MEASURING REGIONAL BUSINESS ENVIRONMENT IN UKRAINE

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Kiev

3 March 2017

Slovak Aid

BAS
Business Alliance of Slovakia

COMPETITIVENESS

Ability * to achieve **sustainable growth** and enhance **prosperity**

* of the country
* of the company
* of the region
* of the community

WORLD ECONOMIC FORUM

# WHY REGIONAL COMPETITIVENESS

- To reduce economic and social disparities between regions

- To analyze competitive advantages and disadvantages of regions

- To formulate growth strategies for regions

COMPETITIVE REGIONS – SK PROJECT

- Project implemented in 2009-2011

- Inspired by international rankings (WEF, IMD)

- BAS developed own mathematic model with 106 indicators to assess regions

  47 indicators from the survey among entrepreneurs (5000 respondents)

  59 indicators from statistical databases

- Data used to calculate values of <u>Regional business environment index</u> and its eight pillars

- Analyses, comparative tables, regions' profiles and recommendations based on these data
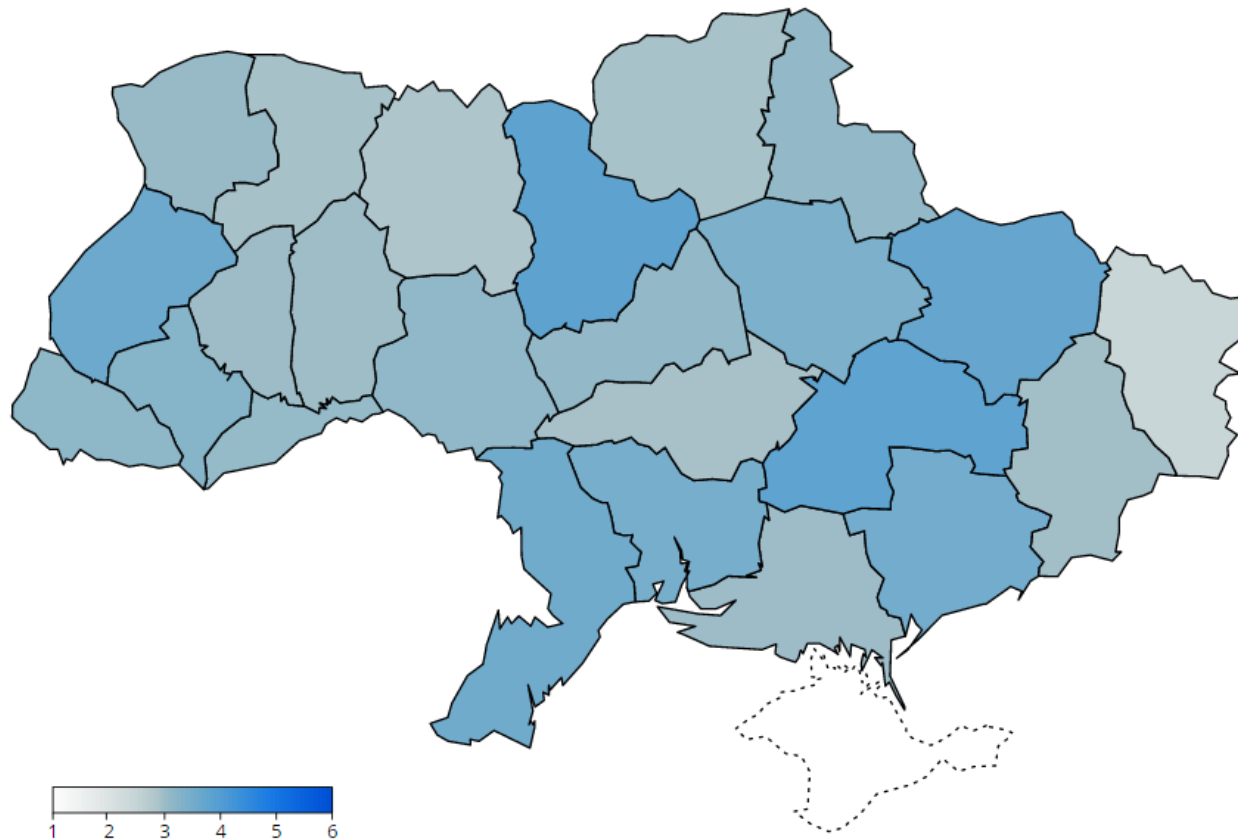
REGIONAL BUSINESS ENVIRONMENT INDEX
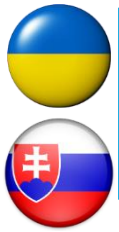
- ## SUBINDEX I: ECONOMIC ACTIVITY

