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**Edited by:**

Viktorie KLÍMOVÁ

Vladimír ŽÍTEK

(Masarykova univerzita / Masaryk University, Czech Republic)

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# REGIONAL COMPETITIVENESS INDEX AS A SUITABLE TOOL FOR EVALUATING SOCIO-ECONOMIC SITUATION OF THE EU NUTS 2 REGIONS

## Index regionální konkurenceschopnosti jako vhodný nástroj pro hodnocení socio-ekonomické situace NUTS 2 regionů EU

MICHAELA STANIČKOVÁ

*Katedra evropské integrace* | *Department of European Integration*  
*Ekonomická fakulta* | *Faculty of Economics*  
VŠB - Technická univerzita Ostrava | VŠB - Technical University of Ostrava  
✉ Sokolská třída 33, 702 00 Ostrava, Czech Republic  
E-mail: michaela.stanickova@vsb.cz

### Annotation

Over the last decades, regional competitiveness has been intensely investigated and many studies reveal how all the regions are not equally able to face the challenges that the new competition proposes but they fail in supplying both an exhaustive explanation and a relevant, accessible and transferable measure of it. Supporting regional competitiveness requires creating framework conditions to develop the necessary infrastructure, human capital, technology and efficient markets that can help attract talent and investment to increase the standards of living of the population. Therefore, competitiveness has been an important issue on the European Union's agenda for several decades too. Launched in 2010 and published every three years by the European Commission, the Regional Competitiveness Index allows NUTS 2 regions of the European Union to monitor and assess their development over time and in comparison with other regions. This paper aims to throw light on some of the underlying aspects of regional competitiveness, give an overview of notion and methods used for planning tasks concerning regional competitiveness as well as analysis of research studies on constructing the territorial composite indices with special attention and application at regional level of the EU.

### Key words

Composite index, European Union, NUTS 2 region, Regional Competitiveness Index

### Anotace

Regionální konkurenceschopnost byla v posledních desetiletích hluboce zkoumána a mnoho studií ukazuje, jak jsou a nejsou regiony schopny čelit výzvám, které utváří nová konkurence, ale nedokáží poskytnout dostatečně relevantní, dostupný a přenosný měření a hodnocení. Podpora regionální konkurenceschopnosti vyžaduje vytvoření rámcových podmínek pro rozvoj nezbytné infrastruktury, lidského kapitálu, technologií a efektivních trhů, které mohou pomoci přilákat inovace a investice vedoucí ke zvýšení životní úrovně obyvatelstva. I z těchto důvodů je konkurenceschopnost již několik desetiletí důležitou otázkou agendy Evropské unie. Index regionální konkurenceschopnosti, poprvé publikovaný v roce 2010 a od té doby vydávaný Evropskou komisí co tři roky, umožňuje NUTS 2 regionům Evropské unie sledovat a hodnotit jejich vývoj v čase ve srovnání s ostatními regiony. Cílem příspěvku je poukázat na některé základní aspekty regionální konkurenceschopnosti, poskytnout přehled o pojmech a metodách používaných při plánování aspektů týkajících se regionální konkurenceschopnosti, jakož i analýzu výzkumných studií o konstrukci územních kompozitních indexů se zvláštní pozorností a aplikací na regionální úrovni EU.

### Klíčová slova

kompozitní index, Evropská unie, NUTS 2 region, Index regionální konkurenceschopnosti

**JEL classification:** B41, O18, P51, R11, R58

## 1. Introduction

Nowadays competitiveness is one of the most monitored characteristics of national economies and is increasingly appearing in the evaluation of their prosperity, welfare and living standards. The need for a definition of

