IMPACT OF SELECTED ECONOMIC FACTORS ON THE BUSINESS ENVIRONMENT: THE CASE OF SELECTED EAST EUROPEAN COUNTRIES

Dvorsky J., Gavurova, B., Čepel, M., Červinka, M.[*]

Abstract: The article aims to identify and quantify significant economic factors that determine the quality of the business environment in small and medium-sized enterprises (SMEs) in the transport and services segment. The case study was carried out on a sample of 258 companies in the Czech Republic and Slovakia. Statistical methods, such as regression analysis and correlation analysis, were used to evaluate empirical data. These statistical methods test and verify several statistical hypotheses formulated. The results of the case study brought interesting findings. Findings showed the impact of the macroeconomic environment on the quality of the business environment. Conversely, monetary policy and interest rates, corporate finance, and population's consumption do not affect the quality of the business environment in the transport and services segment. The results also represent an essential basis for organizations supporting the business environment or for state institutions in the creation of materials for improving services or transport in the selected countries.

Key words: economic factors, SMEs, transport, service, quality of the business environment.

Introduction

The economic development of any state depends on four national economic sectors: transport, services, agriculture and production (Dobes et al., 2019). Each sector of the national economy has businesses of different sizes and values that contribute to overall GDP (Gross domestic product) growth (Dvorsky et. al., 2020). Small and medium-sized enterprises (SMEs) play a key role in the economic acceleration of any state. Especially in job creation, promoting innovation, competitiveness and economic growth (Cepel, 2019).

---

[*] **Ján Dvorský** Ing**.**, Ph.D., **Beáta Gavurová,** Prof**.** Phd**.** MBA**,** Tomas Bata University in Zlín, Faculty of Management and Economics, Czech Republic, **Martin Čepel,** Ing.**,** PhD. MBA, Pan-European University in Bratislava, faculty of Economics and Business, Slovak Republic; **Michal Červinka** Ing.**,** PhD. University of Entrepreneurship and Law,Institute of Entrepreneurship and Marketing, Czech Republic,

✉ corresponding author: j1dvorsky@utb.cz

✉ gavurova@utb.cz; m artin.cepel@paneurouni.com; michal.cervinka@vspp.cz

The growth and development of small and medium-sized enterprises depend on a favourable business environment (Meyer and Meyer, 2016; Civelek et al., 2016). Business activities rely heavily on the business environment, which includes the conditions under which businesses operate and develop their action plan (Rozsa et al., 2019). The business environment has a significant impact on progress, competitiveness and business growth opportunities (Kolkova, 2020; Khan et al., 2019). The Czech Republic and Slovakia make significant efforts (e.g. finance, legislative changes, and so on) in supporting small and medium-sized enterprises (Belas et al., 2018).

The sectoral parameters of SMEs in the countries of Central Europe show many similarities. SMEs mainly operate in the sector of trade, industry and in other activities that do not belong to any of the monitored categories. The study by the Slovak Business Agency (2018) that focused on a comparison of business conditions of SMEs in the countries of Central Europe specifies the fundamental factors of a high-quality business environment. These factors are divided into four groups: institutional and regulatory framework, access to markets, access to resources and entrepreneurial culture. One of the most critical areas that have a significant influence on the status and development of a business environment is regulatory policy (Lyakina et al., 2019). National approaches (regulations, laws, and other instruments of regulatory policy) it differs in the European countries, which also influences aspects of competitiveness in the individual economic sectors. Regulatory burden and regulatory duties has impact on the quality of a business environment (Vejchodska et al., 2016). Many other expert opinions and reports of economy practice besides the research studies provide a broader picture of a business environment quality (Escaleras and Chiang, 2017; Civelek et al., 2016). The tax burden of the Slovak transport enterprises and other related fees are the highest out of all the countries in Central and Eastern Europe (Dobotovicova and Janouškova, 2020). Transport enterprises are essential for a state's economic development. Therefore, a continual creation of high-quality business conditions is significant for their operation.

The given economic aspects penetrate many macroeconomic dimensions with a possibility of their quantification either as input business parameters, or output ones, and/or process parameters (everyday business practice). Consequently, primary research is focused on these parameters in the transport and services segment. Sectoral analyses of the specified business environment are performed quite rarely. Most of SMEs in the countries of Central and Eastern Europe operate in trade/services, industry sectors and in other activities. The main reason is an insufficient database and methodology issues in comparative analyses that are related to the heterogeneity of enterprises in the individual sectors (Buganova and Moricova, 2017). Also, these facts motivated the realization of primary research.

The article presents an assessment of selected economic factors (macroeconomic environment, corporate finance, monetary policy and interest rates, population's

2020
Vol.22 No.2

POLISH JOURNAL OF MANAGEMENT STUDIES
Dvorsky J., Gavurova, B., Čepel, M., Červinka, M.

consumption) and their impact on the quality of the business environment. The case study presents the attitudes of 258 small and medium-sized enterprises operating in the transport and services sectors operating in the Czech Republic and Slovak Republic.

