

## Factors of regional competitiveness

SILVIA RUČINSKÁ

*Faculty of Public Administration  
University of P.J.Šafárik in Košice  
Popradská 66, Košice, Slovakia  
silvia.rucinska@upjs.sk*

RASTISLAV RUČINSKÝ

*Faculty of Business Administration Košice  
University of Economics Bratislava  
Tajovského 13, Košice, Slovakia  
rucinsky@euke.sk*

### Abstract

The competitiveness of a region depends also on character its actors and their development and relations between the actors in and also outside the region. There are many factors, which have positive influence on the regions competitiveness and also there are some with inhibiting effect. In our paper we want to show what is competition of regions and our aim is to determine what presents the competitiveness of a region and to specify factors of it.

**Key words:** region; regional competitiveness, drivers of regional competitiveness

### 1 Introduction

The national economy consists of the economics of particular country's regions, where the level achieved by all of regions determines its economic level. A principle of a development of the national economy is, therefore, in the development of economy of particular regions and their competitiveness [1]. The EU is characterized by substantial regional diversity in wealth, and competitiveness conditions differ substantially across regions. [2, p.12]. Since the world economics is transformed from a protectionism and control regime to a system, for which an integration, deregulation and competitiveness is distinctive, it is normal that an attention paid to countries competitiveness is moving to a competitiveness between supranational and subnational regions [3, p.206]. In our paper, we pay attention just to the competition of regions and our aim is to determine what presents the competitiveness of a region and to specify factors determining it.

### 2 Regional competition and competitiveness

There are some points of view of competitiveness, which could be classified in 2 basic groups. The first defines the competitiveness from microeconomic angle as an ability of companies to fight mutually for a market position and clients and to achieve higher profit and

growth in comparison with others. The second group views the competitiveness from the macroeconomic point of view defining it as a competitiveness of regions, nations or territories. The starting point for defining of the competitiveness of region is a decision what is the competition of regions.

### Regional competition

If the countries support favourable conditions for their companies and they support their strong points at their operation at local and global markets, these conditions represent, as Porter, so called competitive advantage of the nations, expressed it. The idea of competitive advantage can be applied similarly to the regions [3]. As for P.Krugman [4, p.30], who pointed, that “the idea that a country’s economic fortunes are determined by its success on world markets is a hypothesis, not a necessary truth; and as a practical, empirical matter, that hypothesis is flatly wrong. It is simply not the case that the world’s leading nations are to any important degree in economic competition with each other”, also J.Poot [3, p.206] states that although it is holding true there is a strong competition within the conditions of free trade and globalization, but it applies just to companies, not to regions or nations. It means, that a competition between regions is not zero-sum game, having just only one winner. According to J. Poot, a competition between regions „refers to the actions of economic agents that are taken to enhance the standard of living of their own territories such as regions, cities or countries“.

As well as Porter [7, p.31] states that the world economics does not represent zero-sum game, because many countries may improve their prosperity, if they improve their productivity. Then, main challenge of economic development of country or region is to create conditions for fast and sustainable growth of productivity. As mentioned Maskell, Eskelinen [6, p.51] “The capabilities of a region do have a directional effect on the efforts of the firms located there, by supporting and assisting some types of activities while hampering or preventing other“. A relation between microeconomic and macroeconomic framework of development is stated by Porter:



Source: [7, p.31]

Similarly, according to P.Krugman [4, p.31-34] and also J. Kern [8, p.173], the competition between companies and regions is not quite comparable. Companies enter or leave markets according to the fact how they are successful at the market, the regions never. The regions are not and cannot be forced to leave their territories at which they occur and as well as regions do not appear ex nihilo.

On the basis of it it is possible to insist that there is main difference between a competition between companies and regions and it consists in the fact that companies are fighting and their performances are at the expense of each other and at the competition of regions this relation is not applying, the regions may improve their positions simultaneously, if conditions are created or used for it.

We presume that despite the basic features of regions, such as an impossibility of their disappearing or going bankrupt, we think that regions are competing each other at least in certain spheres or at certain activities, therefore we think that it makes sense to talk about a competitiveness of regions.

