625. The lower limit of the interval of the index value was calculated under assumption that all positive elements will have a zero value, and all negative elements will have the extreme value of 1. The upper limit of the interval of the index value was calculated under assumption that all negative elements will have a zero value, and all positive elements will have the extreme value of 1.

ϕIFK_{in} – the average value of the impact factor of individual elements K1, K2, K3, and K4.

i – from 1 to 4,

n – from 1 to 4

The model of the quality of business environment (Equation 1) can be presented in the following detailed form:

$$I_{QSME} = (\phi IFK1 + \phi IFK2 + \phi IFK3 + \phi IFK4) = [(IFK11 + IFK12 + IFK13 + IFK14)/4] + [(IFK21 + IFK22 + IFK23 + IFK24)/4] + [(IFK31 + IFK32 + IFK33 + IFK34)/4] + [(IFK41 + IFK42 + IFK43 + IFK44)/4] \tag{2}$$

The intensity of action of various elements in Czech economic environment was quantified using a questionnaire survey of the opinions of Czech entrepreneurs from the SME segment. The respondents were able to express their agreement or disagreement by the following types of answers: strongly agree, agree, do not hold position, disagree, completely disagree.

For the purpose of measuring the intensity of action of K1 the following statements were defined (plus and minus signs mark positive(+) or negative (-) elements):

- K11: State supports us in doing business. (+)
- K12: According to my opinion the state bullies us in doing business. (-)
- K13: *I have not met corruption and clientelism in my business* (+)
- K14: I believe, that the forms of state financial support are appropriately set.(+)

Element K2 was defined through the following statements:

- K21: I feel support of my surroundings in my business activities. (+)
- K22: I feel that people appreciate the fact that I am doing business. (+)
- K23: Politicians and public are aware of the contribution of entrepreneurs to society. (+)
- K24: Media are poorly informed about the importance of entrepreneurs for society. (-)

Element K3 was defined through the following statements:

- K31: Financial market does have enough sources to finance SMEs. (+)
- K32: Banks accept our needs and are trying to help us. (+)
- K33: Banks use too tough criteria when granting business loans. (-)
- K34: SMEs have difficulties in gaining an access to external sources of financing (financial markets, banks, state loans etc.) (-)

Element K4 was defined through the following statements:

- K41: SMEs perceive an intense action of market risk (lack of orders). (-)
- K42: The intensity of business risks has significantly increased after the crisis. (-)
- K43: I perceive an intense action of legal risk in business activities (non-compliance with contractual obligations, weak law enforcement in courts etc.). (-)
- K44: SMEs suffer from low intensity of operational risk (failure to manage the production process in the company). (+)

In order to evaluate the quality of business environment in the Czech Republic using I_{QSME} index we set the following working hypotheses:

Hypothesis 1: The quality of business environment in the Czech Republic is below average. I_{QSME} value would be under 0.

Hypothesis 1: There are no statistically significant differences in positive answers of the entrepreneurs according to their gender, level of education, age and size of the company.

In order to measure the positive effects in the related questions we merged the following types of answers: strongly agree and agree. These elements are entering the model with the positive value and are marked by a plus sign (+). In order to measure the negative effects in related questions we have merged the following types of answers: disagree and strongly disagree. These elements are entering the model with the negative value and are marked with a minus sign (-).

We analysed in detail the attitudes of entrepreneurs according to their gender, level of education, age and size of the company within the individual elements, and in the most important sub elements.

The survey of the quality of business environment was carried out in the first half of 2015 through a questionnaire on a sample of 1,141 respondents in the Czech Republic. The method of choosing companies was as follows. We randomly selected a total of 1650 companies from the Albertina database. These companies were contacted via email, where the business owners were asked to complete a questionnaire, which was placed on the website: <https://docs.google.com/forms/d/1U9coaC5JRL0N2QOOO6Xb8j3mna>

ZXdSM47Kugt4EDGFo/viewform?usp=send_form. If these companies had not responded to our mail, we addressed them by the telephone.

The structure of the respondents was as follows: 75% men, 25% women; 48% of respondents reported that they have secondary education, 34% had the university degree and 18% reported that they have secondary education without graduation; 65% of the total number of companies are micro enterprises, 27% are small enterprises and 8% are medium-sized enterprises. 62% of companies' owners stated that the company exists for more than 10 years, 21% of them stated that they operate a maximum of five years and 17% of them reported that the company belongs to an interval of five to ten years of existence.