Literature background

After years of global economic downturn, the economic situation in Europe has improved in the last decade (Belas et al., 2019). The past economic crisis has had a long-term impact on the growth and performance of SMEs in the EU, also in Visegrad countries (Hudakova et. al., 2019; Kurowska-Pysz et al., 2018). The negative impact of the economic crisis has been felt in almost all sectors of the national economy (Oláh et al., 2019). Small and medium-sized enterprises have felt its effects even more intensively (Berger and Udell, 1998). Stable economies were the ones that managed to maintain employment and productivity. Stable economies that have continued to make progress include Germany, the Czech Republic and Slovakia. Several authors point out that various factors influence the business environment. The most important are social factors (Hema Priya and Venkatesh, 2019), technological factors (Kozubikova and Kotaskova, 2019), political factors (Gavurova et al., 2019) and also economic factors (Cepel et al., 2019; Herwartz and Walle, 2014).

The study by the Association of Road Transport Operators of the Slovak Republic (CESMAD, 2020) focused on the state's influence on business development in the transportation sector, specifically in 800 transport enterprises. Unfortunately, the results showed that Slovakia has the worst conditions for transport enterprises. Tarashevskyi and Maksym (2020) in this contact said, that the conditions for Ukraine transport enterprises are not also good.

Bekeris (2012) said that macro-economic factors are important determinants of business conditions in the country, and hence, the factors can have a significant impact on profitability. Kadocsa & Francsovics (2011) said that the basic macroeconomic factors are imports, exports, competition in the market, population, wage rate, FDI, GDP, unemployment, infatuation rate, business tax rates, and inter-bank interest rates.

Macroeconomic variables are also known as external factors (Egbunike and Okerekeoti, 2018), and macroeconomic variables do influence systematic risks, and these risks affect all companies to some agree (Giri and Joshi, 2017). Business performances cannot be parted from the impact of macroeconomic factors (Devi et al., 2019), and macroeconomic factors do influence small and medium enterprises, at local and international levels (Fedorova and Pankratov, 2010) firm's performance is often determined from steadiness in the macroeconomic factors (Kljucnikov et al., 2016).

Tangjitprom (2012) mentions that macroeconomic variables used in empirical research can be classified into four groups: variables concerning general economic

POLISH JOURNAL OF MANAGEMENT STUDIES
Dvorsky J., Gavurova, B., Čepel, M., Červinka, M.

2020
Vol.22 No.2

conditions, variables involving the interest rate and monetary policy, variables reflecting price levels and variables related to international activities.

Kot (2018) presented the classification of macroeconomic variables into four groups. In the first group are general economic conditions as is the interest rate and monetary policy, price levels, and international activities. The second group contains industrial production as is the interest rate, consumer price index, exchange rate, gross domestic savings, and term spread. The third group contains the price of key assets, as is crude oil, foreign direct investment, consumption default spread. The last group contains indicators as is gold, foreign exchange reserves, employment level, and money supply.

The factors driving the term structure and the equity premium are relate to macroeconomic variables. When expected inflation decreases, the investor allocates more to the stock market, long-term bonds and unrewarded real balances, reducing short-maturity deposits. The optimal money demand entails time variations in risk aversion; reduces bond market positions when the importance of money in preferences increases, with little impact on the stock market participation; and has quantitative implications in terms of horizon effects (Lioui and Tarelli, 2019).

Stasak and Schmidt (2018) found that foreign monetary policy, the national exchange rate and the business cycle play a key role in the short- and long-term joint movement between capital markets. While a stable economic environment coupled with a strong national currency may reduce the rate of short-term joint movement between capital markets, changes in foreign monetary policy could increase the effect of external shocks. They have also shown that inflation, the exchange rate and the external economic cycle have an essential role to play after more extended periods. Fundamental theoretical aspects of quantifying business process performance include key performance indicators such as GDP, unemployment, inflation. KPIs form an integral part of the internal and external business process metrics (Stasak and Schmidt, 2018).

O'Toole et al. (2013) examined credit constraint problems for SMEs in Ireland. The article showed that the lack of access to finance is the third most important barrier for the SMEs to grow and develop. Finding customers and high competition in the market was the first and second key issues faced by the SMEs. Lack of customers was making it difficult for the SMEs to sell their products, which was creating liquidity problems. Buneeva (2016) said in general, that the consumer expenditure structure has a direct effect not only on the quality of life of people but also on the business environment. Dragnic (2014) said in his results that high lack of demand for products had a negative effect on the growth of SMEs. The article shows that SMEs faced high competition from unregistered SMEs which was creating a problem for SMEs to sell products to their target customers.

