

Effect of Economic Risk Sources on the Quality of the Business Environment in the SME Segment: A Case Study from the Slovak Republic

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Abstract: The aim of the article is to define and quantify the impact of specific economic risk sources on the quality of the business environment (QBE). The subject of the analysis was the evaluation of the impact of selected economic risk sources, including the macroeconomic environment, monetary policy and interest rates, and corporate financing on the QBE. Data was collected between 2018 and 2022 using an online survey method. A total of 480 SMEs from the Slovak Republic's business environment completed the questionnaire. Advanced statistical techniques, including descriptive statistics, correlation analysis, and linear regression analysis, were employed to evaluate the statistical hypotheses. The empirical results yielded several significant findings. All examined sources of the macroeconomic environment, such as the level of basic macroeconomic indicators, the state of the macroeconomic environment in the context of starting a business, and innovation activities of SMEs, determine the QBE. Other key factors that positively influence the quality of the business environment include: stabilization of the business environment by the central bank's monetary policy; the level of bank interest rates on the innovation activities of companies and availability of bank loans. The findings are significant not only for the SME segment itself and their owners and top managers but also for national-level institutions along with non-profit organizations assisting in improving the entire SME segment in the business environment.

Keywords: Quality of business environment, SME segment, Economic risks, Entrepreneurship, Case study

1. Introduction

The business environment is a dynamic and interconnected system influenced by a wide array of institutions and actors at both national and international levels. The complexity of this environment is shaped by interactions among economic, political, technological, and social factors, which are continuously evolving and interdependent (Gaganis et al., 2019; Blasiu). Understanding and monitoring these changes pose significant challenges, and many national and international organizations define specific indicators to ensure international comparability and facilitate the analysis of these dynamic processes (Yarmoliuk & Savchuk, 2022).

Some of the most extensively studied areas of the business environment include risk management, corporate financing and capital, employment, quality of human resources, social policy in connection with the labor market and legislation, legal frameworks for business operations, public finance, including tax and levy policy, antitrust policy, subsidy policy, licensing policy, certification systems, and other related fields. (Barata & Fontainha, 2017; Buno et al., 2015; Hanggraeni et al., 2019, Kotorri & Krasniqi, 2018; Rózsa et al., 2023).

The originality of the article lies in the comparison of research findings from empirical quantitative research on the impact of economic risk sources on the quality of the business environment over the years 2018 and 2022. The quantitative research was conducted based on the individual attitudes of owners and managers within the business environment of the Slovak Republic, with a sample size of 631 respondents.

The structure of the article is as follows. A critical literature review was conducted to identify significant economic risk sources determining the quality of the business environment. Subsequently, the article's objective, data collection methodology, questionnaire and variables, statistical hypotheses and methods, and the demographic structure of the research sample were formulated. The following section presents empirical research results, supported by the application of correlation and regression analysis. The discussion includes an international comparison of empirical results with similar studies in research articles. The conclusion outlines the limitations and future research directions.

2. Literature Review

The effect of economic risk sources on the quality of the business environment in the SME segment has been a significant area of research, particularly given the crucial role SMEs play in the global economy (Manggu et al., 2024; Zsigmond & Mura, 2023; Petrů et al., 2018; Kozubíková et al., 2017; Virglerova et al., 2017). Economic risks, including macroeconomic instability, fluctuations in monetary policy and interest rates, and insufficient corporate financing have been shown to have profound impacts on SMEs' operational performance and growth potential (Čera et al., 2019; Yarmoliuk & Savchuk, 2022). Understanding and mitigating these risks is essential for ensuring the sustainability and competitiveness of SMEs (Belás et al., 2020; Rózsa et al., 2024). Various studies have explored these dimensions, highlighting the multifaceted nature of economic risks and their implications for the SME sector (Ajufoh et al., 2023; Belás et al., 2019).

