

# Comparison of the Slovak Republic and the Czech Republic according to regional competitiveness

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**Abstrakt** This paper deals with examination of the position of Slovak and Czech republic with regard to the values of the Regional Competitiveness Index. This index analysed 11 criteria of competitiveness on regional level. Through this index, we can identify the strengths and weaknesses of regions and, of course countries, too. Such assessment and recognition of its current position is of value to the country, but also to the regions themselves.

**Klíčová slova** Slovak Republic, Czech Republic, Regional competitiveness, RCI

## 1. INTRODUCTION

Competitiveness receives a lot of attention. Krugman is the best-known critic when it comes to using competitiveness with reference to nations. He argues that using the term competitiveness is dangerous, as it can lead to protectionism and bad public policy. Porter and others economists have argued that competitiveness is also a useful concept in the context of national or regional units. He states that competitiveness exists on at least three levels: firms, geographical areas and workers. Regions and countries compete against each other for mobile production factors in factor markets, while firms compete for market shares (Huovari et al., 2001, p. 1455).

The idea of competitiveness implies identification of a fundamental determinant of place prosperity, i.e. the basis for sustainable growth in modern economies. Competitiveness is not really an end in itself, more an indication of the drivers and dynamics of economic success (Turok, 2004, p. 1069).

Economists and experts have elevate competitiveness to the status of a natural law of the modern capitalist economy. To assess a country's competitiveness and to devise policies to enhance it have become officially institutionalized tasks in many nations (Kitson et al., 2004, p. 991). Competitiveness is the ability of the economy to create goods and services to ensure external economic equilibrium, while ensuring the growth of per capita income, a sufficient level of

utilization of national factors and the attainment of social and environmental goals (Hečková - Chapčáková, 2011).

## 2. METHODOLOGY

The aim of this paper is to evaluate the competitiveness of selected countries according to their position in Regional competitiveness index (RCI). We analyse the position of the Slovak Republic and the Czech Republic according to ranking in 2010, 2013 and 2016. This index is published only every three years, so we can analyse only mentioned years.

Firstly, we analyse the changes in position of performance of Slovak and Czech regions in the years 2010, 2013 and 2016. Then, we analyse the regional competitiveness index through 11 indicators in the last year.

Because the RCI analysed the country on NUTS II level, Slovakia (SVK) is divided into 4 regions:

- Bratislava region - the capital,
- Western Slovakia (West.)
- Central Slovakia, (Cen.)
- Eastern Slovakia (East.).

And the Czech Republic (CZ) is according to NUTS II divided into 7 regions:

- Praha - the capital,
- Southwest (SW),
- Northwest (NW),
- Northeast (NE),
- Southeast (SE),
- Central Moravia (CM),
- Moravian-Silesian region (M-S).

At the end, we identify the most and the least competitiveness areas and regions of Slovakia and the Czech Republic.

### 3. DISCUSSION

Regional competitiveness is the ability of a region to offer an attractive and sustainable environment for firms and residents to live and work. For this reason, since 2010 European Commission has been published every three years Regional competitiveness index.

The Regional competitiveness index (RCI) benchmark regional competitiveness of the countries. Its aim is to identify the key factors which would allow a low competitive region to catch-up. RCI can be considered as an overall but synthetic picture of regional competitiveness. Is based on 11 pillars describing both inputs and outputs of territorial competitiveness. The pillars are classified into three major groups, named:

- Basic,
- Efficiency,
- Innovation (Annoni et al., 2017, p. 22), (Annoni - Dijkstra, 2013), (Annoni - Kozovska, 2010).

The basic group includes the following five pillars Institutions, Macroeconomic Stability, Infrastructures, Health and Quality of Primary and Secondary Education. These five pillars are taken to represent the key basic drivers of all types of economies. The Efficiency group includes three pillars Higher Education, Training and Lifelong Learning, Labour Market Efficiency and Market Size [1, p. 14]. At the most advanced stage of development of a regional economy, drivers of improvement are part of the Innovation group which consists of three pillars: Technological Readiness, Business Sophistication and Innovation (Annoni et al., 2017, p. 24).

The economy in the territory of Slovakia also has undergone relatively complicated development and various stages of transformations (Kotulič et al., 2015), (Xhala - Nemec, 2016). We can see these differences in different development of the Slovak regions. The best position from all Slovak regions reached the Bratislava region. This region is between first 100 regions of Europe. But the position of Bratislava region has worsen through the time. On the other hand, Central and Eastern Slovakia achieved the best position in this ranking in the year 2016.