competitiveness at the macroeconomic level emerged with the development of the globalisation process in the world economy. The concept of competitiveness has quickly spread to the regional level, but its notion is also contentious. In the global economy regions are increasingly becoming the drivers of the economy, and generally, one of the most striking features of regional economies is the presence of clusters or geographic concentrations of linked industries. The shifting of production activities threatens current economic fundamentals to places with better conditions. Regional competitiveness is also affected by the regionalisation of public policy because of the shifting of decision-making and coordination of activities at the regional level. Within political circles, interest has grown in the regional foundations of national competitiveness, and with developing new forms of regionally based policy interventions to help improve the competitiveness of every region and major city, and hence the national economy as a whole. Regions play an increasingly important role in the economic development of states. Regional competitiveness is thus a valid topic for academic enquiry, not only in its own right but also because of its potential importance for informing policy-making. Only a thorough analysis involving multiple research studies may assure a conceptual definition and a reliable and relevant comprehensive analysis of the regional competitiveness. The paper is based on systematic literature review approach investigating research works on the issues of competitiveness. The paper aims to make appropriate literature review and to highlight the definition of competitiveness, as well as to analyse components in the context of regional development. The study discusses theoretical background of regional competitiveness, address related questions on the meaning and explanation of regional competitiveness and provides the regional competitiveness' measuring. The main results of literature reviews are an overview of competitiveness concepts and empirics that lead to highlight some of the shortcomings of the research topic. Results in the form of appropriate approach to the evaluation of competitiveness will be utilised as a tool for further analysis in measuring the regional competitiveness of the European Union (EU) regions at level 2 based on the Nomenclature of territorial units for statistics (NUTS) based on existing index titled Regional Competitiveness Index (RCI). This paper aims to throw light on some of the underlying aspects of regional competitiveness, give an overview of notion and methods used for planning tasks concerning regional competitiveness as well as analysis of research studies on constructing the territorial composite indices with special attention and application at regional level of the EU 2.

## 2. The concept of competitiveness and its measuring: special attention at the regional level

The concept of competitiveness has in the last decades extended from the micro-level of firms to the macro-level of countries. Between the two levels stands the concept of regional competitiveness which is the focus of the EU Regional Competitiveness Index (RCI), a joint project between DG Joint Research Centre and DG Regional Policy. Politicians and policymakers as much debate regional competitiveness as academics doubt it. For politicians and policymakers, it offers a reasonably fuzzy umbrella concept that covers aspects that matter to the firms and residents of a region. It tends to focus on measurable differences between regions which fall (partly) under the control of public authorities, without employing any clear political or conceptual framework. Despite accusations that regional competitiveness is embedded in a neo-liberal ideology (Bristow, 2010), the concept, as adopted in the present paper, neither assumes nor supports a minimal state. It takes a simple definition of regional competitiveness which responds pragmatically to current issues raised in the literature and allows us to consider how these issues can guide indicator selection used in the evaluation of competitiveness via RCI.

### 2.1 Literature review and definition

The term of competitiveness is one of the most commonly used concepts in economics, but it is not precise enough, which means that there is no generally accepted definition of competitiveness. The concept of competitiveness has been largely discussed over the last decades. A broad notion of competitiveness refers to the inclination and skills to compete, to win and retain a position in the market, increasing market share and profitability, thus, being commercially successful. An important aspect is a level at which the concept of competitiveness is defined; in most cases, the micro and macroeconomic level are considered, which are strictly interrelated. In original meaning, the concept of competitiveness was applied only to companies and corporate strategies. Competitiveness of companies is understood as the ability to provide products and services as well as or more effective than their main competitors. Competitiveness of companies is derived from the main sources of competitiveness – the competitive advantage which companies gained through their methods of organisation, production and effect on the markets in comparison to their rivals, and covers the company's ability to maintain its market position. The former is relatively clearly defined and is based on the capacity of firms to compete, grow and be profitable (Martin, 2003). The latter is, instead, subject to debate and is generally viewed and measured at the country level. One of the most important definitions of macroeconomic competitiveness is given by the World Economic Forum (WEF) which states that competitiveness is the set of institutions, policies and factors that determine the level of productivity of a country (Schwab, Porter, 2007). The WEF definition links micro- (firm-level) to macro- (country-level) competitiveness. The framework describing a firm's capacity to compete, grow and be profitable (Martin et al.,

2006) is relatively uncontested, but applying the same concept to countries or regions has been subject to much debate. The link between the two levels is straightforward: a stable context at the macro level improves the opportunity to produce wealth but does not create wealth by itself. Wealth is created by utilising at best human, capital and natural resources to produce goods and services, i.e. productivity. But productivity depends on the microeconomic capability of the economy which ultimately resides in the quality and efficiency of the firms (Schwab, Porter, 2007). The implicit analogy between firms and nations has been widely criticised because a country cannot go out of business and because competition between countries can benefit both, while competition between companies in the same sector is more likely to be a zero-sum game (Krugman, 1991). Despite the strict linkage between micro (firm) and macro (country) competitiveness, much criticism to the notion of national competitiveness has been raised, mainly due to the existence of an analogy between firms and nations.

