# DEPENDENCE OF THE LOCATION OF THE EUROPEAN CAPITALS AND COMPETITIVENESS OF THE REGIONS

#### Pawel Dobrzanski

### **Abstract**

Competitiveness is one of the most important topics of modern economics. Current research and publications focus mainly on the international competitiveness of the country. However, in recent years, interest in the competitiveness of regions has increased. The EU created the European Regional Competitiveness Index in 2010. The main goal of this article is to verify whether the region with the capital is the most competitive region in the country. The analysis will be carried out for the EU countries. The article offers an assessment of the competitiveness of selected regions based on the results of the European Regional Competitiveness Index. Evaluations of basic economic indicators are presented, along with effectiveness and innovation factors, establishing the sources of their competitive advantage. The main method is comparative analysis. In most cases capitals attract the most investments, entrepreneurs and have the largest labor force. Countries in which the above hypothesis has not been confirmed are Germany, Italy and Netherlands. In these countries, the industrial regions of Oberbayern, Lombardy and Utrecht are the leaders. This research can be used by policy makers to ensure proper cohesion policy is implemented to reduce inequity.

**Key words:** regional competitiveness, comparative analysis, the EU Regional Competitiveness Index

**JEL Code:** O18, R58, O57

#### Introduction

Nowadays, in modern economies essential is role of the state policy in strengthening country's competitiveness. The persistence of regional disparities justifies the relevance of regional policies. Regions compete on the basis of absolute advantages, and therefore need solid policy tools to enhance their competitiveness (Camagni & Capello, 2010). Regional policy makers are under pressure of short-term outputs, which forced them towards short term policy goals. While regional policies contain many positive elements, there is still a necessity for more long-term policy (Huggins & Williams, 2011). As there are huge differences between regions in the same country, the regional competitiveness has become an important topic of debate between

policymakers and international institutes. Huge differences exist in competitiveness structure of each country, as specific regions achieve better results in certain fields due to its more favorable conditions (Rutkauskas, 2008). Regional policy is one of the fundamental policies for EU, which aims to reduce the economic and social disparities between the EU regions. The EU is focused on decreasing the regional disparities in economic development and on eliminating the economic deficits observed in the least-privileged regions, including rural areas. Development of regions is strongly dependent by enterprises, which exert a marked impact on regional infrastructure, local labor market conditions, and the region's competitiveness (Dobrzanski, 2017).

Research problem in this article is verification if capital regions are the most competitive in the EU countries. The analysis will be carried out for based on the European Regional Competitiveness Index. The main method employed is comparative analysis.

# 1 Regional Competitiveness

Competitiveness is one of the most important economic problems. In the literature, competitiveness initially referred to enterprise. However, the focus on competitiveness has not just been microeconomic phenomenon. Porter (1998) has extended competitive advantage model of firms to the competitive advantage of regions, nations, and places generally. Porter (1998) emphasized that competitiveness of a country depends on its ability to efficiently use available resources and improve innovativeness. Between the micro and the macro levels there is the concept of regional competitiveness. A region is neither a simple aggregation of firms nor a scaled version of nations (Gardiner et al., 2004). Competitiveness varies across geographic space. Regions develop at different rates depending on the growth drivers (Audretsch & Keilbach, 2004).

According to Porter, regional competitiveness and productivity are equivalent terms, because region's standard of living (wealth) is determined by the productivity with which it uses its human, capital, and natural resources. Regional competitiveness is also defined as a firm-based, output-related conception, strongly shaped by the regional business environment (Bristow, 2005). Regional competitiveness is considered as the capability of an economy to attract and maintain companies with stable or rising market shares in an activity, while maintaining stable or increasing standards of living (Storper 1997). Technological and organizational perfection of the fields of activity, utility and efficiency of the international

relations along with the regional resources and labor qualifications are competitive advantages of the region. (Rutkauskas, 2008)

# 2 Measuring competitiveness at the regional level - European Regional Competitiveness Index

European Union is on the dynamic development path, but not without difficulties. In the literature popular become term 'two-speed Europe', which is not only reflection of differences between the individual Member States, but also between regions. The EU is focused on reducing the regional inequities. For that reason, the EU introduced the European Regional Competitiveness Report. The European Commission established in 2002 the Competitiveness Council (COMPET) and it undertook to produce a regular Competitiveness Report on the performance of the economy of the European Union. In the European Union, the issue of competitiveness has taken on particular significance in relation to the Lisbon Strategy with its main goal to become the most dynamic and competitive knowledge-based economy. EU interest has grown in the competitive performance of regions and cities, with identifying the key determinants of regional and urban competitiveness, and with developing policies that promote and support these determinants (Kitson et al., 2004). The index is providing comparable information about economic and social issues at the regional level. It measures regional competitiveness and allow comparing with other peers, which can be useful in long-term development plans.