### **Regional competitiveness**

In the recent years, the significance of a concept of competitiveness has increased rapidly in a theoretical level, as well as in an empirical one. The pioneers in a classification of the competitiveness concept were Freeman, Lundvall, and Porter, who were the first who have defined the national competitiveness as an outcome of a nation's ability to innovate in order to achieve an advantageous position over other nations in the key industrial sectors [9, p.154].

P.Krugman states [4] that a searching for definition of competitiveness is not needed and also trying to define the competitiveness of a nation or region is not so simply than defining that of a corporation. In an interview [6] P.Krugman expressed: "Competitiveness is not a meaningful term. It's an illusion that countries are like corporations, competing with each other in a market". Poot's view [3, p.206] to regional competitiveness results from a definition of competition of regions, when he mentions, that „territorial competitiveness is a measure of a territory's potential to achieve sustainable growth rates in the standard of living of its constituents.“

Similarly Cooke [9, p. 154] defines competitiveness, inclining to a definition according Storper, if he states that competitiveness „is defined as capability of a sub-national economy to attract and maintain firms with stable or rising markets shares in an activity, while maintaining stable or increasing standards of living for those who participate in it“.

E. Farkašová [10, p. 80] states that competitiveness is an ability of economic subjects (companies, regions and countries) to penetrate with products and services to world markets and to gain an advantages from this exchange. This concept is compatible with state control of new-type economics, which has began to start along with globalization deepening.

According to Porter [7] is the most intuitive definition of competitiveness a country's share of world markets for its products. In this case of defining of competitiveness it should apply that one country or one region is making money at the expense of the other. Since we have shown that Porter does not go along with this idea, his definition of competitiveness is different. Porter insists that competitiveness means actually productivity. In his further work with Ch. Keteles [11] UK Competitiveness: Moving to the Next Stage he insists that competitiveness of a nation, country, region has its source in a nation's or region's prosperity. The prosperity of a nation is put by a living standard, which is determined by economics productivity, „measured by the value of goods and services produced per unit of the nation's human, capital and natural resources. Then, competitiveness is measured by productivity. Productivity allows a nation to support high wages, a strong currency and attractive returns to capital, and with them a high standard of living“.

Competitiveness is defined similarly also by the EC [11, p.7]: „Competitiveness is understood to mean high and rising standards of living of a nation with the lowest possible level of involuntary unemployment, on a sustainable basis“ and subsequently it offers a widely accepted definition of competitiveness as the ability of an economy to provide its population with high and rising standards of living and a high level of employment for all those willing to work on a sustainable basis. The central ingredient of competitiveness is productivity growth. Raising productivity growth in a sustainable manner and increasing the rate of employment over the medium term constitute crucial objectives of the Lisbon strategy. However, at the same time it is holding true that competitiveness of regions and competitiveness of companies are interdependent conceptions. [9].