Risks related to the labor force are widely discussed in terms of working and socioeconomic conditions (Devkota et al., 2023; Navickas et al., 2022), generation gap and performance (Cizreliogulları & Babayiğit, 2022; Šakyatė-Statnickė et al., 2023), migration (Přívarová et al., 2022), technological development (Andrade et al., 2023), incentives (Abou-Shouk et al., 2023), networking activities (Rozsa et al., 2022), workshops (Ključnikov et al., 2022a), and satisfaction (Matijová et al., 2023). Other aspects include firms' brand value (Plaikner et al., 2023), digital transformation (Krajcik et al., 2023), innovative organizational strategies (Civelek et al., 2023a), sustainable development (Civelek et al., 2023b), innovation performance (Civelek & Krajčik, 2022), and internationalization (Ključnikov et al., 2022b).

One of the primary economic risk sources affecting SMEs is the macroeconomic environment. Macroeconomic instability, such as fluctuations in GDP growth rates, inflation, and exchange rates, can create uncertainty and volatility, which in turn affect business planning and investment decisions (Lacko et al., 2023; Ceylan, 2021; Halim et al., 2017). Studies have shown that SMEs are particularly vulnerable to macroeconomic shocks due to their limited financial resources and lower resilience compared to larger firms (Altnaa & Neszmélyi, 2022; Pedauga et al., 2021). This vulnerability necessitates a robust understanding of macroeconomic trends and the implementation of strategies to mitigate their adverse effects.

Monetary policy and interest rates also play a crucial role in shaping the business environment for SMEs (Khariza et al., 2020). Changes in interest rates can affect borrowing costs, which are critical for SMEs that often rely on external financing for their operations and expansion. High interest rates can increase the cost of capital, making it more difficult for SMEs to finance new projects or manage cash flow (Ghosh, 2019).

Conversely, low interest rates can stimulate investment and expansion by reducing the cost of borrowing. However, sudden changes in monetary policy can create uncertainty, leading to cautious spending and investment behaviors among SMEs (Mtunya et al., 2017). Research by Ferrando et al. (2023) highlights the importance of stable monetary policy in fostering a supportive business environment for SMEs. Additionally, Caglio et al. (2021) emphasize that understanding the impact of interest rates through regression analysis can help SMEs make informed financial decisions.

Corporate financing is another critical factor influencing the quality of the business environment for SMEs. Access to finance is often cited as one of the main challenges faced by SMEs, and the availability of financial resources is closely linked to economic conditions. During periods of economic downturn, credit availability may decrease, and lenders may become more risk-averse, further limiting the financing options available to SMEs (Nguyen et al., 2021; Zubair et al., 2017).

The quality of the business environment for SMEs is intricately linked to various economic risk sources. Understanding and addressing these risks through informed policy-making and strategic business practices is crucial for fostering a resilient and dynamic SME sector. By leveraging insights from academic research and applying robust risk management frameworks, SMEs can better navigate the complexities of the economic landscape and contribute to sustainable economic growth.

3. Aim, Methodology and Variables

The aim of the article is to define and quantify the impact of specific economic risk sources on the quality of the business environment (QBE). The subject of the analysis was the evaluation of the impact of selected economic risk sources - the macroeconomic environment; monetary policy and interest rates; and corporate financing on QBE.

3.1 Data Collection

The respondent is defined as an owner or a top manager of a SME operating within the business environment of the Slovak Republic (SR). Data was collected between 2018 and 2022 using an online survey. The “Albertina” database was used in 2018 to identify and subsequently contact the respondents. Attitudes from the respondents were gathered using a survey method through the completion of an online questionnaire. The response rate was 5.3% (n = 329 respondents). In 2022, data collection was carried out through the panel agency MNFORCE, with a sample size of 151 respondents.

3.2 Statistical Hypotheses

The following statistical hypotheses (SHs) were formulated to achieve the aim of the scientific article:

SH1: The macroeconomic environment (EF1) is a statistically significant economic factor that has a positive effect on the quality of the business environment (QBE).

SH2: Monetary policy and interest rates (EF2) are statistically significant economic factors that have a positive effect on the quality of the business environment (QBE).

SH3: Corporate financing (EF3) is a statistically significant economic factor that has a positive effect on the quality of the business environment (QBE).

3.3 Questionnaire and Variables

Respondents could answer the statement with one of the five responses: strongly agree, agree, neutral, disagree, and strongly disagree (Likert scale responses). The questionnaire contained the following dependent variable (DV) and independent variables (IVs):

DV: The business environment in our country is of high quality and suitable for business (QBE).