Between the two levels of competitiveness (the micro and the macro levels) stands the concept of regional competitiveness which has gained more and more attention in recent years, mostly due to the increased focus is given to regions as key in the organisation and governance of economic growth and the creation of wealth. A notable example is a special issue of *Regional Studies* 38(9), published in 2004, entirely devoted to the concept of competitiveness of regions. Regional competitiveness is not only an issue of academic interest but of increasing policy deliberation and action. A region is neither a simple aggregation of firms nor a scaled version of nations (Gardiner et al., 2004). Meyer-Stamer (2008) states that (systemic) competitiveness of a territory can be defined as the ability of a locality or region to generate high and rising incomes and improve the livelihoods of the people living there.

In contrast to the WEF definition focussed on the concept of productivity, this definition is based entirely on the benefits to people living in a region. It assumes a close link between competitiveness and prosperity. It characterises competitive regions not only by using output-related terms such as productivity but also by determining the sustained or improved level of comparative prosperity (Bristow, 2010). Regional competitiveness cannot be regarded as either macroeconomic or microeconomic concept. A region is neither a simple aggregation of firms nor a scaled version of nations (Gardiner et al., 2004) and the meso-level it characterises is to be duly described. Hence, competitiveness is not simply resulting from a stable macroeconomic framework or entrepreneurship on the micro-level. New patterns of competition are recognisable, especially at the regional level: for example, geographic concentrations of linked industries, like clusters, are of increasing importance and the availability of knowledge and technology-based tools show high variability within countries. Huggins (2003) underlines that true local and regional competitiveness occurs only when sustainable growth is achieved at labour rates that enhance overall standards of living. The complexity of competitiveness was interestingly decomposed by Esser et al. (1995) into four analytical levels where different types of determinants drive competitiveness. Apart from the meta level, which regards basic orientations of society and other 'slow' variables that are not of primary interest here, the micro, meso and macro levels of competitiveness are clearly described. The meso level is between the macro- and micro level and aims at designing a specific environment for enterprises, e.g. practical aspects in the regional context of this level offers Sucháček (2015). At this level, it is highly important that physical infrastructure (such as transport, communication and power distribution systems) and sector policies (such as those regarding education and R&D policies) are oriented towards competitiveness (Halásková, Halásková, 2016).

Along the same lines, Dijkstra et al. (2011) propose a definition of regional competitiveness which integrates the perspective of both firm and residents, i.e. regional competitiveness can be defined as the ability to offer an attractive and sustainable environment for firms and residents to live and work. Sustainable in this definition is not used in the purely ecological-environmental sense, but in the mind of a region's capacity to provide an attractive environment in both the short- and long-term. This means that a region which reduces taxes to such a degree that it can no longer maintain the quality of its public infrastructure and services does not provide a sustainable, attractive environment. These definitions cover issues which benefit both firms and residents, such as good institutions, and issues where their interests may conflict, such as wages. It strives to balance the most critical aspects of an attractive environment by combining the goals of commercial success with personal well-being. As stated in the Sixth Progress Report on Economic and Social Cohesion (European Commission, 2009), the challenge is to capture into a competitiveness index the notion that every region has common features which affect and drive the competitiveness of all the firms located there, even if the variability of competitiveness level of the firms within the region may be very high. These features should describe physical and social infrastructure, the skills of the workforce and the efficiency and fairness of the institutions. This is reflected in the interest devoted in the recent years by the European Commission (EC) to define and evaluate the competitiveness of European regions, an objective closely related to the realisation of the Lisbon Strategy on Growth and Jobs. According to the Treaty on European Union (Article 3) (2012), working towards a competitive economy is one of the EU's goals.

Similarly, improving Europe's competitiveness is among the aims of the Europe 2020 strategy for smart, sustainable and inclusive growth – the successor of the Lisbon Strategy aimed at making the EU the most competitive and dynamic knowledge-based economy in the world. Competitiveness is also an important theme on the agenda of the current EC. The EU supports competitiveness through policies aimed at creating a business-friendly environment, improving innovation, modernising the industrial base, varying sectoral support and encouragement for structural reform through the framework of economic policy coordination (European Semester). Funding for such assistance is available under different EU programmes, such as the programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME), and the European Structural and Investment Funds (ESIF).