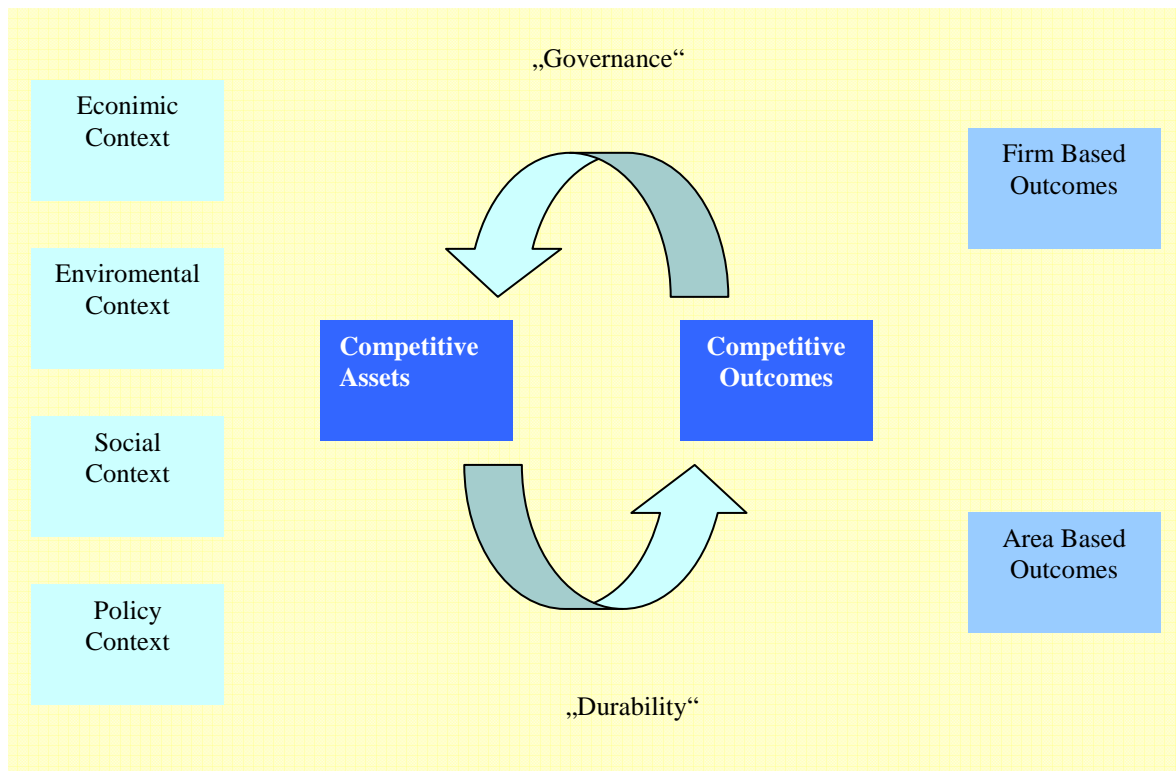
### **Sources and presumptions of competitiveness**

Competitiveness is given, on the one hand, by indicators determining ability of region to compete with other regions (drivers) and on the other side, by result, which regional competitiveness has brought (outcomes). On the basis of it we distinguish between works dealing by competitiveness the studies analyzing regional competitiveness as a cumulative outcome of factors and the studies dealing by drivers of competitiveness.

Drivers are all those determinatenesses and presumptions of regions, which create an equipment of a region consisting predominantly of infrastructure facilities, safety, technical characteristics of region, natural sources, level and scope of services, number of companies, qualifiedness and number of labors, number and level of education institution, quality of public administration, historical framework of region. Outcomes are consequences and results of competitiveness and it is possible to express and measure them by regional indicators of economic development as regional GDP per capita, unemployment rate, average wage and its comparison with national level, influx of direct foreign investments.

For the needs of a determination of regional competitiveness we consider to be suitable to execute a combination of both of measurements, outcomes as well as drivers. The same standpoint is presented by E. Farkašová [10, p. 81] insisting that it is optimal to execute a measuring of regional competitiveness by both the ways and on the basis of analysis of results obtained in this way, the causes of possible low competitiveness are identified. Those causes can have a dual nature, there are insufficient sources or their insufficient utilization.

A combination of drivers and outcomes of region we can record by Assets-Outcomes model. It is possible to see the indicators of competitiveness as 4 contexts: economic context, environmental context, social context, policy context. Outcomes are divided into firm-based and area-based outcomes. The result of competitiveness should be, according to innovative approach of Deas and Giordano increased economic success for the region, higher employment levels, jobs growth, a greater number of new businesses, and increased GDP per capita, increasing living standards for those who live within the region. [12, p. 193-194]



Source: [12, p. 194]

The summary of drivers determining competitiveness of particular countries and regions is varied. In 1999 UK government was one of the first EU government, which put competitiveness at the centre of its economic policy and published UK Competitiveness Indicators selected with the aim to have strong relationship with competitiveness and at the same time to be main drivers of productivity. All the indicators were arranged under five productivity drivers: investment, innovation, skills, enterprise and competitive markets. [13]

The presumptions of competitiveness of region depend on a fact in which segment such competing is executed, because the region can have good presumptions for living conditions of population, but it need not be attractive one for companies, what can mean in general perception that there is low competitiveness. By this reason, it is needed to understand competitiveness comprehensively, not only from the point of view of particular segments.