In compliance with the recommendation of the European Commission no. 2003/361 / EC we separated microenterprises employing 0-9, small enterprises (10-49 employees) and medium-sized enterprises (50-249 employees) within the category of SMEs in the questionnaire.

Respondents were representing the following sectors: trade (33%), manufacturing (23%), construction (14%), transport (6%), agriculture (3%), and other services (39%). The total value exceeds 100% due to the fact, that the respondents were able to choose more than one option.

Statistically significant differences between the designated groups of entrepreneurs were compared through Pearson statistics at the significance level of 5%. If the calculated p-value was lower than 5%, we rejected the null hypothesis and the alternative hypothesis was adopted. The calculations were made through the software available at: <http://www.socscistatistics.com/tests/ztest/Default2.aspx>.

RESULTS AND DISCUSSION

Table 1 presents the processed results of the research. Based on the empirical research, we calculated the average values of the defined elements and calculated the value of $I_{Q_{SME}}$ index.

Table1

The average values of individual elements of the model of the quality of business environment

K1	Value of IF	K2	Value of IF	K3	Value of IF	K4	Value of IF
K11	0.111	K21	0.641	K31	0.267	K41	-0.512
K12	-0.518	K22	0.595	K32	0.399	K42	-0.616
K13	0.238	K23	0.173	K33	-0.465	K43	-0.758
K14	0.096	K24	-0.711	K34	-0.455	K44	0.202
Sum	-0.073		0.698		-0.254		-1.684
Average value	-0.018		0.175		-0.064		-0.421

Source: own processing.

$I_{Q_{SME}}$ index was calculated according to the equation (2):

$$I_{Q_{SME}} = (\phi IFK1 + \phi IFK2 + \phi IFK3 + \phi IFK4) = [(IFK11 + IFK12 + IFK13 + IFK14)/4] + [(IFK21 + IFK22 + IFK23 + IFK24)/4] + [(IFK31 + IFK32 + IFK33 + IFK34)/4] + [(IFK41 + IFK42 + IFK43 + IFK44)/4] = -0.018 + 0.175 - 0.064 - 0.421 = -0.328$$

The calculated value indicates that the quality of business environment in the Czech Republic is below average because the I_{QSME} index value belongs to the the lower part of the defined interval.

According to the above presented empirical results *we confirm H1*.

Entrepreneurs negatively evaluated the state approach to business ($\Phi IFK1 = -0.018$), the access to external sources of financing ($\Phi IFK3 = -0.064$) and the current intensity of business risk ($\Phi IFK4 = -0.421$), but positively evaluated the relationship of their surroundings to their entrepreneurial activities ($\Phi IFK2 = 0.175$).

The following elements reached the highest values in our research: K12 (state burdens in relation to business activities: negative impact), K21 (support of entrepreneurs in the local environment: positive effect), K33 (rigid banks criteria in providing loans: negative effect) and K43 (intense action of legal risk: negative effect).

These sub elements were a subject of detailed analysis in relation to gender and education of the entrepreneur. and the size and age of the company.

Table 2

According to my opinion the state bullies us in doing business

K12	M	W	UD	OD	ME	OE	10+	10-	Z score p-value M/W UD/OD ME/OE 10+/10-
The number of positive answers	184	88	96	176	191	81	144	128	0.0006 0.7114 0.0340 0.0006
The total number of respondents	861	280	392	749	740	401	705	436	
Share in %	21.37	31.43	24.49	23.50	25.81	20.20	20.43	29.36	

Legend: M – males, W – females, UD - university education, OD - other education, ME – microenterprises, OE - other enterprises in the segment of SMEs, 10+ - companies that operate for more than 10 years, 10- - companies that operate for less than 10 years.

Source: own processing.

The results of our research confirmed that there are statistically significant differences in the perception of state obstruction in relation to gender (p-value = 0.0006), size of the company (p-value = 0.0340) and age of the company (p-value = 0.0006). We found that female entrepreneurs and micro businesses more intensively perceive that the state bullies them in doing business.

Table 3

I feel support of my surroundings in my business activities.

K21	M	W	UD	OD	ME	OE	10+	10-	Z score p-value M/W UD/OD ME/OE 10+/10-
The number of positive answers	663	196	272	459	474	257	433	298	0.0183 0.0067 0.9920 0.0178
The total number of respondents	861	280	392	749	740	401	705	436	
Share in %	77.00	70.00	69.39	61.28	64.05	64.09	61.42	68.35	

Source: own processing.

According to our results, male entrepreneurs, entrepreneurs with the university degree and younger companies more intensively perceive the support of their surrounding in their entrepreneurial activities.