Objective, Data collection, methodology and methods

The article aims to identify and quantify significant economic factors (macroeconomic environment, monetary and interest rates, financing of enterprises, and population's consumption) that determine the quality of the business environment in small and medium-sized enterprises (SMEs) in the transport and services segment. Based on the results of case studies (Khan et al., 2019; Dvorsky et al., 2020), the authors of the article concluded that there are significant differences in the perception of economic factors by respondents in business sectors (transport and services) and it is important their examine. The business environment in the Czech Republic (CR) and the Slovak Republic (SR) was chosen for this purpose because of the mental, language, geographical, and cultural proximity of the inhabitants of both countries.

A case study of factors determining the quality of the business environment (QBE) in SMEs was conducted during 2017 - 2018. The SME was defined as the enterprise with less than 250 employees. More than 17,000 SMEs were randomly selected from reputable databases CRIBIS (SR) and BISNODE ALBERTINA (CR). The total number of addressed SMEs corresponded to approximately 5% of all SMEs in selected countries (9400 in the SR and 7800 in the CR). SMEs were approached using a structured e-mail asking them to complete an online version of the questionnaire. Only the SME owner or a senior SME manager could complete the questionnaire (hereinafter "respondent"). An online survey was created separately for each country. A total of 641 SMEs (329 in SR and 312 in CR) responded positively to our request. The return on completed questionnaires was thus 3.5%.

The first part of the questionnaire contained demographic information of respondent. The statements of selected economic factors were formulated in random order in the questionnaire. A control statement was also formulated to increase the objectivity and relevance of respondents' attitudes (e.g. prevention the questionnaire from being filled out automatically by computer). Incorrect and incomplete questionnaires were removed from the survey. Respondents were able to answer specific questions (statements) by one of the following options (according to the 5-degree Likert scale): (A5) strongly agree – 5, (A4) agree – 4, (A3) neither agree nor disagree – 3, (A2) disagree – 2, (A1) completely disagree – 1. The following statements dealing with economic factors (EFs) and the quality of the business environment were constructed from literature researches:

EF1: Macroeconomic environment: EF11: I assess the macroeconomic environment in our country as favourable for business activity; EF12: The state of the macroeconomic environment in our country promotes business start-ups; EF13: The current macroeconomic environment supports innovative business activities; EF14: The current level of fundamental macroeconomic variables (GDP, employment, inflation) promotes entrepreneurship and creates attractive business opportunities.

EF2: Monetary policy and interest rates: EF21: The central bank's monetary policy has a positive impact on the business environment; EF22: Interest rates in banks have a positive impact on the business environment; EF23: Interest rates in banks have a positive impact on innovation activities of companies; EF24: The central bank's monetary policy stabilizes the business environment.

EF3: Financing of enterprises: EF31: Companies have good access to bank loans; EF32: Bank lending conditions are acceptable to firms; EF33: The price of loans is acceptable to businesses; EF34: Banks have a positive impact on the quality of the business environment.

EF4: Population's consumption, changes in income and consumer expenditure structure: EF41: Increasing population's consumption has a positive impact on the quality of the business environment; EF42: People can buy more goods and services; EF43: Increasing population's consumption has a positive effect on my business; EF44: People buy more compared to the past.

QBE: Quality of the business environment: The business environment in our country is of high quality and suitable for business.

The following statistical hypotheses (SHs) were formulated to the main objective:

SH1: There are statistical significant differences between respondent according to nationality on the perception of the economic factors (macroeconomic environment – SH1_1; monetary policy and interest rates – SH1_2; business finance – SH1_3; population's consumption – SH1_4) in the transport and services segment.

SH2: Economic factor as is the macroeconomic environment (SH2_1); monetary policy and interest rates (SH2_2); business finance (SH2_3); population's consumption (SH2_4) is a statistically significant factor that determines the quality of the business environment according to the attitudes of Czech and Slovak SMEs in the transport and services sectors.

Pearson's Chi-square test was applied to discover statistically significant differences among the selected groups of respondents according to nationality (verification SH1). Multiple linear regression (MLR) was used to identify and quantify the relationship between EFs and QBE (verification SH2). Linear regression analysis is one of the appropriate statistical methods to evaluate factors since both the dependent variable (QBE) and the independent variables (EF1, EF2, EF3, EF4) are same metrics. Independent variables must meet the assumptions of linearity and normal data distribution (scatter plots). We used a correlation coefficient (R) to verify the dependence between QBE and EFs. The significance of regression coefficients was verified by t-test. Basic multiple linear relationships between variables are described using linear regression models: i. predictive model; ii. partial models.

Predictive model:

$$QBE= \beta_0 + \beta_1 \times EF_1 + \beta_2 \times EF_2 + \beta_3 \times EF_3 + \beta_4 \times EF_4 + \varepsilon_{t,} (1)$$

variables and constants explanation: QBE – Quality of business environment (the dependent variable); β_0 – constant, $\beta_{1; ...; } \beta_4$ – coefficients of independent variables EF_i; EF_i – independent variables (EF_1 – macroeconomic environment, EF_2 – monetary policy and interest

rates, EF_3 – Business finance, EF_4 – population's consumption, changes in income and consumer expenditure structure); ε_t – error term.