### Factors – what makes the region more or less competitive?

Defining the factors determining regional competitiveness we proceed from several authors. According to Porter [7] the sources of competitiveness are 3 types of competitive advantages (stages of competitive development) classifying countries as it follows:



Source: [7, p.34]

Factor-driven regions in this way compete by low costs, thus cheap production factors. Investment-driven economies compete by advantages from the economies of scale increase and productivity improves. The advantage consists in improvement of efficiency. In innovation-driven economies new technologies are produced mainly tied to producing innovative products and services. The success depends on innovation. In connection to this classification of factors of regional competitiveness, S.Mueller and M.Kornmeier [24] in their study about main mistakes of competitiveness pointed out the fact that a focus to low costs as a competitive advantage, or a factor which influences regional competitiveness, is not suitable. For example, reduction of price of production factor „work“ results in higher competitiveness in the given period of time, but from medium- or long-term point of view it implies a decrease of regional quality. At the same time, they pointed out the fact that regional competitiveness depends on many so-called soft factors such as cultural openness, legal system, focus of region to future. Similar also Harmes-Liedtke [24, p. 10] describes the situations, when the competition between territories does not always produce positive results. There is a static price competition, in which the governments of different territories attempt to attract investors through lower salaries, or with higher subsidies. This competition leads to produce the winners and losers and has negative influences on the results in labour and environmental standards

According to P. Kresl [24, p. 213] there are 2 approaches of planning the enhancement of the competitiveness of a region. The first is quantitative and comparative and the second is qualitative and subjective and it is focused to concrete features of the region. The quantitative approach insists that regional or urban competitiveness is a function of three variables, which could be considered the indicators of competitiveness: growth over the period of years, manufacturing value added, business services and retail sales. Manufacturing value added is quick indicator of growth of investments into human and fixed capital, the gain of which has the positive influence to competitiveness. The quantitative approach has the basic advantage, those indicators, or variables enable the mutual comparison of regions.