  - 1st pillar: Economic environment (21 indicators; e.g. population density, employment)

  - 2nd pillar: Economic output (12 indicators; e.g. construction output, ee productiviry)

- ## SUBINDEX II: PUBLIC ADMINISTRATION AND LEGISLATION

  - 3rd pillar: Legislation (12 indicators; e.g. local and other taxes)

  - 4th pillar: Public administration (11 indicators; e.g. efficiency of local authorities, e-communication)

- ## SUBINDEX III: TECHNOLOGY AND INFRASTRUCTURE

  - 5th pillar: Infrastructure (9 indicators; e.g. availability of banks, density of motorway)

  - 6th pillar: Technology (8 indicators; e.g. FDI inflow, technology level)

- ## SUBINDEX IV: EDUCATION AND HUMAN RESOURCES

  - 7th pillar: Human resources (20 indicators; e.g. population growth, job vacancies)

  - 8th pillar: Education (13 indicators; e.g. school examination results, secondary enrolment)
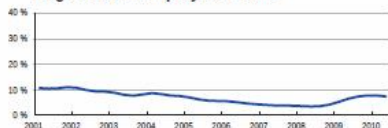
VISUALIZATION OF RBEI RESULTS

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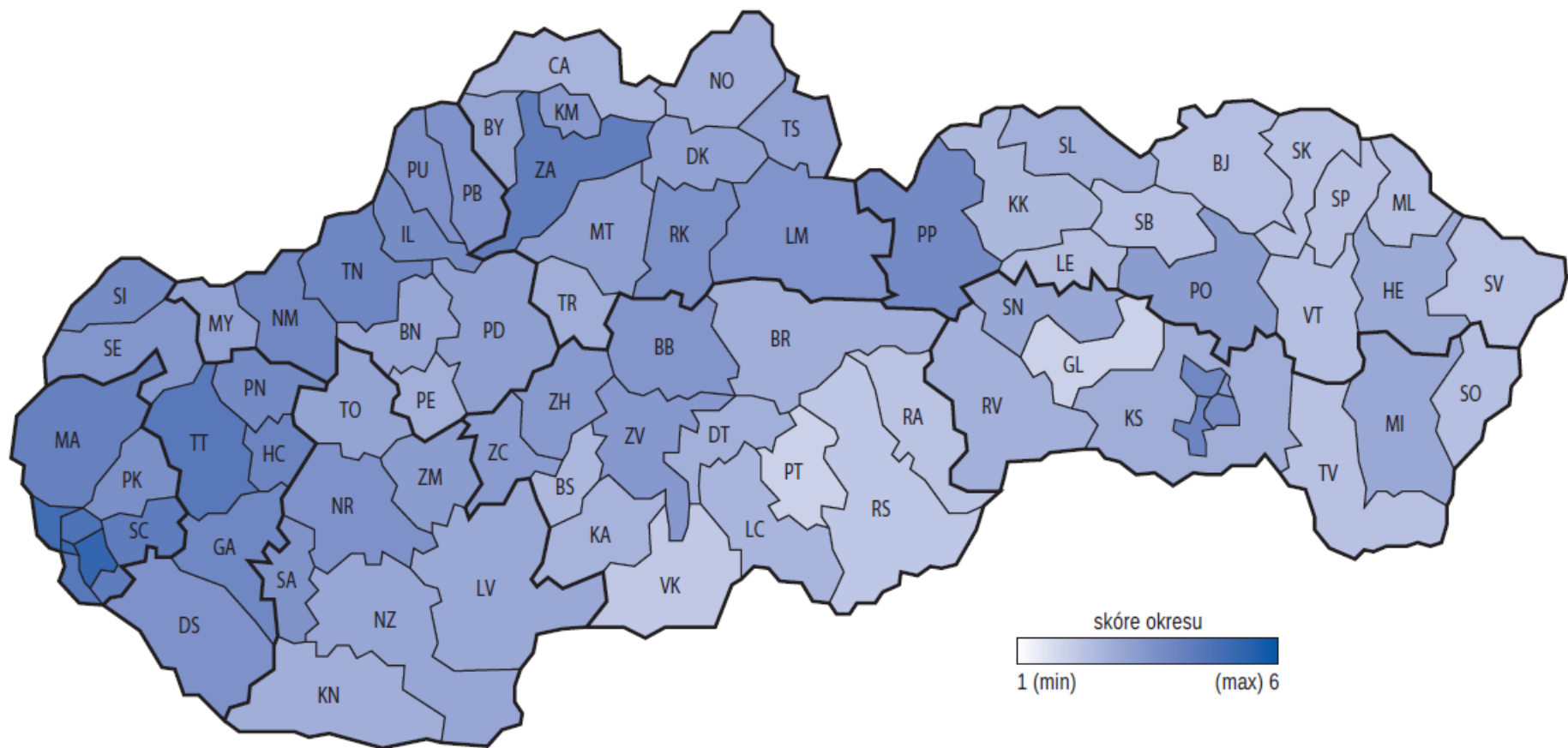
RBEI VISUALIZATION