Partial models (PMs):

$$EF_i = \beta_0 + \beta_{i,1} \times EF_{i,1} + \beta_2 \times EF_{i,2} + \beta_3 \times EF_{i,3} + \beta_4 \times EF_{i,4} + \varepsilon_{t,} (2)$$

variables and constants explanation: EFi– the selected economic factor(i=1,…, 4); β_0 – constant, $\beta i,1;… \beta i,5$ – coefficients of independent variables EFi; EFi,j – independent indicators; εt – error term.

The coefficient of determination (R^2) gives the percentage of the explained variability of the dependent variable by the chosen regression model. The F-test verified the significance of the whole regression model. The presence of dependence between independent variables (multicollinearity) was verified using the Inflation Variation Factor (VIF - test). If the value of the VIF test for the independent variable is less than 5, that the regression coefficient (economic factor) is not affected by multicollinearity. The Bartlett test confirmed the assumption of homoscedasticity (constant dispersion) of errors if the Bartlett statistic value was less than the critical rejection value. Normal distribution of errors was evaluated by S-W test. The Chi-square test was used to determine the differences in a perception of selected factors among respondents in the Czech Republic and Slovakia. The level of significance (α) in testing hypotheses is 0.05. The calculations were performed using the SPSS Statistics software.

Table 1 presents the demographic characteristics of the respondents (n = 258; 40.2% of 641SMEs) of SMEs in the transport and services sector.

Table 1. Structure of respondents according to demographic characteristics

Demographic characteristics		Czech Republic n = 125 (100%)	Slovak Republic n = 133 (100%)
Company Size	Micro Business	111 (88.8%)	100 (75.2%)
	Small Business	12 (9.6%)	26 (19.5%)
	Medium-sized Business	2 (1.6%)	7 (5.3%)
Time of Business	Less than 5 years	20 (16.0%)	50 (37.6%)
	5 – 10 years	20 (16.0%)	31 (23.3%)
	More than 10 years	52 (68.0%)	52 (39.1%)
Academic Degree	High school education	76 (60.8%)	38 (28.6%)
	University education	49 (39.2)	95 (71.4%)
Gender	Male	96 (76.8%)	99 (74.4%)
	Female	29 (23.2%)	34 (25.6%)

Case study results

The total number of attitudes for each EFs (EF1, ..., EF4) is 500/532 SMEs in CR/SR (number of respondents * number of indicators of selected economic factor). The pivot table (see table 2) contains the attitudes of respondents according to nationality and type of response to selected economic factors.

Table 2. Comparison of attitudes among respondents in the Czech Republic and Slovakia in the economic area

Respondents´ Attitudes	Czech Republic				Slovak Republic			
	EF1	EF2	EF3	EF4	EF1	EF2	EF3	EF4
A1 + A2	208	154	146	62	217	164	198	61
(%)	41.6%	30.8%	29.2%	12.4%	40.8%	30.8%	37.2%	11.5%
A3	145	201	165	60	139	182	132	55
(%)	29.0%	40.2%	33.0%	12.0%	26.1%	34.2%	24.8%	10.3%
A4 + A5	147	145	189	378	176	186	202	416
(%)	29.4%	29.0%	37.8%	75.6%	33.1%	35.0%	38.0%	78.2%
EFs	EF1		EF2		EF3		EF4	
Chi-square	1.931		5.348		10.977		1.053	
P – value	0.381		0.069		0.004^*		0.591	

Note: EFs – Economic factors; *Statistical significant differences on $\alpha = 0.05$; A1, …, A5 – type of answer of respondent.

The results (Table 2) show significant differences in a perception of monetary policy and interest rates (EF3) among respondents in the Czech Republic and Slovakia (p-value = 0.004). SH1_1 was confirmed.
However, there are no statistically significant differences among respondents in the Czech Republic and Slovakia in comparing economic factors EF1, EF2 and EF4 (p-value > 0.05).
SH1_2, SH1_3 and SH1_4 were rejected.
Linear trends between the dependent variable (QBE) and the independent variables (EFi; i = 1, ..., 4) were performed (and confirmed) by the application of point graphs (graphical analysis).
The following table (see Table 3) summarizes the results of the verification of the dependence (correlation analysis) between the selected indicators (EF11, ..., EF44) and the economic factors (dependent variable - EF1, …, EF4). Table 3 contains also the verification of the significance of regression coefficients in PMs.