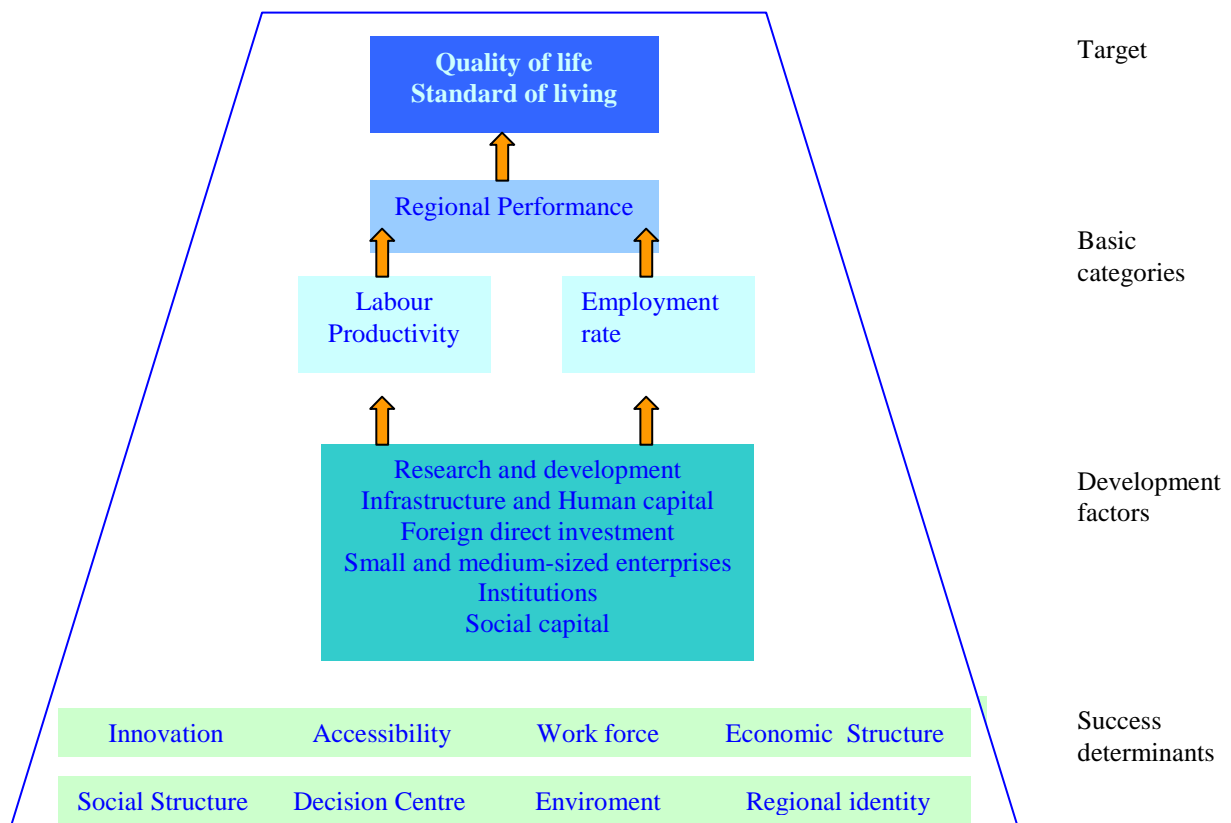
According to P.Cooke, it is possible to compare regions on various levels by competitiveness index, which includes a link between macroeconomic performance innovative business behaviour. Competitiveness index reflects the model consisting of 3 key input factors determining region output [24, p. 155-156]

- business density (firms per capita)
- number of knowledge-based businesses (proportions of all businesses)
- overall economic participation (economic activity rates)

Regional and national competitiveness is monitored by defined factors and regional ranking by many international organizations and research institutes. Famous are the publication of World Economic Forum „Global Competitiveness Report“ and as well as The world Competitiveness Yearbook, which is issued by Institute for Management Development in Switzerland. Until 1996 the WEF and the IMD published a common index, afterwards the two organizations have modified their methodology independently and published separate reports on competitiveness [20].

The regional factors we can define also by the pyramidal model of regional competitiveness, which seeks to provide a systematic account to describe the basic aspects of improved competitiveness, where the target of the competitiveness is the quality of life standard measured by regional product, labour productivity and employment rate. [20, p.4]:

The pyramidal model of regional competitiveness



Source: [20, p.4]

According to our opinion the indicators, as well as results of competitiveness may be identified by „competitiveness factors“ term, which, in general, is divided into static and dynamic ones or traditional and acquired ones. Static factors are the source of static competitive advantages of region and they come out from conditions given to the region by its nature, they are constant, such as region position, natural wealth, and history. Dynamic factors are the source of dynamic competitive advantages of region; they are not connected with the concrete region as a result of its geographical relevancy. As E. Farkašová insists, those factors may be influenced from the part of companies, as well as from the part of regional and state institutions.

It is possible to anticipate a debate, whether competitiveness results can be at the same time its factors and whether only drivers are to be classified as the factors. We suppose that the results of regional competitiveness themselves have influence to its development; productivity and therefore we consider them a factor and driver at the same time.

The interesting approach is a definition of factors of regional competitiveness as a sum of urban competitiveness = economic determinants + strategic determinants, where the economic determinants = factors of production + location + infrastructure + economic structure + urban amenities; strategic determinants = governmental effectiveness + urban strategy + public-privat sector cooperation + institutional flexibility [17, p.8].

Research company Ecorys Nei has developed benchmarking method [28] of quality measuring of regional investment climate. On the basis of their study we can state 7 basic factors determining competitiveness: Clusters, Demography, migration and place, Enterprise

milieu and networks, Governance and institutional capacity, Industrial structure, Innovation – Regional Innovation Systems, Ownership. For a unification of main factors of regional competitiveness was used a model of „regional competitiveness hat“, created from the regional outcomes, outputs, throughputs and regional competitiveness factors.