IVs: Macroeconomic Environment (EF1) – EF11: I consider the macroeconomic environment in our country to be favorable for business activities. EF12: The state of the macroeconomic environment in our country supports the initiation of new businesses. EF13: The current macroeconomic environment supports innovative activities of companies. EF14: The current level of basic macroeconomic indicators (GDP, employment, inflation) supports business and creates interesting business opportunities.

Monetary Policy and Interest Rates (EF2) – EF21: The central bank's monetary policy positively influences the business environment. EF22: Interest rates in banks positively affect the business environment. EF23: Interest rates in banks positively influence the innovative activities of companies. EF24: The central bank's monetary policy stabilizes the business environment.

Corporate Financing (EF3) – EF31: Companies have a good access to bank loans. EF32: Bank loan conditions are acceptable for companies. EF33: The cost of loans is acceptable for companies. EF34: Banks positively influence the quality of the business environment.

3.4 Statistical Methods

Regression analysis is used not only for predicting the future values of the dependent variable in time series but also for identifying causal relationships between variables. By applying linear regression models, the significance of indicators (determining the direction and strength of influence using RC1, ..., RC3) on QBE is verified. LRM is appropriate to apply because all variables are identically scaled (same metrics - response scaling: 1 – strongly agree, ..., 5 – strongly disagree) and are formulated in such a way that the respondents' attitudes towards selected economic factors (EF1, ..., EF3) converge linearly with their attitudes towards statements regarding QBE.

In the first phase, descriptive statistics (mean, standard deviation, skewness, kurtosis) were calculated for the initial evaluation of statements related to the DV and IVs. In the second phase, paired correlation coefficients were used to determine the dependencies between the dependent variable (DV) and independent variables (IVs), which were presented through correlation matrices (Schmidt & Finan, 2018). The significance of the paired correlation coefficients was verified at the significance level ($\alpha = 0.05$). The estimation of regression coefficients of the independent variables was conducted using the least squares method (Hair et al., 2010). A regression coefficient is statistically significant if the p-value of the t-test is less than α ($\alpha = 0.05$; Salmerón et al., 2018). The general form of the linear regression function is as follows:

$$QBE = RC_0 + RC_1 \times EF_1 + RC_2 \times EF_2 + \beta_3 \times EF_3 + \varepsilon_n, \quad (1)$$

where: – dependent variable (quality of business environment); RC_0 – constant, RC_1 ; ...; RC_3 – estimate of regression coefficients; EF_1 , ..., EF_3 – independent variables (items of economic factors: EF_1 , ..., EF_3); ε_n – random error.

LRM is verified using regression characteristics: multiple correlation coefficient (R), coefficient of determination (R^2), and adjusted coefficient of determination (Adj. R^2); ANOVA – F test. Negative dependence among the indicators of selected factors was verified using the Variance Inflation Factor (VIF). If the VIF value is less than 5 (Liao & Valliant, 2012), multicollinearity in the LRM is rejected. The Shapiro-Wilk test (S-W test) was applied to verify the normal distribution of errors. The assumption is accepted if the p-value of the S-W test is greater than the significance level (Salmerón et al., 2018). Bartlett's test was used to verify the assumption of homoscedasticity. This assumption is accepted if the p-value of the Bartlett test statistic is higher than the significance level (Yang et al., 2019). The presence of autocorrelation in the regression models was not investigated, given that the data is not from time series. All tests were conducted using SPSS Statistics vs. 27 software.