Table 3. Verification of statistical significance of regression coefficients

Type of model	Correlation and regression analysis	Independent variables			
		EFi1	EFi2	EFi3	EFi4
PM1 $EF_{i=1}$	Coefficient of Correlation (R)	0.481	0.544	0.409	0.383
	Significance R: p- value	0.004^*	0.001^*	0.001^*	0.001^*
	SEC (t-test: p-value)	7.39E-5	4.42E-08	0.012	0.034
PM2 $EF_{i=2}$	Coefficient of Correlation (R)	0.157	0.217	0.209	0.356
	Significance R: p- value	0.024^*	0.001^*	0.001^*	0.001^*
	SEC (t-test: p-value)	0.627	0.240	0.160	2.11E-6
PM3	Coefficient of Correlation (R)	0.306	0.259	0.191	0.315

$EF_{i=3}$	Significance R: p- value	0.001^*	0.001^*	0.007^*	0.001^*
	SEC (t-test: p-value)	0.018	0.267	0.483	0.001
PM4 $EF_{i=4}$	Coefficient of Correlation (R)	0.186	0.153	0.179	0.148
	Significance R: p- value	0.015^*	0.037^*	0.034^*	0.035^*
	SEC (t-test: p-value)	0.043	0.293	0.121	0.483

Note: R–coefficient of correlation; * Statistically significant correlation; SEC – Significance of the estimate coefficient; PM1 – partial model for EF1; …; PM4 – partial model for EF4.

The results (see Table 3) showed a moderate positive dependence between i. EF11 and QBE; ii. EF12 and QBE; iii. EF13 and QBE. Other paired correlation coefficients (indicators and QBE) showed a weak positive correlation. The regression coefficient of the independent variable is statistically significant if the p-value of the Student t-test criterion is less than the significance level. The following Table 4 shows the results of testing (according to MLR) of the statistical significance of the sub-models thus designed (PM1,…, PM4).

Table 4. Characteristics of multiple linear regression of PMs

Characteristics of the PMs	Type of partial model			
	PM1	PM2	PM3	PM4
MCC	0.628	0.388	0.372	0.246
R^2	0.395	0.151	0.138	0.060
F-test (p-value)	1.15E-26	2.18E-08	1.19E-7	0.003
Type of model	MLR equation			
PMs PM1	$EF_1 = 0.08 + 0.229*EF_{11}+0.35*EF_{12}+0.17*EF_{13}+0.13*EF_{14}$			
PM2	$EF_2 = 0.89 + 0.24*EF_{24}$			
PM3	$EF_3 = 1.08 + 0.18*EF_{31}+0.26*EF_{34}$			
PM4	$EF_4 = 0.98 + 0.13*EF_{41}$			

Note: MCC – Multiple correlation coefficient; R^2 – Coefficient of determination; PM1 – partial model for EF1; …; PM4 – partial model for EF4.

Table 4 shows that all PMs are statistically significant (P-value of the F-test is lower than the significance level). Multicollinearity in PM1 is rejected because the Variance Influence factor is 2.581 (value is less than 5). Other PMs are less than three statistically significant indicators. Homoscedasticity of errors were confirmed for all PMs (PM1: Bartlett's test: p-value = 0.156; PM2: Bartlett's test: p-value = 0.417; PM3: Bartlett's test: p-value = 0.132; PM4: Bartlett's test: p-value = 0.097). The p-values are greater than level of significance (0.05). The normal distribution of errors was confirmed by S-W test (PM1: S-W test: p - value = 0.247; PM2: S-W test: p - value = 0.174; PM3: S-W test: p - value = 0.480; PM4: S-W test: p - value = 0.255).The results of statistical testing of relations of economic factors (EF1, ..., EF4) and QBE are shown in Table 5 (predictive model).

Table 5. Characteristics of QBE of predictive model

Verification of the significance of the estimated coefficient and correlation				
Coefficient of Correlation (R)	0.617	0.338	0.335	0.244
Significance R: p- value	0.000[*]	0.001[*]	0.001[*]	0.001[*]
SEC (t-test: p-value)	9.46E-20	0.628	0.179	0.501
Characteristics of the regression Predictive model				
MCC	0.623			
R^2	0.387			
F-test (p-value)	5.64E-26			
MLR equation	QBE = -0.32 + 0.21*EF1			

Note: [*] Statistically significant correlation;; R- coefficient of correlation; SEC – Significance of the estimate coefficient.

The results of verifying the significance of the regression coefficients for performing MLRs are satisfying (see Table 5). Statistically insignificant factors are EF2, EF3 and EF4. The above predictive model is statistically significant (p-value of F-test is 5.64E-27). Macroeconomic environment (EF1; p-value of t-test = 9.46E-20) explains 38.7% of the variability of respondents' responses to QBE perception. The other factors are not statistically significant (according SEC: EF2 = 0.628; EF3 = 0.179; EF4 = 0.501). Homoscedasticity of errors was confirmed (Bartlett's test: p-value = 0.198). The normal distribution of errors was confirmed by S-W test (S-W test: p – value = 0.364). Hypothesis SH1 is confirmed. We reject the hypotheses SH2_2, ..,SH2_4.

Discussion

The results of the case study yielded surprising findings. All selected indicators of the macroeconomic environment are significant and determine this economic factor. The same conclusions were reached by Dobes et al. (2019). The most important indicator of the macroeconomic environment is the fact that the macroeconomic environment supports business start-ups. The least determinant indicator of the macroeconomic environment is macroeconomic variables (GDP, employment, inflation). The outcomes of our study correlate positively with Onofrei's results (2019). Interest rates in banks have a positive effect on the business environment determined by the monetary policy factor and interest rates. Other monetary policy and interest rate indicators are not relevant. These conclusions from the SME sector in the transport and services divisions are contrary to the results of the study (Lioui and Tarelli, 2019).