## 2.2 Review of applied approaches and methods

The pursuit of competitiveness has assumed essential significance for policymakers at regional, urban and local scales. Within political circles, interest has grown in understanding the competitive performance of individual regions and cities and in devising policies to promote and enhance competitiveness. Indeed, regional competitiveness has been enthusiastically adopted as a policy goal by the European Commission and by national governments across the EU, as well as Europe as a whole and the United States of America. It has risen to particular prominence in the United Kingdom where the pursuit of regional competitiveness has moved to centre stage in the policy statements of the national government. This has helped create significant interest in the construction of competitiveness indices (CIs) which enable regions to compare their relative standing in competitiveness league tables. Thus in parallel with the development of national competitiveness indices, a plethora of regional, city and local CIs have emerged which rank places by particular measures of competitiveness (Berger, 2011).

Since competitiveness is a relative concept, it implies the need to compare with others such that regions are inexorably sucked into the continual monitoring and periodic benchmarking of what 'the competition' is doing and where the best practice' or best offer' lies. As a consequence, the obsession with regional competitiveness has created a voracious demand for indicators by which policy makers and analysts can measure, analyse and compare regional performance, or find out who is 'winning'. More recently, efforts have also been made to develop CIs of regional competitiveness, following similar trends in the evolution of national competitiveness indicators. These combine relevant indicators into one overarching measures, the results of which can be reported in the form of a league table (Huggins, 2003). Such indices and rankings attract widespread attention and are inevitably seductive for regional development agencies and the media keen to absorb 'quick and dirty' comparative measures of regional economic performance. To date, however, there has been limited critical interrogation of how valid and useful these indices are in respect of their ability to both provide insights into what drives regional competitiveness, and to generate robust predictions and rankings of regional economic performance (Berger, 2011).

Within the breadth of approaches, a broad dichotomy is discernible between analyses which consist of the reporting of a series of separate indices, and those which seek to develop composite index, where a range of input, output and outcome variables are measured and aggregated to form a single overarching measure of competitive performance (Huggins, 2003). The increased popularity of such CIs reflects the growing urge to benchmark or rank the comparative performance of one region against another (Farrugia, 2007). CIs simplify complex measurements constructs and thus have considerable political appeal (Booyesen, 2002). Some indices are explicitly produced for media purposes, whereas others seek to develop an overall measure of the different factors shaping competitiveness outcomes (Greene et al., 2007). Such indices can serve a useful purpose in highlighting differences between regions in particular economic circumstances. Thus, the business community uses ranking as a tool to determine investment plans and to assess locations for new operations, while governments and policy officials use them to identify particular areas of an economy's weakness or make a case for specific public policies or strategies for inducing growth. According to Fisher (2005), the indices produced by think tanks in the US states and regions are predominantly used to promote particular policy agendas. So while there are thus clear uses for such indices as benchmarks of regional competitiveness, those constructing suitable indices are confronted with a number of critical challenges not least of these being what variables to include or what model of regional competitiveness to base the measure upon, and how to aggregate the chosen variables into a CI for ranking purposes. While these decisions have considerable implications for the ultimate indices and their rankings, there has a very little critical interrogation to date of the validity of these indices in respect of their ability to produce robust and valid diagnoses of regional economic problems and policy solutions.

Over the last years, more and more researchers have looked at the benchmarking of places. There are three kinds of publications to be distinguished, some studies looking at the constructing of indices (Bowen, Moesen, 2010; Saisana, Tarantola, 2002), others focusing on the index applied (Bandura, 2005; Booyesen, 2002) and – only a few – incorporating both approaches. Berger, Bristow (2009) analysed four national indices in more detail, looking at index construction and their use as a predictor of future economic performance. Several well-established studies

measure competitiveness at the country level and present a mainstream approach. At the country level, the Global Competitiveness Index, prepared by the World Economic Forum, and World Competitiveness Yearbook by the Institute for Management Development (IMD) is by far the most influential and best-known indices. GCI is indeed the most internationally recognised index covering a reasonably comprehensive set of aspects relevant to competitiveness.

Importance and popularity of CIs nowadays are also evident in the EU that confirmed the establishment of the Composite Indicators Research Group (COIN) under the Joint Research Centre (JRC) of the European Commission (European Commission, 2016). The EU and its institutions intend to support and improve participation of local and regional authorities in the planning and implementation of the EU policies and activities on the ground also by contributing to improving sound statistics and data by exploring possible new ways of measuring and presenting regional performance. This importance of CIs for the EU research also confirm the number of studies evaluated the level of development in a specific topic. More approaches assessing the EU competitiveness in terms of CIs exist, e.g. the newest ones such as The Europe 2020 Index: The progress Of EU Countries, Regions and Cities to the 2020 targets (European Commission, 2015), An Indicator for Measuring Regional Progress towards the Europe 2020 Targets (European Commission, 2014), the Europe 2020 Regional Index (European Union, 2014). Also possible to mention older approaches such as The Regional Lisbon Index (European Commission, 2010), Synthetic index: Regional perspective on the Lisbon Agenda (European Commission, 2007).