Table 4

Banks use too tough criteria when granting business loans

K33	M	W	UD	OD	ME	OE	10+	10-	Z score p-value M/W UD/OD ME/OE 10+/10-
The number of positive answers	412	118	152	378	346	184	331	199	0.0969 0.0002 0.7795 0.6672
The total number of respondents	861	280	392	749	740	401	705	436	
Share in %	47.85	42.14	38.78	50.47	46.76	45.89	46.95	45.64	

Source: own processing.

The results of our research indicate that entrepreneurs with the lower level of education more intensively perceive that banks that use too tough criteria when granting business loans.

Table 5

I perceive an intense action of legal risk in business activities
 (non-compliance with contractual obligations, weak law enforcement in courts etc.)

K33	M	W	UD	OD	ME	OE	10+	10-	Z score p-value M/W UD/OD ME/OE 10+/10-
The number of positive answers	662	203	296	569	556	309	547	318	0.1362 0.8650 0.4715 0.0751
The total number of respondents	861	280	392	749	740	401	705	436	
Share in %	76.89	72.50	75.51	75.97	75.14	77.06	77.59	72.94	

Source: own processing.

According to the empirical results, presented in this chapter, *we reject H 2*.

The results of our research indicate, that Czech state authorities create unnecessary barriers for business (literally bullies entrepreneurs). State support of the entrepreneurship in general was negatively evaluated by the entrepreneurs. Our study also identified the existence of a relatively high level of corruption in the business environment.

The survey conducted by Podnikatel.cz (2013) revealed, that most of the business owners are overwhelmed with the administrative duties and often whole days with filling out forms. Vast majority of entrepreneurs believe that reports about the reducing of administrative burdens in the Czech Republic remains at the level of proclamations. According to 59% of entrepreneurs bureaucratic burden increased in recent years. A third of the total amount of respondents (35%) reported that administrative requirements did not change during recent years, and only 5% of respondents stated that bureaucratic burden declined. The survey furthermore revealed that 44% of business owners spend more than 72 hours (3 full days) per year with filling in forms, reporting, acknowledgement and other bureaucratic matters.

Business environment in the Czech Republic faces a number of problems. According to several international surveys the major problems include the following: obtaining construction permits, protecting investors and enforcing contracts. Czech innovation system also has several shortcomings, eg. low coherence between business community and academic sphere, the need to improve the relevance of the scientific research and technical outputs. The main challenges for the Czech Republic are in better linkage between industry and universities, the proper use of relevant operational programs for structural funds and ensuring the commercialization of Research and Development by their involvement in economic activities. Quality of compulsory and tertiary education is also problematic (World Bank, 2014).

According to Transparency International (2015) *Corruption Perception Index* improved in 2014 in comparison with 2013 by only 3 points and the Czech Republic reached the 53rd place in the global position with a score of 51 points. Similar results were achieved by such countries as Georgia, Malaysia, Samoa, Slovakia and Bahrain. Within Europe, the Czech Republic is on 25th place out of a total number of 31 evaluated countries, is behind Hungary, but in front of Slovakia.

The report on global competitiveness by the World Economic Forum 2013-2014 highlights the corruption and inefficient government bureaucracy as two main problematic factors for doing business. The report on the fight against corruption in the EU from 2014 also mentions that among the EU member states the

Czech Republic has a highest degree of perception of corruption in the business environment (71%) and the problems of favouritism and nepotism in business (69%). OECD database on product market regulation also notes that regulatory processes are extremely complex and that start-ups perceive the above the average administrative burden (The World Bank, 2015).

Our research identified statistically significant differences between the groups of entrepreneurs in the field of perception of corruption. Women compared to men (p -value=0.006), micro-enterprises in comparison with larger businesses in the segment of SMEs (p -value=0.0340) and younger companies compared to older firms (p -value=0.0006) less intensely perceived corruption in their business environment.

The results of our research confirmed that the level of support of entrepreneurs is quite high in their surroundings (family, friends), but formal surroundings (politicians, media) were negatively rated by the entrepreneurs.

According to the entrepreneurs the approach of financial markets in relation to SMEs segment is still problematic, because entrepreneurs assume that banks apply too tough criteria for the SMEs evaluation in provision of bank loans, and financial markets do not offer enough money for their external financing.

Banks play a key role in financing of SMEs, as these companies have difficulties in accessing the capital markets. SMEs have a low amount of equity, they suffer greater intensity of information asymmetry and have a minimum internal cash flow (Dierkes et al., 2013; Fetisovová et al., 2012; Májková, 2012), which means that they don't belong to the group of the most popular commercial banks' clients.