In particular, good access to bank loans and the fact that banks have a positive impact on the quality of the business environment have a positive effect on the economic factor. The positive impact of the banking sector on business is a subject to several studies (Belas et al., 2018; Berger and Udell, 1998). Population's

consumption, changes in incomes and structure of consumer expenditures are also economic factors, which are determined by the increasing consumption of the population. Increased population's consumption has a positive impact on the quality of the business environment.

Conclusion

The article aims was identification and quantification significant economic factors that determine the quality of the business environment in SMEs in the transport and services segment. Our case study demonstrated the impact of the macroeconomic environment on the quality of the business environment. Conversely, monetary policy and interest rates, corporate finance, and population's consumption do not affect the quality of the business environment in the transport and services segment. On the other hand, the above findings are formulated on a sample of 258 subjective attitudes of owners and managers of SMEs in the transport and services sector.

Improvement of macroeconomic conditions to develop a business environment in both countries represents continual research of external changes and their influence on performance parameters of the enterprises and their strategic orientation. Also, the conditions, which are set for creating new enterprises, are essential. Decreasing administration process burden and time-consuming in the creation of enterprises, as well as a limitation of an administrative burden of small and medium-sized enterprises represent those conditions. The business community that can consider and evaluate the impacts of regulations' influence on their business should be a part of the processes of new regulations' creation. Consequently, it should support those processes that prevent effective business development. Favourable business environment also requires the stability of the legislative environment, its transparency and legal certainty, better law enforcement, etc. The state should review the tax burdens of the enterprises (e.g. tax wedge), and it should support simplification of tax processes, innovation potential and technological readiness of SMEs during limited time frames. As the attitudes of owners and managers show, the monetary policy and interest rates do not influence the quality of a business environment in the researched sectors. However, access to finances may represent a significant barrier in the micro-enterprises.

The authors realize that the case study has its limits. One of them is the local character of the case study - only two Central European countries. Another restriction is the number of addressed entrepreneurs - 258 enterprises in the transport and services sectors — a selection of statistical methods in the form of regression analysis to prove relationships between selected economic factors. Authors believe that the article, despite the above shortcomings, has interesting findings, especially for small and medium-sized enterprises themselves in given sectors of the national economy of transport and services. The results also represent an essential basis for organizations supporting the business environment or for state

POLISH JOURNAL OF MANAGEMENT STUDIES
Dvorsky J., Gavurova, B., Čepel, M., Červinka, M.

2020
Vol.22 No.2

institutions in the creation of materials for improving services or transport in selected countries.

The cross-sectoral perception of selected economic factors and their impact on the quality of the business environment can also bring a different understanding of the needs of SMEs. The effect of other factors on the quality of the business environment will be no less interesting for further research direction. These are mainly political factors (legislation, state, business support organizations), technological factors (availability of human capital, infrastructure of science, research and ecology, relationship between private and public sector) and social factors (education and its quality, family environment, influence of media and communication channels, business reputation, etc.).

The research results represent a valuable platform for the creators of economic policies, as well as the creators of national and regional development plans in both countries. Trends in the regional development lead to a creation of concepts of strategic- investment and development packages that include in their basic structure information of a sectoral business attractiveness, sectoral and regional productivity, etc. The differences in regional productivity significantly influence the economic development of the countries. Also, there persist strong tendencies of widening gaps in labour productivity between successful and underdeveloped regions. The sectoral analyses and causal research of competitiveness factors of the individual sectors and related enterprises and conditions, where such enterprises are created and operate, are inevitable in stopping this process. Management of economic factors of SMEs in the business sectors transportation and services have many specifics, but management (identification, analysis, evaluation, and preventive actions) are important for each business sector.

References

Belas, J., Smrcka, L., Gavurova, B. and Dvorsky, J., (2018). The Impact of Social and Economic Factors in the Credit Risk Management of SME. *Technological and Economic Development of Economy,* 24(3): 1215–1230.

Belas, J., Strnad, Z., Gavurova, B. and Cepel, M. (2019). Business environment quality factors research-sme management´s platform. *Polish Journal of Management Studies, 20*(1), 64-77.

Bekeris, R., (2012). The impact of macro-economic indicators upon SME's profitability. *Ekonomika*, 91(3), 117–128.

Berger, A. N., Udell, G. F., (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking and Finance, 22*(6-8), 613-673.

Buganová, K., Moricová, V., (2017). Innovation of education in risk and crisis management. *Turkish Online Journal of Educational Technology, 2017*(November Special Issue INTE), 177-182.

Buneeva, R. I., Buneeva, M. V., Toropov, V. V. and Khryuchkina, E. A., (2016). Analysis of researching dynamics and structure of consumer expenditure of the russian population. *International Journal of Economics and Financial Issues, 6*(2), 31-36.