Piešťany

Piešťany

General information

Abbreviation	PN
Population	64,207
Area	381 km²
Population density	169 hab / km²
Number of workers	27,986 (43.5 %)
Unemployment rate	7.3 %

Registered unemployment rate

Regional Business Environment Index (RBEI)

	Rank (1–79)	Score (1–6)	SR
RBEI	**16**	**3.68**	3.43
Subindex I: Economic activity	**10**	**3.86**	3.51
1st pillar: Economic environment	8	3.86	3.48
2nd pillar: Economic output	15	3.86	3.53
Subindex II: Public administration and legislation	**77**	**2.88**	3.32
3rd pillar: Legislation	77	3.39	4.19
4th pillar: Public administration	67	2.48	2.63
Subindex III: Technology and infrastructure	**18**	**3.77**	3.30
5th pillar: Infrastructure	8	4.11	3.26
6th pillar: Technology	31	3.41	3.34
Subindex IV: Education and human resources	**16**	**3.79**	3.43
7th pillar: Human resources	15	4.08	3.68
8th pillar: Education	22	3.27	3.16
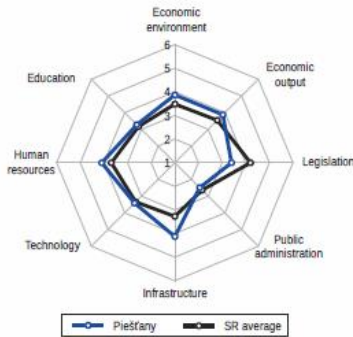
Structure of the business sector

Agriculture	8.4 %
Heavy industry	12.7 %
Light industry	25.7 %
Construction	6.8 %
Trade and transport	11.0 %
Other services	35.4 %
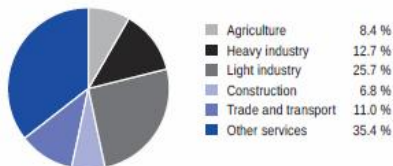
Top 5 employers

Company name	Number of employees
Slovenské liečebné kúpele Piešťany, a.s.	1,240
FMC – dialyzačné služby, s.r.o.	474
Bodet & Horst mattress ticking, k.s.	430
SEMIKRON, s.r.o.	402
Trnavská vodárenská spoločnosť, a.s.	332

Main competitive advantages

Impact of district location on doing business	1.21
Perception of unemployment	0.45
Availability of necessary materials and services	0.42
Employee motivation for productivity increase	0.35
Availability of free labor	0.29

Main barriers to business development

Connection of vocational schools and labor market	–0.47
Law enforcement in the district court	–0.46
Interest of the state institutions in the district	–0.45
Economic management of local self–governments	–0.44
Quality of road infrastructure	–0.40
Protection of private property	–0.35
Impact of corruption on authorities' decisions	–0.33
Availability of financial and capital resources	–0.33
Electronic communication with local authorities	–0.30
Fulfillment of the duties by local authorities	–0.29

RBEI Indicators

Subindex I: Economic activity

		Rank	Score	
	1st pillar: Economic environment	**8**	**3.86**	
1.01	Population density	19	3.22	
1.02	Urbanization	28	4.60	
1.03	Impact of district location on doing business*	7	4.74	■
1.04	Impact of natural conditions on doing business*	20	4.73	■
1.05	Area of agricultural land	13	5.27	■
1.06	Current business conditions*	11	3.10	■
1.07	Change of business conditions in recent years*	11	2.88	■
1.08	Barriers to improving business conditions*	19	2.61	■
1.09	Impact of the minimum wage on doing business*	42	2.84	■
1.10	Impact of the informal economy on doing business*	59	2.50	■
1.11	Level of competitiveness in services*	33	3.70	■
1.12	Level of competitiveness in industry*	41	3.48	■
1.13	Reliability of business partners*	14	3.94	■
1.14	Availability of financial and capital resources*	58	2.79	■
1.15	Availability of necessary materials and services*	10	4.72	■
1.16	Development potential of the district*	22	3.32	■
1.17	Potential for tourism development*	17	4.39	■
1.18	Economically active population	7	4.79	■
1.19	Social benefit claims	17	4.18	■
1.20	Share of foreign companies	9	4.39	■
1.21	Share of international companies	4	5.81	■