RCI evaluate eleven pillars, which are grouped into three groups: Basic, Efficiency and Innovation. Basic dimension includes: institutions, macroeconomic stability, infrastructure, health, and basic education – these measures the continuous economic development and competitiveness. Efficiency dimension is assessing higher education and lifelong learning, labor market efficiency, and market size. Innovation dimension reflect the level of innovation, technological readiness, and business sophistication. (Dijkstra et al., 2011)

The regional competitive index (RCI) can be represented as follows (Benzaquen et al., 2010):

$$RCI = \frac{\sum_{k=1}^{l} Pillar_k}{I}$$
 (1)

where the RCI is the average of the l pillars comprising it, and in which each pillar (Pillar<sub>k</sub>) is represented by the average of the m factors comprising it.

The EU Regional Competitiveness Index (RCI) provides competitiveness assessment for each of the NUTS 2 regions of the 27 EU Member States. RCI is emphasizing main problems in less developed regions and innovative advantages in more developed regions. The pillars measure not only issues relevant to enterprises, but also resident's quality of life. The index is used to monitor, evaluate and compare the development of regions. The first RCI index had adopted competitiveness definition as the ability of region to generate high and rising income and improve the livelihoods of the people living there (Meyer-Stamer, 2016). The latest report updated definition of regional competitiveness as the ability of a region to offer an attractive and sustainable environment for firms and residents to live and work (Annoni et al., 2017).

# 3 Competitiveness of capital regions in EU – results and discussion

In this research method of data analysis was used. Data was taken from Regional Competitiveness Index Database. The most competitive regions from each of 28 EU Member States were selected for the analysis. Reserach covers years 2016 and 2013. The results of the research confirmed hypothesis, that the region, in which the capital is located is the most competitive in a given country. Just in three out of twenty-seven EU countries obtained other results. These regions were located in Germany, Italy and Netherlands. The most competitive region in Netherlands, called Utrecht, ranked 2th in RCI index. The German region, called Oberbayern, and Italian - Lombardia, ranked 9th and 143th respectively.

The scores of RCI index are presented in the table 1. Region called "Bedfordshire and Hertfordshire" form UK took first place in the ranking. The second position was taken by the Stockholm region, which overall took 4th place in the RCI index. The regions located in Denmark (Hovedstaden), Luxembourg (Luxembourg) and France (Île de France) also received a high position in the ranking. The poorest results were obtained by the regions: Kontinentalna Hrvatska, Yugozapaden, Lietuva, Attiki, Latvija, belonging to Croatia, Bulgaria, Lithuania, Greece and Latvia.

However, it is worth to underline that in top 10 regions in RCI index just 5 of them are representing capitol regions, moreover in top 20 just 8 of them. This means that there is a large disproportion between rich countries/regions and the poor ones in the EU. That is why cohesion policy is very important, which aims to reduce these differences between countries/regions.

In many countries, the capital region is far more competitive than the others in the same country and many countries show highly varied scores. The gap between the capital region and

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other regions is particularly wide in Romania, Greece, Slovakia, Bulgaria and France. These countries are also characterized by a high level of variability within the country, which is caused by disproportion outperforming capital region. Increasing gap between the capital region and the rest of the country puts extensive pressure on the capital region. This may also cause that some of the resources in other regions are underutilized. In United Kingdom, Austria and Belgium the difference between the capital region and the second-highest-performing region is relatively small. Nevertheless, it does not mean that entire country performs well. Some capital regions are surrounded by similarly competitive regions, indicating the presence of spillover effects, like in Germany. However, in many countries the regions neighboring the capital are far less competitive.