3.5 Structure of SMEs

The demographic structure of the SME research sample according to the characteristics of enterprises and respondents was as follows (2018: n = 329 / 2022: n = 151): i. Location of enterprise operation: Prešov Region 76/21 enterprises, Košice Region 75/14 enterprises, Bratislava Region 56/28 enterprises, Banská Bystrica Region 30/16 enterprises, Žilina Region 28/25 enterprises, Trnava Region 27/8 enterprises, Trenčín Region 20/24 enterprises, Nitra Region 17/15 enterprises; ii. Sector of business: Services 122/67 enterprises, trade 69/32 enterprises, manufacturing 51/13 enterprises, construction 39/19 enterprises, agriculture 20/3 enterprises, transportation 11/5 enterprises, other business sectors 17/12 enterprises; iii. Duration of enterprise operation: 104/46 enterprises operating for 1 – 5 years, 78/44 enterprises operating for 5 – 10 years, 147/61 enterprises operating for more than 10 years; iv. Size of enterprise: 234/111 micro-enterprises (up to 10 employees), 71/24 small enterprises (up to 50 employees), 24/16 medium-sized enterprises (up to 250 employees); v. Highest education level of the entrepreneur: 10/12 with secondary education without graduation, 95/61 with secondary education with graduation, 224/78 with higher education; vi. Gender of the entrepreneur: 251/81 male, 78/70 female.

4. Research Results

Table 1 presents the results of the descriptive characteristics (e.g. mean, standard deviation, skewness, and kurtosis) of the respondents' evaluation of the statements about the selected economic factors (EF_1 , ..., EF_{34}).

Table 1: Descriptive statistics of economic statements (2018/2022)

V	EF11	EF12	EF13	EF14	EF21	EF22	EF23	EF24
Mean	3.438/ 3.437	3.380/ 3.583	3.082/ 3.364	2.988/ 3.576	2.942/ 3.325	2.948/ 3.457	2.924/ 3.430	2.891/ 3.483
St. Dev.	1.063/ 1.257	0.990/ 1.163	0.888/ 1.061	0.985/ 1.122	0.869/ 1.105	1.027/ 1.057	0.892/ 0.983	0.848/ 1.057
Skew- ness	-0.976/ -0.722	-0.952/ -0.498	-0.699/ -0.405	-0.982/ -0.637	-0.524/ -0.660	-0.940/ -0.699	-0.809/ -0.206	-0.430/ -0.554
Kur-tosis	-0.364/ -0.610	-0.213/ -0.552	-0.004/ -0.333	0.082/ -0.422	0.252/ -0.192	0.155/ -0.098	0.098/ -0.272	0.211/ -0.213
V	EF31	EF32	EF33	EF34				
Mean	2.812/ 3.033	2.994/ 3.252	2.881/ 3.397	2.964/ 3.523				
St. Dev.	1.013/ 1.110	0.982/ 1.078	0.957/ 1.020	0.907/ 1.032				
Skew- ness	-0.855/ -0.714	-1.003/ -0.704	-1.031/ -0.601	-0.716/ -0.530				

V	EF11	EF12	EF13	EF14	EF21	EF22	EF23	EF24
Kur-tosis	0.438/ 0.230	0.168/ -0.098	0.323/ -0.176	0.196/ 0.229				

Note: EF11, ..., EF34 – Indicators of economic factors. Source: own data collection.

4.1 Effect of Macroeconomic Environment on the QBE

The results of verification of dependences between the indicators of EF1 and QBE are presented in the correlation matrix (see table 2).

Table 2: Dependences between macroeconomic environment and QBE (2018/2022)

	QBE	EF11	EF12	EF13	EF14
QBE	1				
EF11	0.423*/0.671*	1			
EF12	0.407*/0.810*	0.325*/0.709*	1		
EF13	0.382*/0.695*	0.227*/0.674*	0.412*/0.708*	1	
EF14	0.328*/0.607*	0.253*/0.661*	0.389*/0.615*	0.315*/0.606*	1

Note: * Statistically significant on the $\alpha = 0.05$; EF11, ..., EF14 – Indicators of macroeconomic environment. Source: own data collection.

The results of correlation analysis (see table 2) confirmed that there are the significant pairwise dependences between independent variables (indicators of macroeconomic environment) and quality of business environment on the $\alpha = 0.05$.

The results of verification of relationships between the indicators of EF1 (independent variables) and QBE (dependent variable) are presents in the LRM1 (see table 3).