		Rank	Score	
	2nd pillar: Economic output	**15**	**3.86**	
2.01	Construction output	9	4.23	■
2.02	Construction of apartments	9	4.49	■
2.03	Produced added value	45	3.30	■
2.04	Employee productivity	61	2.73	■
2.05	Level of industry development	24	4.43	■
2.06	Environmental friendliness of production	20	4.81	■
2.07	Air pollution	28	4.84	■
2.08	Tourism activity	6	5.67	■
2.09	Tourism attractiveness	5	3.84	■
2.10	Profitability and productivity of businesses*	9	3.97	■
2.11	Level of corruption among private businesses*	55	2.84	■
2.12	Development potential of businesses*	21	3.93	■

Subindex II: Public administration and legislation

		Rank	Score	
	3rd pillar: Legislation	**77**	**3.39**	■
3.01	Barriers to business development*	16	3.39	■
3.02	Perception of local taxes*	64	2.67	■
3.03	Business development prospects*	67	2.48	■
3.04	Non–construction land tax	76	4.50	■
3.05	Building site tax	63	5.01	■
3.06	Housing tax and tax on ancillary facilities	74	2.86	■
3.07	Agricultural and irrigation tax	79	1.31	■
3.08	Industrial property tax	77	2.25	■
3.09	Taxes on buildings for other business	77	3.30	■
3.10	Apartment and non–residential property tax	76	2.82	■
3.11	Motor vehicle tax	62	3.10	■
3.12	Charges for municipal waste	29	5.11	■

		Rank	Score	
	4th pillar: Public administration	**67**	**2.48**	
4.01	Fulfillment of the tasks by local authorities*	64	2.66	■
4.02	Bureaucracy and delays in the offices*	10	2.82	■
4.03	Availability of public information*	42	3.11	■
4.04	Electronic communication with local authorities*	61	2.51	■
4.05	Law enforcement in the district court*	63	2.03	■
4.06	Impact of corruption on authorities' decisions*	69	2.63	■
4.07	Protection of private property*	65	2.55	■
4.08	Interest of the state institutions in the district*	59	2.00	■
4.09	Impact of authorities' activities on doing business*	53	2.56	■
4.10	Economic management of local self–governments*	76	2.36	■
4.11	Impact of trade unions on doing business*	18	2.85	■

Subindex III: Technology and infrastructure

		Rank	Score	
	5th pillar: Infrastructure	**8**	**4.11**	
5.01	Availability of banks	18	3.22	■
5.02	Availability of post offices	24	3.67	■
5.03	Capacity of medical facilities	33	3.81	■
5.04	Quality of road infrastructure*	41	2.21	■
5.05	Density of motorways	3	5.80	■
5.06	Density of 1st class roads	57	2.03	■
5.07	Density of 2nd class roads	6	4.22	■
5.08	Density of 3rd class roads	57	3.72	■
5.09	Utilization of roads	9	5.96	■

		Rank	Score	
	6th pillar: Technology	**31**	**3.41**	
6.01	Inflow of foreign direct investments	28	2.86	■
6.02	Technology level*	19	3.97	■
6.03	Ability of businesses to use latest technologies*	16	4.64	■
6.04	Usage of internet services by businesses*	6	5.69	■
6.05	Information on the supply of goods and services*	27	4.66	■
6.06	Usage of personal motor vehicles	74	2.85	■
6.07	Usage of trucks	49	2.87	■
6.08	Usage of technical motor vehicles	55	2.37	■