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Tab. 1: RCI index, sub-indices and pillar scores in 2016

Tab.	i. KCI mucx,	sub-marces an	u pinai scores in 2010												
	Capital Region	Country name	NUTS NAME	Basic sub-index			Efficiency sub-index			Innovation sub-index			RCI 2016		
1	YES	United Kingdom	Bedfordshire and Hertfordshire	0,604	86,615	47	1,438	100,000	1	1,246	86,009	6	1,214	100,000	1
2	YES	Sweden	Stockholm	0,750	92,221	17	1,110	91,526	4	1,444	91,606	3	1,138	97,206	4
3	YES	Denmark	Hovedstaden	0,687	89,798	32	0,968	87,880	7	1,337	88,574	4	1,022	92,942	6
4	YES	Luxembourg	Luxembourg	0,349	76,849	83	0,759	82,496	14	1,741	100,000	1	0,972	91,064	7
5	YES	France	Île de France	0,540	84,168	58	1,108	91,479	4	0,961	77,946	18	0,950	90,274	8
6	YES	Finland	Helsinki-Uusimaa	0,794	93,906	9	0,762	82,564	14	1,186	84,307	9	0,896	88,259	11
7	NO	Netherlands	Noord-Holland	0,726	91,298	22	0,795	83,410	11	1,093	81,685	12	0,871	87,335	12
8	YES	Belgium	Prov. Vlaams-Brabant	0,498	82,577	66	0,634	79,274	28	1,222	85,332	8	0,783	84,121	19
9	NO	Germany	Brandenburg	0,650	88,402	40	0,351	71,964	69	0,738	71,628	28	0,523	74,527	45
10	YES	Austria	Niederösterreich	0,334	76,277	85	0,474	75,143	48	0,555	66,450	52	0,470	72,560	49
11	YES	Spain	Comunidad de Madrid	0,195	70,982	104	0,289	70,371	82	0,521	65,488	57	0,340	67,747	83
12	YES	Slovakia	Bratislavský kraj	-0,486	44,876	210	0,438	74,224	53	0,514	65,299	58	0,276	65,400	96
13	YES	Czech Republic	Strední Cechy	-0,101	59,621	146	0,268	69,834	93	0,477	64,258	62	0,257	64,692	102
14	YES	Ireland	Southern and Eastern	0,084	66,701	118	0,013	63,250	134	0,651	69,160	37	0,218	63,262	109
15	YES	Slovenia	Zahodna Slovenija	-0,036	62,130	136	0,160	67,055	113	0,362	60,987	80	0,167	61,356	113
16	YES	Portugal	Área Metropolitana de Lisboa	-0,311	51,580	183	-0,037	61,963	140	0,276	58,555	91	-0,020	54,463	139
17	YES	Estonia	Eesti	0,378	77,968	81	-0,272	55,902	162	-0,093	48,129	144	-0,035	53,897	141
18	YES	Poland	Mazowieckie	-0,322	51,183	186	0,090	65,248	122	-0,368	40,354	164	-0,128	50,491	150
19	YES	Hungary	Közép-Magyarország	-0,759	34,439	223	-0,080	60,854	145	0,208	56,632	110	-0,166	49,087	152
20	NO	Italy	Lazio	-0,287	52,493	178	-0,241	56,713	158	-0,081	48,460	143	-0,202	47,743	156
21	YES	Romania	Bucuresti - Ilfov	-1,302	13,650	238	0,169	67,271	112	-0,298	42,323	159	-0,265	45,412	161
22	YES	Cyprus	Kýpros	-0,962	26,645	232	-0,278	55,747	162	-0,388	39,762	166	-0,491	37,076	184
23	YES	Malta	Malta	-0,423	47,307	201	-0,752	43,522	213	-0,035	49,775	141	-0,500	36,740	187
24	YES	Latvia	Latvija	-0,574	41,503	217	-0,553	48,662	193	-0,479	37,207	174	-0,546	35,060	191
25	YES	Greece	Attiki	-1,335	12,360	240	-0,423	52,014	179	-0,135	46,946	149	-0,564	34,389	193
26	YES	Lithuania	Lietuva	-0,924	28,110	227	-0,291	55,406	167	-0,717	30,452	198	-0,569	34,202	194
27	YES	Bulgaria	Yugozapaden	-1,340	12,170	241	-0,287	55,531	166	-0,570	34,634	179	-0,669	30,513	207
28	YES	Croatia	Kontinentalna Hrvatska	-0,945	27,316	228	-0,756	43,429	213	-0,684	31,392	193	-0,802	25,619	220