Attempts to extend the analysis at the regional level have been carried out in more recent years also in the EU. The European Competitiveness Index (ECI), computed by the University of Wales Institute, focuses on European regions at the EU NUTS 1 level (Huggins, Davies, 2006), which did not include Romania and Bulgaria at the time. A more straightforward but more detailed geographical description of competitiveness is presented in Atlas of Regional Competitiveness (Eurochambers, 2007), reflecting the international recognition of the importance of the regional NUTS 2 level, but the approach falls short of aggregating the variables to a single composite index. Some European countries have dedicated efforts to construct national measures of regional competitiveness, such as in the UK (Huggins, Izushi, 2008), Croatia (UNDP, 2008), Lithuania (Snieska, Bruneckienė, 2009) and Finland (Huovari et al., 2001), in the Visegrad Four countries or in their NUTS 2 regions (Melecký, Skokan, 2011) and also in the Czech Republic (Žitek, Klímová, 2015; Žizka, 2013), as specified Staničková (2018). The literature's most widely acclaimed index is seemingly the Regional Competitiveness Index constructed for the EU by Annoni, Kozovska in 2010, and enhanced and enlarged in 2013 by Annoni, Dijkstra, and subsequently in 2017 updated by Annoni, Dijkstra, Gargano, to include the EU regions. The European Commission commissioned these studies as a part of preparatory work for the EU' fifth, sixth and seventh Report on economic and social cohesion. Its methodological soundness, vast territorial extent, as well as the fact that it is the support document to the European Commission's policies, makes the three publications of this index highly recommendable for further improvements.

In addition to composite indices, there are other approaches to composite because regional competitiveness and its evaluation are issues always in the forefront of economic sciences, which lacks a mainstream method of regional competitiveness monitoring and assessment. Decomposition of aggregate macroeconomic indicators of international organisations (WEF, IMD) is most commonly used approach at the regional level, as well as comprehensive (mostly descriptive) analysis aimed at identifying the key factors of regional development, productivity and economic growth (Viturka, 2016). Another approach is an evaluation by structural indicators of the EU, which is used for the assessment and the attainment of the objectives of the EU growth strategies (such as Lisbon strategy or Strategy Europe 2020) or by multicriteria decision-making methods (Melecký, 2017; Hančlová, Melecký, 2016; Poledníková, 2014; Svoboda, 2014).

Evaluation of regional competitiveness is determined by the chosen territorial region level, especially in terms of NUTS. No less important is the reference period, availability and periodicity of data, and selection of convenient specific factors. For evaluation of regional competitiveness, it is necessary to note that the data availability decreases in direct proportion to the lower territorial unit.

### **3. RCI as a suitable approach to measuring the competitiveness of the EU NUTS 2 regions**

Why measuring regional competitiveness is so important? Because if you cannot measure it, you cannot improve it (Lord Kelvin). A quantitative score of competitiveness will facilitate the EU Member States in identifying possible regional weaknesses together with factors mainly driving these weaknesses. This, in turn, will assist regions in the catching up the process.

The concept of competitiveness has in the last decades extended from the micro-level of firms to the macro-level of countries. Between the two levels stands the concept of regional competitiveness which is the focus of the EU Regional Competitiveness Index (RCI), a joint project between Directorate General (DG) Joint Research Centre and DG Regional Policy. GCI of the WEF inspires the EU RCI. Therefore, GCI has been the leading reference framework for RCI construction. This choice has been driven by the fact that GCI is the most internationally recognised and acclaimed index in the field of competitiveness and its framework covers a very comprehensive set of aspects relevant to competitiveness. However, some key differences distinguish RCI from GCI due to RCI European and regional dimension.