Subindex IV: Education and human resources

		Rank	Score	
	7th pillar: Human resources	**15**	**4.08**	
7.01	Life expectancy	4	4.84	■
7.02	Natural population growth	41	3.97	■
7.03	Ageing index	74	2.09	■
7.04	Registered unemployment rate	14	3.88	■
7.05	Perception of unemployment*	16	3.72	■
7.06	Share of long–term jobseekers	18	5.03	■
7.07	Age structure of jobseekers	13	4.39	■
7.08	Availability of free labor*	13	4.37	■
7.09	Labor market dynamics	15	5.02	■
7.10	Job vacancies in services	65	2.78	■
7.11	Job vacancies in industry	44	3.47	■
7.12	Unskilled job vacancies	47	3.88	■
7.13	Migration of skilled labor*	19	2.97	■
7.14	Net migration	18	4.16	■
7.15	Average monthly wage	24	4.44	■
7.16	Wage expectations of jobseekers*	58	2.97	■
7.17	Discipline and diligence of employees*	61	4.03	■
7.18	Duration of sick leave	24	3.47	■
7.19	Employee motivation for productivity increase*	4	5.04	■
7.20	Fairness in employee selection*	24	4.08	■

		Rank	Score	
	8th pillar: Education	**22**	**3.27**	
8.01	Level of education*	26	3.80	■
8.02	Knowledge of foreign languages*	11	3.26	■
8.03	School leaving examination results – Slovak language	31	3.31	■
8.04	School leaving examination results – Mathematics	52	2.70	■
8.05	Number of secondary school students	24	4.26	■
8.06	Scores achieved in Monitor 9 test – Slovak language	22	3.27	■
8.07	Scores achieved in Monitor 9 test – Mathematics	24	3.95	■
8.08	Number of primary school pupils	68	3.76	■
8.09	Connection of vocational schools and labor market*	69	2.22	■
8.10	Qualification of jobseekers*	40	2.97	■
8.11	Availability of highly skilled labor	33	3.01	■
8.12	Availability of skilled labor	21	3.20	■
8.13	Availability of unskilled labor	12	4.52	■

■ Strong competitive **advantage** of district
■ Strong competitive **disadvantage** of district
■ Not very strong (dis)advantage of district
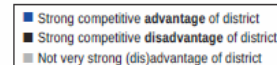
* Data based on the *Survey of entrepreneurs' and municipality representatives' opinions.*

REGIONAL BUSINESS ENVIRONMENT INDEX (RBEI) | OVERALL RANK: 4 OF 24

	Rank (1 - 24)	Score	Country average
Regional business environment index	**4**	**3.67**	**3.30**
Economic activity	**7**	**3.68**	**3.39**
Economic environment	7	3.65	3.45
Economic output	6	3.71	3.34
Public administration and legislation	**5**	**2.59**	**2.45**
Legislation	7	2.77	2.58
Public administration	6	2.47	2.37
Technology and infrastructure	**4**	**4.05**	**3.60**
Infrastructure	2	3.99	3.50
Technology	5	4.09	3.66
Education and human resources	**5**	**3.79**	**3.35**
Human resources	6	3.53	3.37
Education	1	4.32	3.31
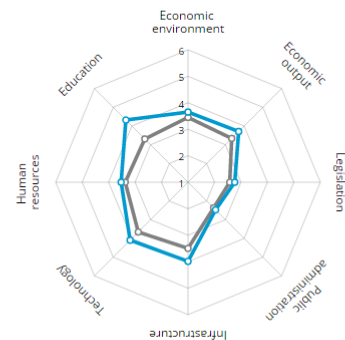
LARGEST COMPETITIVE ADVANTAGES AND DISADVANTAGES

Largest competitive advantages and disadvantages are selected from RBEI indicators based on simple rule. In the first step, benchmark value for each RBEI indicator for a particular region is calculated. For each indicator, this benchmark is for each indicator defined as 3/4 * A + 1/4 * V, where A is average value of a particular indicator among all regions and V is value of the indicator itself. In the second step, all indicators are compared with their benchmark and these differences are sorted in descending order. Five indicators with highest positive difference are defined as largest competitive advantages, and conversely, five indicators with highest negative difference are defined as largest competitive disadvantages.

ADVANTAGES

Potential for tourism development	2.28	
Mother language skills	1.86	
Level of education	1.13	
Environmental friendliness of production	0.94	
Impact of district location on doing business	0.89	

DISADVANTAGES

|		
Level of competitiveness in industry	-0.88	
Connection of vocational schools and labor market	-0.72	
Development potential of businesses	-0.54	
Fairness in employee selection	-0.53	
Bureaucracy and delays in the offices	-0.47	