Source: Author's own study based on Annoni et al., 2017

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In both 2016 and 2013 editions of RCI capital and metropolitan areas are main competitors. Spillover effects can be noted in most of north-western Europe, but not in the east and south. Comparing 2016 to 2013 RCI, in more than 70 % of regions, the development stage remains unchanged from 2013, while 8 % of the regions improved their development stage. These regions are in Austria, the Czech Republic, Germany, Poland, Romania and Slovakia. 47 regions dropped to a lower stage of development, including Cyprus and some regions in Greece, Spain, Ireland, Italy, the Netherlands, Portugal and Sweden. When it comes to the most competitive regions in the particular countries they are the same in 2013 and 2016. Twelve of them strengthened their position, while in the same time fourteen regions fall down in the ranking and two remain at the same place. Region Bedfordshire and Hertfordshire overtook the Utrecht region, which fall down in 2016 to second place.

Tab. 2: RCI index, sub-indices and pillar scores in 2016 and 2013

	Country name	NUTS NAME	F	RCI 2016	RCI 20	Trend		
1	United Kingdom	Bedfordshire and Hertfordshire	1,214	100,000	1	1,192	2	7
2	Sweden	Stockholm	1,138	97,206	4	1,149	4	=
3	Denmark	Hovedstaden	1,022	92,942	6	1,040	9	7
4	Luxembourg	Luxembourg	0,972	91,064	7	0,971	13	7
5	France	Île de France	0,950	90,274	8	1,050	8	=
6	Finland	Helsinki-Uusimaa	0,896	88,259	11	0,790	22	7
7	Netherlands	Noord-Holland	0,871	87,335	12	1,078	6	7
8	Belgium	Prov. Vlaams-Brabant	0,783	84,121	19	0,969	14	7
9	Germany	Brandenburg	0,523	74,527	45	0,551	42	7
10	Austria	Niederösterreich	0,470	72,560	49	0,393	75	7
11	Spain	Comunidad de Madrid	0,340	67,747	83	0,479	57	7
12	Slovakia	Bratislavský kraj	0,276	65,400	96	0,378	78	7
13	Czech Republic	Strední Cechy	0,257	64,692	102	0,213	96	7
14	Ireland	Southern and Eastern	0,218	63,262	109	0,072	120	7
15	Slovenia	Zahodna Slovenija	0,167	61,356	113	0,119	112	7
16	Portugal	Área Metropolitana de Lisboa	-0,020	54,463	139	0,019	127	7
17	Estonia	Eesti	-0,035	53,897	141	-0,182	148	7
18	Poland	Mazowieckie	-0,128	50,491	150	-0,180	147	7
19	Hungary	Közép-Magyarország	-0,166	49,087	152	-0,148	144	7
20	Italy	Lazio	-0,202	47,743	156	-0,125	143	7
21	Romania	Bucuresti - Ilfov	-0,265	45,412	161	-0,309	165	7
22	Cyprus	Kýpros	-0,491	37,076	184	-0,285	163	7
23	Malta	Malta	-0,500	36,740	187	-0,569	193	7
24	Latvia	Latvija	-0,546	35,060	191	-0,840	226	7
25	Greece	Attiki	-0,564	34,389	193	-0,366	174	7
26	Lithuania	Lietuva	-0,569	34,202	194	-0,820	224	7

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27	Bulgaria	Yugozapaden	-0,669	30,513	207	-0,715	208	7
28	Croatia	Kontinentalna Hrvatska	-0,802	25,619	220	-0,743	213	7

Source: Author's own study based on Annoni et al., 2017

#### **Conclusion**

Analysis confirmed that in the majority of EU countries capital regions are the most competitive. European capitals are attracting the most investments, entrepreneurs and have the largest labor force. Only in three EU countries hypothesis was not confirmed: Germany, Italy and Netherlands. In these countries, the industrial regions of Oberbayern, Lombardy and Utrecht are the most competitive, but capital regions are also achieving good score in competitive index. The persistence of regional disproportions justifies the importance of regional policies. Regions to improve competitiveness need solid policy tools. Analysis of region can provide better picture that cannot be guarantee by country level analysis. Further research should verify if regional competitiveness gaps have negative impact for national competitiveness and to what extent the internal inequality can be remediated. Important question is also whether the competitiveness of capital and metropolitan regions will help to increase the performance of neighboring regions or whether the gap between them and the other regions will extend.

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