Praha is the capital of the Czech republic and reached the best position of all analysed region from the Czech republic. But compared to Bratislava, which is capital too, Praha has worsened its position, and actually, is out of first 100 regions of Europe. Other regions from the Czech republic reached better position than Slovak regions. So differences between regions in the Czech republic are smaller than in the Slovak republic, as we can see in table 1.

Table 1 Ranking of regions according to RCI in selected countries

	RCI 2010	RCI 2013	RCI 2016	
Bratislava region	66	87	96	Slovak Republic
Western Slovakia	182	202	196	
Central Slovakia	220	227	211	
Eastern Slovakia	231	240	225	
Praha	36	96	102	Czech Republic
Southwest	164	166	166	
Northwest	193	180	189	
Northeast	171	164	159	
Southeast	166	168	151	
Central Moravia	183	179	164	
Moravian-Silesian	197	176	167	
Number of evaluated regions	268	268	274	

Source: own processing according

In table 2, we have analysed the regions in selected countries through 11 indicators of RCI. Obtained values are from 0 to 100. Regions with values closer to 100 has the better competitiveness as the others.

The most competitiveness indicators of the Slovak Republic are macroeconomic stability, higher education and lifelong learning and health. The least competitiveness areas are the market size, infrastructure, business sophistication and innovation. In these areas, Bratislava region has problems too, not just other three regions.

The most competitiveness indicators of the Czech Republic are macroeconomic stability, technological readiness, basic education and health. On the other hand, the least competitiveness areas are business sophistication, market size, infrastructure and innovation.

The most competitive regions are both capital, Bratislava and Praha. The least competitive regions are Eastern Slovakia and the Northwest region from the Czech republic.

Table 2 RCI 2016 - indicators

NUTS NAME	Bratislava region	Western Slovakia	Central Slovakia	Eastern Slovakia	Praha	SW	NW	NE	SE	CM	M-S
Institutions	28,058	30,236	30,183	27,367	35,603	37,419	30,256	36,870	38,159	36,212	33,941
Macroeconomic Stability	70,126	70,126	70,126	70,126	76,131	76,131	76,131	76,131	76,131	76,131	76,131
Infrastructure	41,539	25,375	10,345	9,984	32,219	21,058	26,023	38,610	25,931	30,801	23,379
Health	70,934	57,841	54,611	45,283	74,364	63,891	55,137	67,057	69,627	66,369	62,892
Basic Education	33,208	33,208	33,208	33,208	61,978	61,978	61,978	61,978	61,978	61,978	61,978
Higher Education	73,136	57,133	56,467	53,256	70,824	63,310	52,462	64,259	66,980	61,503	62,997
Labour Market Efficiency	73,976	51,810	43,970	38,350	72,357	58,041	46,913	55,552	61,358	56,335	53,241
Market Size	44,566	23,963	18,871	14,238	36,829	18,243	23,788	21,849	21,821	21,582	26,435
Technological Readiness	62,516	59,678	58,774	60,472	80,493	73,691	62,635	71,922	72,696	70,306	69,058
Business Sophistication	55,565	15,212	19,353	17,336	44,186	21,283	20,429	21,582	24,627	20,692	19,975
Innovation	64,307	20,292	24,264	16,241	59,163	29,166	19,328	34,776	47,347	29,005	25,811

Source: own processing

The stage of development was in 2013 and now divided into five development stages based on their average 2012 - 2014 GDP per capita in purchasing power standard (PPS) expressed as an index (EU - 28 = 100). The five development stages are defined according to the following thresholds:

- Stage 1: < 50;
- Stage 2: 50 - 75;
- Stage 3: 75 - 90;
- Stage 4: 90 - 110;
- Stage 5: > 110 (Annoni et al., 2017).

In the year 2010, the stage of development was divided into 3 levels, High, Intermediate and Medium (Annoni - Kozovska, 2010, p. 11). In all 3 years, we can see, that Bratislava and Praha has had the high position, or 5th level. Other regions gained the medium position, or 2nd, in one case 1st and 3rd stages. This stage of development reflects the real situation of regions in both countries.

Table 3 The stage of development in selected countries

	2010	2013	2016
Bratislava	high	5	5
Western Slovakia	medium	2	2
Central Slovakia	medium	2	2
Eastern Slovakia	medium	1	2
Praha	high	5	5
Southwest	medium	2	2
Northwest	medium	2	2
Northeast	medium	2	2
Southeast	medium	2	3
Central Moravia	medium	2	2
Moravian-Silesian	medium	2	2

Source: own processing

When we analysed the development of GDP per capita in purchasing power standard on NUTS II level, we can see, that all analysed regions have growing trend. For better comparison, we calculate the average values for period 2010 - 2015, as we can see in Figure below.