Table 3: LRM1 – relationships between indicators of EF1 and QBE (2018/2022)

ANOVA – Analysis of variance					
Variability	Degree of freedom	Sum of square	Mean square	F- ratio	
Model	4/4	101.66/141.17	25.4/35.3	36.931/83.966	
Error	324/146	222.97/61.37	0.69/0.42	p-value	
Sum	328/150	324.63/202.54		<0.000/ <0.000	
Verification of regression coefficient in the LRM1					
Variable	Regression coefficient	Mean Square	t-Stat	t-Stat (p-value)	VIF value
Constant	0.994/0.284	0.221/0.199	4.497/1.428	0.000/0.155	-/-
EF11	0.269/0.083	0.046/0.068	5.821/1.222	0.000/0.224	1.150/2.575
EF12	0.183/0.561	0.055/0.073	3.365/7.678	0.001/0.000	1.388/2.574
EF13	0.228/0.199	0.058/0.077	3.949/2.591	0.000/0.011	1.255/2.364
EF14	0.122/0.096	0.052/0.067	2.346/1.442	0.020/0.151	1.240/1.999

Note: EF11, ..., EF14 – Indicators of macroeconomic environment. Source: own data collection.

The results of regression characteristics are follows (2018/2022): $R = 0.560/0.835$; $R^2 = 0.313/0.697$; Adj. $R^2 = 0.305/0.689$; $SE = 0.830/0.648$; $n = 329/151$. Also, the results confirmed (see table 3) that the LRM1 is a statistic significant for each time period (2018/2022) on the $\alpha = 0.001$. Linear regression function are follows:

$$2018: QBE = 0.994 + 0.269 \times EF11 + 0.183 \times EF12 + 0.228 \times EF13 + 0.122 \times EF14 \quad (2)$$

$$2022: QBE = 0.284 + 0.083 \times EF11 + 0.561 \times EF12 + 0.199 \times EF13 + 0.096 \times EF14 \quad (3)$$

where: – dependent variable (quality of business environment); EF11, ..., EF14 – independent EF1.

The VIF values (see table 3) did not show the presence of multicollinearity in the LRM1 (2018 or 2022). The results of Bartlett's test (BTS) and S-W test are follows (2018/2022): BTS(2018) = 0.428/BTS(2022) = 0.274; S-W(2018) = 0.249/S-W(2022) = 0.314. The hypotheses SH1_2018 and SH1_2022 were accepted. LRM1 confirmed the positive effect of macroeconomic environment on the quality of business environment.

4.2 Effect of Monetary Policy and Interest Rates on the QBE

The results of verification of dependences between the indicators of EF2 and QBE are presented in the correlation matrix (see table 4).

Table 4: Dependences between monetary policy with interest rates and QBE (2018/2022)

	QBE	EF21	EF22	EF23	EF24
QBE	1				
EF21	0.122*/0.577*	1			
EF22	0.129*/0.615*	0.188*/0.540*	1		
EF23	0.210*/0.547*	0.222*/0.515*	0.535*/0.708*	1	
EF24	0.270*/0.575*	0.330*/0.635*	0.294*/0.583*	0.315*/0.529*	1

Note: * Statistically significant on the $\alpha = 0.05$; EF21, ..., EF24 – Indicators of monetary policy and interest rates. Source: own data collection.

The results of correlation analysis (see table 4) confirmed that there are the significant pairwise dependences between independent variables (indicators of monetary policy and interest rates) and quality of business environment on the $\alpha = 0.05$.

The results of verification of relationships between the indicators of EF2 (independent variables) and QBE (dependent variable) are presents in the LRM2 (see table 5).

Table 5: LRM2 – relationships between indicators of EF2 and QBE (2018/2022)

ANOVA – Analysis of variance					
Variability	Degree of freedom	Sum of square	Mean square	F- ratio	
Model	4/4	29.46/99.44	7.37/35.21	8.085/35.206	
Error	324/146	295.17/103.10	0.91/0.71	p-value	
Sum	328/150	324.63/202.54		<0.000/ <0.000	
Verification of regression coefficient in the LRM2					
Variable	Regression coefficient	Mean Square	t-Stat	t-Stat (p-value)	VIF value
Constant	2.362/0.442	0.254/0.281	9.314/1.573	0.000/0.118	-
EF21	0.022/0.249	0.065/0.084	0.334/2.949	0.739/0.004	1.144/1.105
EF22	-0.017/0.323	0.062/0.099	-0.276/3.266	0.783/0.001	1.438/1.057
EF23	0.161/0.135	0.072/0.102	2.253/ .328	0.025/0.186	1.469/0.983
EF24	0.262/0.212	0.069/0.091	3.803/2.325	0.000/0.021	1.230/1.057

Note: EF21, ..., EF24 – Indicators of Monetary policy and interest rates. Source: own data collection.