SUBINDICES I, II

Subindex I: Economic activity		Rank	Score	Distance from average
1st pillar: Economic environment		**7**	**3.65**	
1.1	Population density	1	4.97	
1.2	Urban population	14	4.29	
1.3	Economically active population	19	2.57	
1.4	Number of companies	9	4.05	
1.5	Multinational and foreign companies*	2	2.85	
1.6	Impact of the informal economy on doing business*	3	2.55	
1.7	Level of corruption among private businesses*	9	2.50	
1.8	Level of competitiveness in services*	1	3.80	
1.9	Level of competitiveness in industry*	16	2.40	
1.10	Reliability of business partners*	16	3.15	
1.11	Availability of financial and capital resources*	5	2.10	
1.12	Availability of necessary materials and services*	6	3.10	
1.13	Impact of district location on doing business*	5	4.75	
1.14	Impact of natural conditions on doing business*	10	5.15	
1.15	Current business conditions*	10	2.20	
1.16	Change of business conditions in recent years*	1	2.40	
1.17	Potential for tourism development*	2	5.55	

SUBINDICES III, IV

Subindex III: Technology and infrastructure		Rank	Score	Distance from average
5th pillar: Infrastructure		**2**	**3.99**	
5.1	Density of 1st class roads	18	2.71	
5.2	Density of 2nd class roads	1	5.80	
5.3	Density of 3rd class roads	4	5.01	
5.4	Density of 4th class roads	3	4.94	
5.5	Density of road infrastructure*	9	2.25	
5.6	Quality of road infrastructure*	4	2.15	
5.7	Number of bank branches	5	4.49	
5.8	Availability of banks*	7	4.80	
5.9	Number of post offices	3	5.14	
5.10	Availability of post offices*	19	3.55	
5.11	Number of hospital beds	3	3.60	
5.12	Availability of medical facilities*	5	2.55	
6th pillar: Technology		**5**	**4.09**	
6.1	Innovative companies	9	4.63	
6.2	Technical companies	16	2.41	
6.3	Scientific and technical companies	4	4.92	
6.4	Scientific and technical specialists	3	4.47	

WWW.REGIONY21.SK

- Interactive web page

- Contains all data processed during the project

- Weight of parameters to assess the regions can be adjusted to get customized results according to user preferences (maps / rankings)

- Unique tool for all target groups

RBEI Overall Results Map
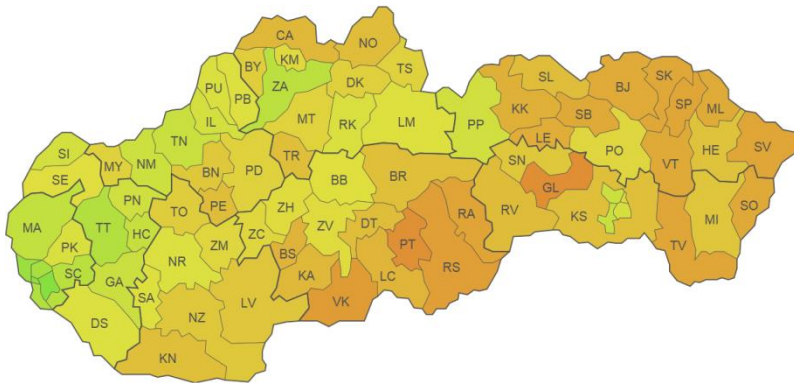
Public Administration Quality Map
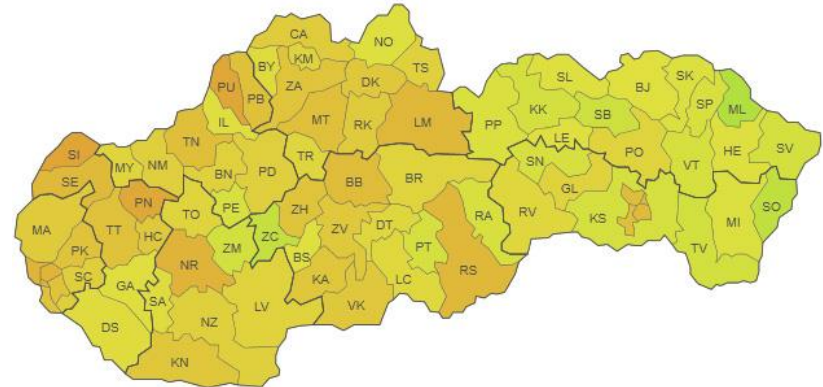
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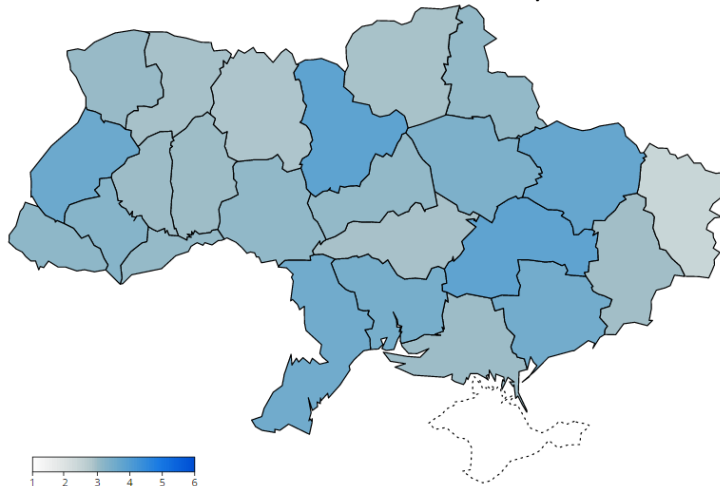
Level of Competitiveness in Industry Map
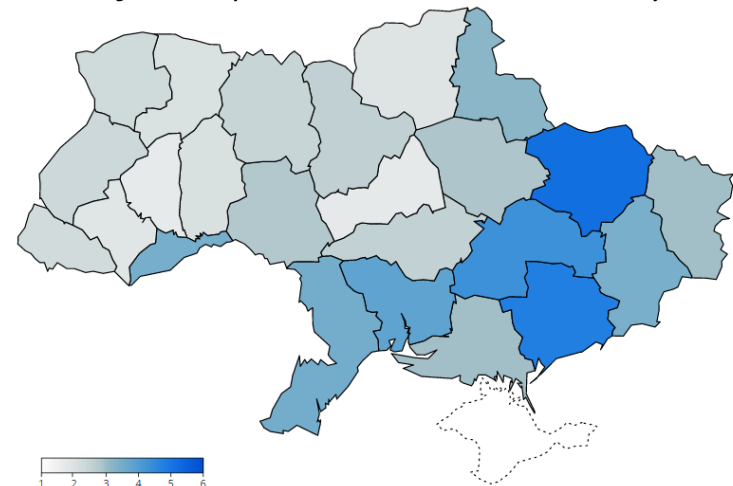
TARGET GROUPS & USABILITY OF RBEI