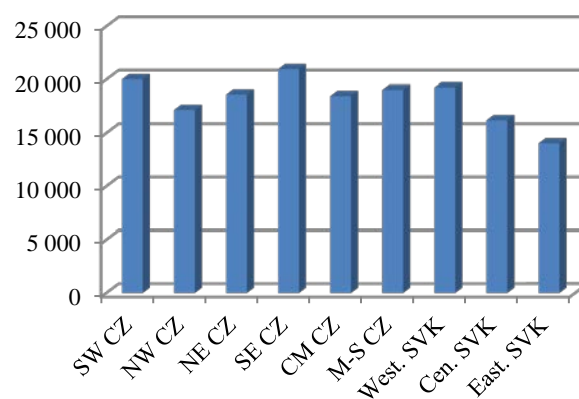


Figure 1 Average values of GDP per capita in PPS (2010 - 2015)

Source: own processing

The lowest value were in Eastern and Central Slovakia. Both values were under the amount of 15 000 PPS. The highest values were in both capitals regions, Praha and Bratislava. They were excluded from this figure, because, we have analysed them in next figure.

We compare in Figure 2 the development of GDP per capita in PPS in capitals regions. In both capitals, the growing trend were obtained. The highest values were in the whole analysed period in Bratislava region.

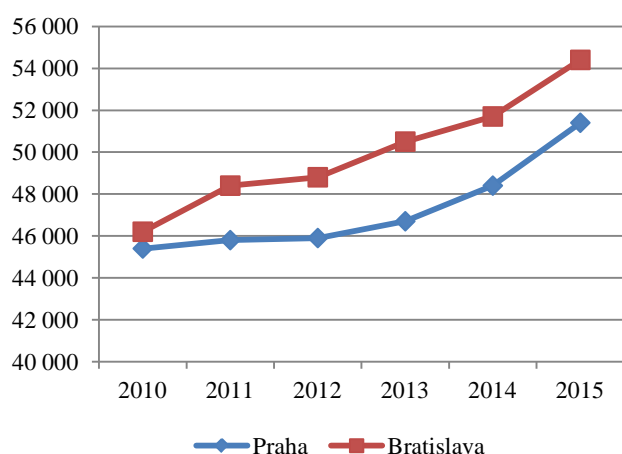


Figure 2 The development of GDP per capita in PPS in both capitals

Source: own processing

The best position in both analysed countries in RCI were obtained in capital regions. We compare the values of EU, Bratislava and Praha in spider graph. We can see, that the best values achieved Bratislava in innovation, business sophistication, market size, labour market and in higher education. Praha achieved the best values in technical readiness and macroeconomic stability.

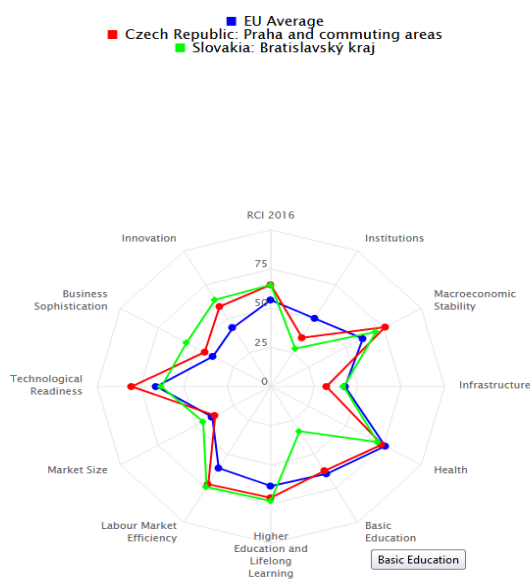


Figure 3. Comparison of both capitals in RCI  
Source: Regional Competitiveness Index 2017

#### 4. CONCLUSION

When we want to summarize the performance through Regional Competitiveness Index in 2016, we can identify the most and the least competitiveness areas. The most competitiveness indicators in the Slovak Republic were macroeconomic stability, higher education and lifelong learning and health. The least competitiveness areas were the market size, infrastructure, business sophistication and innovation.

The most competitiveness indicators of the Czech Republic were macroeconomic stability, technological readiness, basic education and health and the least competitiveness areas were business sophistication, market size, infrastructure and innovation.

The most competitive regions are both capitals, Bratislava and Praha. Compared them, we can see, that the best values achieved Bratislava region in innovation, business sophistication, market size, labour market and in higher education. Praha region achieved the best values in technical readiness and macroeconomic stability. The least competitive regions are Eastern Slovakia and the Northwest region from the Czech Republic.

Both analysed countries has had differences between regions, which effect the global rank in Regional competitiveness index. Therefore, when we improve the competitiveness of the weakest regions, the overall position of the country will be improved.

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