We found that only 41.46% of entrepreneurs agree that banks accept their needs and meet their requirements. A greater intensity of positive assessment of the banks was shown by the entrepreneurs with the university degree, compared with entrepreneurs with lower education (p -value=0.0102), larger firms compared to micro-enterprises (p -value=0) and older firms with younger companies (p -value=0.0015).

Entrepreneurs currently perceive more intense action of market risk and the overall growth in the intensity of business risks due to the crisis.

According to our previous researches the most important business risks perceived by entrepreneurs in the Czech Republic and Slovakia were as follows: market, financial and personnel risks. Market risk was identified as the key risk by the largest number of entrepreneurs, which means 79.44% of them in the Czech Republic and 80.49% in Slovakia. Average performance decrease reached the level of 15.80% in the Czech Republic (calculated average of the upper values of individual intervals). Average performance decrease reached 18.78% in Slovakia (Belás et al., 2014b).

Our research confirmed that the intensity of entrepreneurial risk after the crisis significantly increased, which was confirmed by 61.61% of the total respondents. The values of the test criteria confirmed that there are statistically significant differences in the views of entrepreneurs in relation to the level of education of the entrepreneur and the age of the company. We found that entrepreneurs with higher level of less intensively perceive the current growth of business risks compared with entrepreneurs who have other types of education (p -value = 0.0007), and also younger companies compared to older firms less intensively perceive the current state of risk in the business sector (p -value = 0.0139).

CONCLUSION

The aim of our research team was to ascertain the views of the Czech entrepreneurs and create our own model for measurement of the quality of business environment for SMEs, focused on the factors, which are the most important for the entrepreneurs themselves.

The results of our research evaluated the conditions of doing business and the quality of business environment in the Czech Republic to be quite challenging (below average) because the I_{QSME} index (index of the quality of business environment in SME segment) value belongs to the the lower part of the defined interval.

In accordance with our defined parameters we found that Czech entrepreneurs quite negatively evaluate the government's approach and its attempts to develop suitable conditions for doing business, the attitude of the financial market players in providing the opportunities of external financing for their entrepreneurial activities, current situation in the sphere of business risks, that are increased due to the crisis, but are satisfied with the attitude of their surroundings to their business activities, while this area presented the higher score in the model.

The applied methodology has certain limitations. For example, during the research it was found that the defined statements cannot fully describe various elements of the model. Furthermore, we found that the expression of individual claims may not be clear to our respondents. Nevertheless, we believe that our methodological approach, that emphasizes the evaluation of the quality of business environment by the entrepreneurs, is valuable and inspiring.

We are planning to upgrade our methodological approach in our further research in order to achieve a significant improvement in the quality of the model.

REFERENCES

- Bartoš, P., Rahman, A., Horák, J., Jacová, H. (2015). Education And Entrepreneurship In The SME Segment In Economic Transformation. *Economics and Sociology*, 8(2), pages 227-239. DOI: 10.14254/2071-789X.2015/8-2/16
- Belanová, k. (2014). Komparácia kvality podnikateľského prostredia v krajinách Vyšehradskej štvorky s osobitným akcentom na dostupnosť finančných zdrojov. *Biatic*, No.1, pp. 12 – 17.
- Belas, J., Bilan, Y., Demjan, V., Sipko, J. (2015a). Entrepreneurship In SME Segment: Case Study From The Czech Republic And Slovakia. *Amfiteatru Economic*, vol. 17, issue 38, pages: 308-326.
- Belás, J., Bilan, Y., Ključnikov, A., Vincúrová, Z., Macháček, J. (2015). Actual Problems Of Business Risk In SME Segment. Case Study From Slovakia. *International Journal of Entrepreneurial Knowledge*. 2015, Issue 1/2015, Volume 3, s. 46-56. ISSN:2336-2960.
- 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*, Vol. 8, No 4, pp. 32-42.
- Belás, J., Bartoš, P., Habánik, J., Novák, P. (2014a). Significant attributes of the business environment in Small and Medium-Sized Enterprises. *Economics & Sociology*, Vol. 7, No 3, pp. 22-39.
- Belás, J., Macháček, J., Bartoš, P., Hlawiczka, R., Hudáková, M. (2014b). Business risks and the level of entrepreneurial optimism of SME in the Czech and Slovak Republic. *Journal of competitiveness*, Vol. 6, Issue 2, pp.30-41.
- Belás, J., Bartoš, P., Ključnikov, A., Doležal, J. (2015c). Risk perception differences between micro-, small and medium enterprises, *Journal of International Studies*, Vol. 8, No 3, pp. 20-30. DOI: 10.14254/2071-8330.2015/8-3/2
- Chládková, H. (2015). Selected approaches to the business environment evaluation. *Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis*, 63(2), 515-523. doi:10.11118/actaun201563020515
- Dierkes, M., Erner, C., Langer, T., Norden, L. (2013). Business credit information sparing and default risk of private firms. *Journal of Banking & Finance*, v. 37, pages 2867-2878.
- European Commission (2015). *2015 SBA Fact Sheet Czech Republic*. Available at: http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/files/countries-sheets/2015/czech-republic_en.pdf
- Fetisovová, E. a kol. (2012). *Aktuálne problémy financií malých a stredných podnikov*. Bratislava: Ekonóm.