The results of regression characteristics are follows (2018/2022): $R = 0.301/0.701$; $R^2 = 0.091/0.491$; Adj. $R^2 = 0.080/0.477$; SE = 0.954/0.840; n = 329/151. Also, the results confirmed (see table 5) that the LRM2 is a statistic significant for each time period (2018/2022) on the $\alpha = 0.001$. Linear regression function are follows:

$$2018: QBE = 2.362 + 0.022 \times EF21 - 0.017 \times EF22 + 0.161 \times EF23 + 0.262 \times EF24 \quad (4)$$

$$2022: QBE = 0.442 + 0.249 \times EF21 + 0.323 \times EF22 + 0.135 \times EF23 + 0.212 \times EF24 \quad (5)$$

where: – dependent variable (quality of business environment); EF21, ..., EF24 – independent EF2.

The VIF values (see table 5) did not show the presence of multicollinearity in the LRM2 (2018 or 2022). The results of Bartlett's test (BTS) and S-W test are follows (2018/2022): BTS(2018) = 0.150/BTS(2022) = 0.207; S-

W(2018) = 0.201/S-W(2022) = 0.639. The hypotheses SH2_2018 and SH2_2022 were accepted. LRM2 confirmed the positive effect of monetary policy with interest rates on the quality of business environment.

4.3 Effect of Corporate financing on the QBE

The results of verification of dependences between the indicators of EF3 and QBE are presented in the correlation matrix (see table 6).

Table 6: Dependences between corporate financing and QBE (2018/2022)

	QBE	EF31	EF32	EF33	EF34
QBE	1				
EF31	0.298*/0.548*	1			
EF32	0.257*/0.578*	0.533*/0.633*	1		
EF33	0.136*/0.577*	0.342*/0.642*	0.629*/0.781*	1	
EF34	0.244*/0.586*	0.408*/0.497*	0.493*/0.564*	0.533*/0.618*	1

Note: * Statistically significant on the $\alpha = 0.05$; EF31, ..., EF34 – Indicators of corporate financing. Source: own data collection.

The results of correlation analysis (see table 6) confirmed that there are the significant pairwise dependences between independent variables (indicators of corporate financing) and quality of business environment on the $\alpha = 0.05$.

The results of verification of relationships between the indicators of EF3 (independent variables) and QBE (dependent variable) are presents in the LRM3 (see table 7).

Table 7: LRM3 – relationships between indicators of EF3 and QBE (2018/2022)

ANOVA – Analysis of variance					
Variability	Degree of freedom	Sum of square	Mean square	F- ratio	
Model	4/4	38.08/94.34	9.52/23.58	10.764/31.822	
Error	324/146	286.55/102.21	0.88/0,74	p-value	
Sum	328/150	324.63/202.54		<0.000/ <0.000	
Verification of regression coefficient in the LRM3					
Variable	Regression coefficient	Mean Square	t-Stat	t-Stat (p-value)	VIF value
Constant	2.449/0.629	0.208/0.276	11.762/2.280	0.000/0.024	-
EF31	0.193/0.216	0.062/0.087	3.120/2.489	0.002/0.014	1.457/1.871
EF32	0.143/0.206	0.076/0.109	1.875/1.878	0.062/0.062	2.078/2.820
EF33	-0.101/0.117	0.074/0.121	-1.371/0.962	0.171/0.338	1.862/3.103
EF34	0.161/0.353	0.071/0.089	2.258/3.979	0.025/0.000	1.547/1.691

Note: EF31, ..., EF34 – Indicators of Corporate financing. Source: own data collection.