RCI has been published every three years since 2010, coinciding with the European Commission reports on economic, social and territorial cohesion. It covers regions at NUTS 2 level, but necessary to note that number of evaluated NUTS 2 regions differs across RCI editions 2010, 2013 and 2016. RCI is based on indicators grouped in eleven pillars corresponding to various aspects of regional competitiveness (for more information see Annoni, Kozovska, 2010). Again, it should be noted that a number of indicators differ across RCI editions 2010, 2013 and 2016. Pillars are designed to capture short- as well as long-term capabilities of the region. They are classified into three major groups: the pillars Institutions, Macro-economic stability, Infrastructure, Health and Quality of Primary and Secondary Education are included in the first group and represent the key fundamental drivers of all types of economies. As the regional economy develops, other factors enter into play for its advancement in competitiveness and are grouped in the second group of pillars – Higher Education/Training and Lifelong Learning, Labour Market Efficiency and Market Size. At the most advanced stage of development of a regional economy, key drivers for regional improvement are factors related to Technological Readiness, Business Sophistication and Innovation, included in the third group. These aspects have been selected in line with the definition of competitiveness quoted above, used by the EC for RCI (the ability of a region to offer an attractive and sustainable environment for firms and residents to live and work). According to authors of RCI editions (Annoni, Kozovska, 2010; Annoni, Dijskstra, 2013; Annoni, Dijsktra, Gargano, 2017), this allows the extension of traditional analysis of competitiveness to integrate perspectives of both businesses and inhabitants, taking into account both business success and personal well-being.

As is mentioned, the reference for RCI construction is well-established GCI by the WEF but some variations and adaptations have been considered necessary to address the regional dimension of RCI. The main differences between RCI and GCI are as follows (Annoni, Kozovska, 2010): the application of a regional as supposed to country-level analysis; the exclusion of two pillars (Goods market efficiency and Financial market sophistication); the division in two separate pillars of GCI Health and Primary education pillar; the preference towards hard (quantitative) data concerning survey data. The reason for the exclusion of Goods market efficiency pillar is related to the fact that EU regions are subject to the European Single Market and the Customs Union. The pillar is then expected to show little if any variation across the EU. Moreover, some of the indicators selected by the WEF to describe this pillar have been included in the RCI Institutions pillar. Little variation across the EU is also expected for the Financial market sophistication pillar. Also, only a few hard data are available to describe this aspect for the EU. These have been the reasons behind the choice of excluding the pillar from RCI framework as well. Concerning the WEF framework, the pillar Health and Primary Education has been slightly modified and split into two different pillars to better distinguish between two distinct aspects of regional competitiveness across the EU. Health – pillar 4 – is described at the regional level while Quality of Primary and Secondary Education – pillar 5 – is described at the country level in terms of achievements and skills of pupils of age 15. The compulsory education system in force in the EU fixes to either 15 or 16 the ending age of mandatory education for most countries, except Hungary and the Netherlands where the minimum age is 18. Pillars may be grouped according to the different dimensions (input versus output aspects) of regional competitiveness they describe. The terms inputs and output are meant to classify pillars into those which describe driving forces of competitiveness, also in terms of long-term potentiality, and those which are direct or indirect outcomes of a competitive society and economy.

#### 4. Conclusion

RCI represents the first measure of the level of competitiveness at the regional level covering all EU countries. It takes into account both social and economic aspects, including the factors which describe the short and long-term potential of the economy. The significant added-value of the RCI is that it extends the traditional analysis of competitiveness from a purely economic measure to incorporate social elements. It also takes into account the level of development of a region by shifting the emphasis from more fundamental issues to innovation-related factors. RCI provides a synthetic picture of the level of the EU competitiveness at the NUTS 2 regional level representing, at the same time, a well-balanced plurality of different fundamental aspects. It is essential to

understand the extent to which areas (territories/localities or regions) compete with each other, where this competition comes from, and what factors determine a territorial, economic attractiveness. The index can, therefore, provide indications of what each region should focus on, taking into account its specific situation and its level of development. RCI interactive tools allow not only for monitoring and assessing a region's progress over time, but also comparing it with others (other EU regions, the best performer, the national average and the EU average). Performance can even be compared with peer regions in terms of GDP per capita, as RCI rankings can vary among regions with a similar level of economic development. RCI may be used to facilitate benchmarking, identify regional strengths and weaknesses, and support policymaking by informing regional development strategies to target the areas which need improvement with suitable investment priorities. Its regional granularity also helps illustrate within-country variations. RCI editions present a ranking of regions according to their attractiveness for both firms and residents. This broader vision of competitiveness can have implications for policy decisions and the choice of investment priorities. Data on the different dimensions of RCI, such as innovation, education and institutions, can help authorities to identify respective regional strengths and aspects to be improved.

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