- GfK Czech. (2013). *Průzkum: Podnikatelé jsou vnímáni pozitivněji*. Praha: ČTK. Available at: <http://www.podnikatel.cz/clanky/pruzkum-podnikatele-jsou-vnimani-pozitivneji/>
- g82. (2013). *Podnikatelé a podnikání v ČR*. Výskum. Available at: [http://www.ey.com/Publication/vwLUAssets/ Podnikatelsk%C3%BD_pr%C5%AFzkum_EOY_a_g82/\\$FILE/EYG82_EYPodnikatel_roku_2013_pruzkum.pdf](http://www.ey.com/Publication/vwLUAssets/ Podnikatelsk%C3%BD_pr%C5%AFzkum_EOY_a_g82/$FILE/EYG82_EYPodnikatel_roku_2013_pruzkum.pdf)
- Hamplova, E., Provaznikova, K. (2015). *Opinion and Attitudes of Entrepreneurs of Small and Medium-Sized Business in the Czech Republic Conditions*. 2nd Global Conference On Business, Economics, Management And Tourism. Procedia Economics and Finance, volume: 23, pages: 942-947. DOI: 10.1016/S2212-5671(15)00438-4
- Kaplanova, P. (2016). Public goods as factors of a local economic development in Slovakia, *Administratie si Management Public*, (26), pp. 6-24.
- Ključnikov, A. (2014). *Macroeconomic overview of the CIS countries as the target market for Czech exports*. In: Hradec Economic Days 2014. Hradec Králové: Univerzita Hradec Králové, pages 274-281. ISBN: 978-80-7435-369-7.
- Knorr, H., Alvarez, C., Urbano, D. (2013). Entrepreneurs or employees: a cross-cultural cognitive analysis. *Int Entrep Manag J*, 9: 273-294.
- Korner, P. Kudrna, Z., Vychodil, O. (2002). Measuring business environment quality in Central Europe. *FINANCE A UVER*, volume 52, issue 12, pages: 674-697
- Kozubíková, L., Belás, J., Bilan, Y., Bartoš, P. (2015). Personal characteristics of entrepreneurs in the context of perception and management of business risk in the SME segment. *Economics and Sociology*, Vol. 8, No1, pp. 41-54.
- Kubátová, K. a kol. (2012). *Podnikatelské prostředí v EU z hlediska veřejných financí*. Bratislava: Eurokódex.
- Májková, M. (2012). *Možnosti financování malých a středních podniků v SR*. Brno: Tribun. 2012.
- Ministerstvo průmyslu a obchodu ČR (2015). *Zpráva o vývoji malého a středního podnikání a jeho podpoře v roce 2014*. Praha: MPO
- Pavelková, D. a kol. (2009). *Klustry a jejich vliv na výkonnost firem*. Prague: Grada.
- Podnikatel.cz. (2013) *Většina podnikatelů tráví papírováním celé dny, byrokracie sa prý zvyšuje*. Available at: <http://www.podnikatel.cz/clanky/vetsina-podnikatelu-travi-papirovanim-nekolik-dni-byrokracie-se-navic-zvysuje/>
- Synek, M. a kol. (2006). *Podniková ekonomika*. Prague: C. H. Beck.
- The World Bank (2016). *Doing Business 2016*. DOI: 10.1596/978-1
- Virglerova, Z., Dobes, K., Vojtovic, S. (2016). The perception of the state's influence on its business environment in the SMEs from Czech Republic, *Administratie si Management Public*, (26), pp. 78-96.
- Transparency International (2015). *Index vnímání korupce 2014*. Available at: <http://www.transparency.cz/vysledky-zebricku-zemi-podle-indexu-vnimani-korupce-2014/>
<http://www.socscistatistics.com/tests/ztest/Default2.aspx>