The results of regression characteristics are follows (2018/2022): $R = 0.342/0.682$; $R^2 = 0.117/0.466$; Adj. $R^2 = 0.106/0.451$; SE = 0.940/0.861; n = 329/151. Also, the results confirmed (see table 7) that the LRM3 is a statistic significant for each time period (2018/2022) on the $\alpha = 0.001$. Linear regression function are follows:

$$2018: QBE = 2.449 + 0.193 \times EF31 + 0.143 \times EF32 - 0.101 \times EF33 + 0.161 \times EF34 \quad (6)$$

$$2022: QBE = 0.629 + 0.216 \times EF31 + 0.206 \times EF32 + 0.117 \times EF33 + 0.353 \times EF34 \quad (7)$$

where: – dependent variable (quality of business environment); EF31, ..., EF34 – independent EF3.

The VIF values (see table 7) did not show the presence of multicollinearity in the LRM3 (2018 or 2022). The results of Bartlett's test (BTS) and S-W test are follows (2018/2022): BTS(2018) = 0.124/BTS(2022) = 0.253; S-W(2018) = 0.327/S-W(2022) = 0.142. The hypotheses SH3_2018 and SH3_2022 were accepted. LRM3 confirmed the positive effect of corporate financing on the quality of business environment.

5. Discussion

All indicators of the macroeconomic environment positively influence the quality of the business environment in Slovakia. Among the macroeconomic environment indicators, the favorable assessment of the macroeconomic environment by SMEs has the most significant impact on the quality of the business environment (EF11: RC = 0.269). Other macroeconomic environment indicators also have a significant (though weaker) positive impact on the quality of the business environment (EF13: RC = 0.228; EF12: RC = 0.183; EF14: RC = 0.122).

The most significant indicator of the economic factor "monetary policy and interest rates", which positively influences the quality of the business environment in Slovakia, is the stabilization of the central bank's monetary policy (EF24: RC = 0.262). Also, significant (though weaker than EF24) is the positive impact of bank interest rates on the innovative activities of companies on the quality of the business environment (EF23: RC = 0.161).

The most significant indicator of corporate financing that positively influences the quality of the business environment in Slovakia is access to bank loans (EF31: RC = 0.193). Also, significant (though weaker) is the positive impact of banks on the quality of the business environment (EF34: RC = 0.161). The influence of bank loan conditions (EF32: t-test: p-value = 0.062) and the cost of loans (EF33: t-test: p-value = 0.172) is not significant.

6. Conclusion

The aim of the article was to define and quantify the impact of specific economic risk sources on the quality of the business environment (QBE).

All indicators of the macroeconomic environment positively influenced the quality of the business environment in Slovakia in 2018. The favorable assessment of the macroeconomic environment by SMEs had the most significant impact on the quality of the business environment among the macroeconomic indicators in 2018. Other macroeconomic environment indicators also had a significant positive impact on the quality of the business environment in 2018. On the other hand, the state of the macroeconomic environment and its support for starting a business had the most significant impact on the quality of the business environment among the macroeconomic indicators in 2022. Similar conclusions were reached in the studies by Liu, Q. (2021) and Lizhong (2020), where their research provides empirical evidence on the impacts of macroeconomic factors on the quality of the business environment.

The most significant indicator of the economic factor "monetary policy and interest rates" that positively influenced the quality of the business environment in Slovakia in 2018 was the stabilization of the central bank's monetary policy. On the other hand, according to respondents, the significant impact of interest rates on the business environment and the effect of interest rates on the innovative activities of companies were notable indicators with a positive influence on QBE in 2022. Additionally, the positive impact of bank interest rates on the innovative activities of companies was also significant for the quality of the business environment in 2018. The empirical evidence of the impact of monetary policy stabilization and interest rates on the business environment is confirmed, for example, by studies by Ma & Zimmermann (2023) or Klimova (2021).

The significance of the empirical findings from the conducted quantitative research lies in a deeper understanding of the economic determinants that influence the quality of the business environment. The findings can serve national policymakers in the area of business support for the small and medium-sized enterprise (SME) segment. Additionally, the findings can help owners and managers of SMEs, as well as educational organizations, to better understand and deepen their scientific knowledge, thereby contributing to the sustainable growth of the SME segment in Central European countries.

The conducted quantitative research has its limitations. The subject of the study was the individual attitudes of owners and managers of small and medium-sized enterprises from only one Central European country. The questionnaire was evaluated using linear regression models, which quantify causal relationships between variables in only one direction. Data collection was carried out over a longer time horizon of 4 years.

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