LOCAL GOVERNMENT

- To learn about strengths and weaknesses

- To compare among each other

- To formulate accurate development strategies

- To support arguments in discussion with central government

- To present highlights to voters and gain popularity

TARGET GROUPS & USABILITY OF RBEI

CENTRAL GOVERNEMENT

- To target the regional development policies more precisely

- To scale state aid (incl. investment stimuli) according to the development level of the regions

- To measure the efficiency of regional development policies and regional governments

ENTREPRENEURS & INVESTORS

- To get basic info about quality of business environment in regions

- To have supportive arguments when negotiation w central/local government

- To get specific info for doing business

TARGET GROUPS & USABILITY OF RBEI

Interactive model

1. SELECT YOUR WEIGHT FOR EACH INDICATOR

Adjust the weight of each indicator by clicking the plus or minus button on the right of the indicator name. The weight will be displayed both visually and numerically. Changing the weight of and individual indicator will affect the weight of the whole pillar, changing the weight of the whole pillar will affect weights of all its indicators. Maximum weight for any indicator is equal to 100, minimum weight is equal to 0.01. When you are done, click the *"Calculate new rankings"* button.

Show or hide indicators of each pillar by clicking the minus button on the left of the pillar name.

[Reset weights] [Expand] [Collapse]   [**Calculate new rankings**]

	1st pillar: Economic environment			14,7
1.1	Population density	−		0,01
1.2	Urban population	−		0,01
1.3	Economically active population	−		0,01
1.4	Number of companies	−		0,01
1.5	Multinational and foreign companies*	−		0,01
1.6	Impact of the informal economy on doing business*	−		0,01
1.7	Level of corruption among private businesses*	−		0,01
1.8	Level of competitiveness in services*	−		100
1.9	Level of competitiveness in industry*	−		0,01
1.10	Reliability of business partners*	−		0,01
1.11	Availability of financial and capital resources*	−		0,01
1.12	Availability of necessary materials and services*	−		0,01
1.13	Impact of district location on doing business*	−		0,01
1.14	Impact of natural conditions on doing business*	−		0,01
1.15	Current business conditions*	−		0,01
1.16	Change of business conditions in recent years*	−		50
1.17	Potential for tourism development*	−		100