2020
Vol.22 No.2

POLISH JOURNAL OF MANAGEMENT STUDIES
Dvorsky J., Gavurova, B., Čepel, M., Červinka, M.

Civelek, M., Ključnikov, A., Dobrovič, J. and Hudakova, M., (2016). A model of measurement of the quality of business environment in SME segment. *Journal of International Studies, 9*(2), 90-102.

CESMAD (2020). Available at: *https://cesmad.sk/clanok/2426-statne-podmienky-brzdia-rozvoj-podnikania-v-cestnej-doprave,* Access on: 29.05.2020

Cepel, M., (2019). Social and Cultural Factors and Their Impact On The Quality Of Business Environment In the SME Segment. *International Journal of Entrepreneurial Knowledge*, 7(1), 65-73.

Cepel, M., Stasiukynas,A., Kotaskova, A. and Dvorsky, J., (2018). Business environment quality index in the SME segment. *Journal of Competitiveness*, 10 (2), 21-40.

Commander, S., Svejnar, J., (2011). Business environment, exports, ownership, and firm performance. *Review of Economics and Statistics, 93*(1), 309-337

Dewi, V. I., Soei, C. T. L. and Surjoko, F. O., (2019). The impact of macroeconomic factors on firms' profitability (evidence from fast moving consumer good firms listed on indonesian stock exchange). *Academy of Accounting and Financial Studies Journal, 23*(1).

Dobes, K., Virglerova, Z. and Kramolis, J., (2019). Impact of selected factors on the perception of the macroeconomic and financial environment of smes (empirical study from czech republic and slovak republic). *Scientific Papers of the University of Pardubice, Series D: Faculty of Economics and Administration, 27*(45), 29-40

Dragnic, D., (2014) „Impact of internal and external factors on the performance of fast-growing small and medium businesses", *Management: Journal of Contemporary Management Issues*, 19(1): 119–159.

Dvorsky, J., Belas, J., Novotna, I., Fero, M. and Petrakova, Z., (2020). Quality of business environment of the SME: A sectoral view. *Communications - Scientific Letters of the University of Zilina, 22*(4), 163-172.

Egbunike, C.F., Okerekeoti, C.U., (2018). Macroeconomic factors, firm characteristics and financial performance. *Asian Journal of Accounting Research*, 3(2),142–168.

Escaleras, M., Chiang, E. P., (2017). Fiscal decentralization and institutional quality on the business environment. *Economics Letters, 159*, 161-163.

Fedorova, E. A., Pankratov, K. A., (2010). Influence of macroeconomic factors on the russian stock market. *Studies on Russian Economic Development, 21*(2), 165-168.

Gavurova, B., Belas, J., Strnad, Z., and Rozsa, Z., (2019). Impact of the state on business environment-sectoral analysis. *Journal of International Studies, 12*(4), 244-257

Giri, A. K., Joshi, P., (2017). The impact of macroeconomic indicators on Indian stock prices: An empirical analysis. *Studies in Business and Economics*, 12(1), 61-78.

Hema Priya, M., Venkatesh, R., (2019). The paradoxical effect of drive factors on social entrepreneurship sustainability. *International Journal of Recent Technology and Engineering, 8*(2), 644-649.

Herwartz, H., Walle, Y. M., (2014). Determinants of the link between financial and economic development: Evidence from a functional coefficient model. *Economic Modelling, 37*, 417-427.

Hudakova, M., Masar, M., Luskova, M. and Patak M.R., (2018). The Dependence of Perceived Business Risks on the Size of SMEs. *Journal of Competitiveness*, 10(4), 54–69.

POLISH JOURNAL OF MANAGEMENT STUDIES
Dvorsky J., Gavurova, B., Čepel, M., Červinka, M.

2020
Vol.22 No.2

Kadocsa, G., Francsovics, A., (2011). Macro and micro economic factors of small enterprise competitiveness. *Acta Polytechnica Hungarica, 8*(1), 23-40.

Khan, K. A., Çera, G. and Nétek, V., (2019). Perception of the Selected Business Environment Aspects by Service Firms. *Journal of Tourism and Services*, 10(19), 111-127.

Ključnikov, A., Belás, J. and Smrcka, L., (2016). Risk-taking and Aggressiveness as the Significant Part of the Entrepreneurial Orientation of SMEs: Case of the Czech Republic. *Polish Journal of Management Studies,* 14(1), 129-139.

Kolkova, A., (2020). The Application of Forecasting Sales of Services to Increase Business Competitiveness. *Journal of Competitiveness*, 12(2), 90–105.

Kot, S., (2018). Sustainable supply chain management in small and medium enterprises. *Sustainability (Switzerland), 10*(4).

Kozubikova, L., Kotaskova, A., (2019). The impact of technological factors on the quality of the business environment. *Transformations in Business and Economics, 18*(1), 95-108.