2. THEN SELECT YOUR DESIRED RANKING

[Regional business environment index ▼]
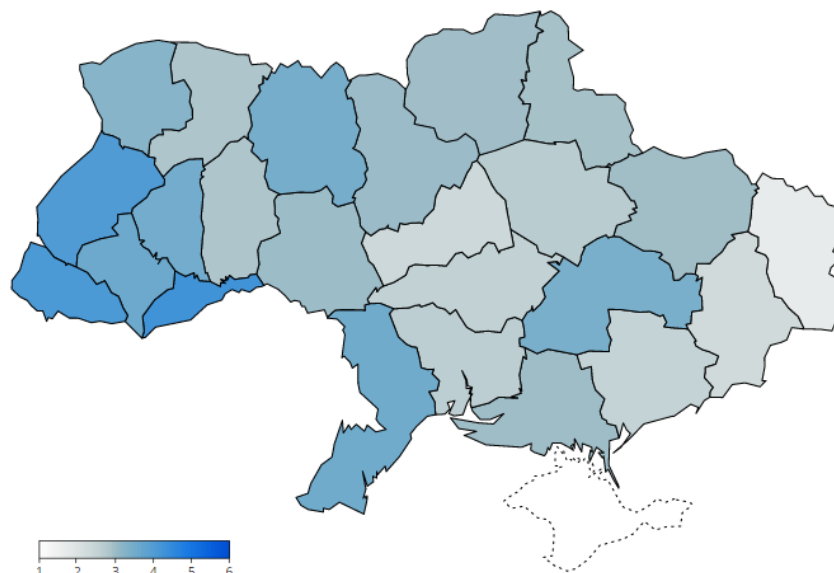
	Region	Score
1	Chernivtsi	4.32
2	Zakarpattia	4.17
3	Lviv	4.09
4	Ivano-Frankivsk	3.67
5	Odessa	3.61
6	Ternopil	3.56
7	Zhytomyr	3.53
8	Dnipro	3.46
9	Volyn	3.28
10	Kyiv	3.06
-	Country average	3.06
11	Vinnytsia	3.04
12	Kherson	3.02
13	Chernihiv	3.01
14	Kharkiv	3.00
15	Sumy	2.97
16	Khmelnytsk	2.89
17	Rivne	2.89
18	Poltava	2.74
19	Mykolaiv	2.68
20	Kropyvnytsky	2.62

Map legend: 1 2 3 4 5 6

TARGET GROUPS & USABILITY OF RBEI

GENERAL PUBLIC, THINK TANKS AND NGOs

- To increase pressure on local and central officials to care about regions

- To measure the impact of central and regional development policies

- To analyze personal performance of local politicians & municipality reps.

- To develop further detailed regional analyses

- To formulate own regional development recommendations

THANK YOU FOR YOUR KIND ATTENTION
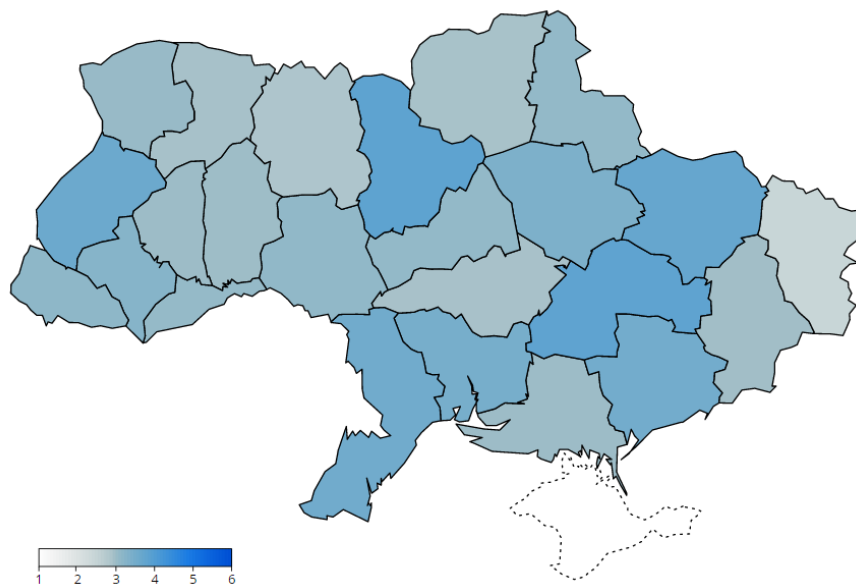
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