Kurowska-Pysz, J., Szczepańska-Woszczyna, K., Štverková, K., Kašík, K. (2018). The catalysts of cross-border cooperation development in Euroregions. *Polish Journal of Management Studies*, 18(1), 180-193.

Lioui, A., Tarelli, A., (2019). Macroeconomic environment, money demand and portfolio choice. *European Journal of Operational Research, 274*(1), 357-374.

Lyakina, M., Heaphy, W., Konecny, V. and Kliestik, T., (2019). Algorithmic governance and technological guidance of connected and autonomous vehicle use: Regulatory policies, traffic liability rules, and ethical dilemmas. *Contemporary Readings in Law and Social Justice, 11*(2), 15-21.

Meyer, N., Meyer, D. F., (2016). The relationship between the creation of an enabling environment and economic development: A comparative analysis of management at local government sphere. *Polish Journal of Management Studies, 14*(2), 150-160.

Narayan, P. K., Sharma, S. S., (2011). New evidence on oil price and firm returns. *Journal of Banking and Finance, 35*(12), 3253-3262.

Oláh, J., Virglerova, Z., Popp, J., Kliestikova, J. and Kovács, S., (2019). The assessment of non-financial risk sources of SMES in the V4 countries and serbia. *Sustainability (Switzerland), 11*(17).

O'Toole, C., Gerlach-Kristen, P., O'Connell, B., (2013) „Measuring credit constraints for Irish SMEs", *Quarterly Economic Commentary*, 1(3), pp 1–14.

Rozsa, Z., Formanek, I. and Manak, R., (2019). Determining the factors of the employees' intention to stay or leave in the Slovak's SMEs. *International Journal of Entrepreneurial Knowledge*, 7(2), 63-72.

Slovak Business agency (2018). Available at: *http://www.sbagency.sk/sites/default/files/porovnanie_podmienok_podnikania_msp_v_k rajinach_strednej_europy.pd*f, Access on: 01.09.2019

Sobotovičová, Š., Janoušková, J., (2020). Specifics of real estate taxation in the czech and slovak republics. *International Advances in Economic Research, 26*(3), 273-287.

Stasak, J., Schmidt, P., (2018). Key performance indicators versus business process metrics. *International Journal of Advanced Operations Management, 10*(2), 130-154.

Tangjitrom, N., (2012). The review of macroeconomic factors and stock returns. *International Business Research*, 5(8), 107–115.

Tarashevskyi, Maksym M., (2020). The Status of Risk Management in Transport Enterprises of Ukraine. *Business Inform*, 8, 125–133.

Vejchodská, E., Slavíková, L. and Malý, V., (2016). Evaluating the regulatory burden: Pollutant release and transfer reporting costs. *Prague Economic Papers, 25*(6), 671-685.

WPŁYW WYBRANYCH CZYNNIKÓW GOSPODARCZYCH NA OTOCZENIE BIZNESOWE NA PRZYKŁADZIE WYBRANYCH KRAJÓW EUROPY WSCHODNIEJ

Streszczenie: Artykuł ma na celu identyfikację i kwantyfikację istotnych czynników ekonomicznych, które determinują jakość otoczenia biznesowego w małych i średnich przedsiębiorstwach (MŚP) w segmencie transportu i usług. Studium przypadku zostało przeprowadzone na próbie 258 firm w Czechach i na Słowacji. Do oceny danych empirycznych zastosowano metody statystyczne, takie jak analiza regresji i analiza korelacji. Te metody statystyczne testują i weryfikują kilka sformułowanych hipotez statystycznych. Wyniki studium przypadku przyniosły interesujące ustalenia. Wyniki pokazały wpływ otoczenia makroekonomicznego na jakość otoczenia biznesowego. I odwrotnie, polityka pieniężna i stopy procentowe, finanse przedsiębiorstw i konsumpcja ludności nie wpływają na jakość otoczenia biznesowego w segmencie transportu i usług. Wyniki stanowią również istotną podstawę dla organizacji wspierających otoczenie biznesu lub dla instytucji państwowych w tworzeniu materiałów do doskonalenia usług lub transportu w wybranych krajach.

Słowa kluczowe: czynniki ekonomiczne, MŚP, transport, usługi, jakość otoczenia biznesowego.

选定经济因素对商业环境的影响：以选定的东欧国家为例

摘要：本文旨在确定和量化影响运输和服务领域中小型企业（SME）的商业环境质量的重要经济因素。该案例研究是对捷克共和国和斯洛伐克258家公司的样本进行的。统计方法，例如回归分析和相关分析，用于评估经验数据。这些统计方法测试并验证了所制定的几个统计假设。案例研究的结果带来了有趣的发现。调查结果显示了宏观经济环境对商业环境质量的影响。相反，货币政策和利率，公司融资以及人口的消费不会影响运输和服务领域的商业环境质量。结果还为支持商业环境的组织或国家机构创建用于改善所选国家/地区的服务或运输的材料提供了必要的基础。

关键词：经济因素，中小企业，运输，服务，商业环境质量。