In the studies concentrated on regional competitiveness following factors is specified group of factors, which we also think are the most important for the competitiveness of a region:

with the most attention:

- industrial structure
- innovation
- education and universities
- clusters
- demography
- factors of localization
- local policy and government quality
- entrepreneurial environment and inter-firm networks
- foreign direct investments

### 3 Conclusion

On the basis of factors analysis influencing regional competitiveness, we insist that competitiveness is governable variable consisting of many elements, which each of them can be used for the benefit of competitiveness growth. Rate of influence to factor depends of a fact whether there is a static or dynamic regional factor. Even if theory insists that regions, towns and nations do not compete each other, we think that regions are competitors in certain spheres and then they use a rate of political, economic and social influence to growth of regional drivers and outcomes. At the same time we think, that regions competes each other by their companies and other participants in the region. Porter [7] insists that “almost everything matters for competitiveness. The schools matter, the roads matter, the financial markets matter, customer sophistication matters, among many other aspects of a nation’s circumstances, many of which are deeply rooted in a nation’s institutions, people, and culture. This makes improving competitiveness a special challenge, because there is no single policy or grand step that can create competitiveness, only many improvements in individual areas. Improving competitiveness is a marathon, not a sprint. How to sustain momentum in competitiveness improvements over time is among the greatest challenges for the regions.”

### Acknowledgements

The text is part of project VEGA 1/4639/07 “Role and status of universities in creation of regional networks as an assumption for regional development” (Úloha a postavenie univerzít pri budovaní regionálnych sietí ako predpokladu regionálneho rozvoja).

### References

- [1.] SAMSON, Š. –KOLVEKOVÁ, G.: Vývoj rozdielov v regiónoch SR. In: Národná a regionálna ekonomika VI. Herľany, 11.-13. október 2006. s. 330-338. ISBN: 80-8073-721-5



- 
- [2.] European Competitiveness Report 2003, A5 422 DT competitiveness report 2003. Brussels, 12.11.2003
  - [3.] POOT, J.: Reflections on Local and Economy- Wide Effects of Territorial Competition. In: BATEY, P. – FRIEDRICH, P.: Regional Competition. Springer 2000, ISBN 3540675485
  - [4.] KRUGMAN, P.: Competitiveness- A Dangerous Obsession. In: Foreign Affairs, Issue: March/April 1994, Vol. 73, N. 2
  - [5.] KURTZMAN, J.: An Interview with Paul Krugman. 1.10.1998, <http://www.strategy-business.com/press/16635507/13652?tid=230&pg=all>
  - [6.] MASKELL, P. – ESKELINEN, H. ET ALL: Competitiveness, Localised Learning and Regional Development: Specialisation and Prosperity in Small Open Economies. London : Routledge, 1998.
  - [7.] PORTER, E.M.: Building the Microeconomic Foundations of Prosperity: Findings from the Business Competitiveness Index. [http://www.weforum.org/pdf/Gcr/GCR\\_2003\\_2004/BCI\\_Chapter.pdf](http://www.weforum.org/pdf/Gcr/GCR_2003_2004/BCI_Chapter.pdf)
  - [8.] KERN, J.: Je konkurencieschopnost regionu podmínkou jejich efektivního rozvoje? In: „New members – New Challenges for the European Regional Development Policy “. 27.-30.9.2005. Nový Smokovec, s. 171-174. ISBN 80-225-2060-8
  - [9.] COOKE, P.: Competitiveness as cohesion: Social capital and the knowledge economy. In: BODDY, M. – PARKINSON, M.: City Matters: Competitiveness, Cohesion and Urban Governance. s. 153 – 170.
  - [10.] FARKAŠOVÁ, E.: Meranie konkurencieschopnosti na úrovni subnacionálnych regiónov. In: Národná a regionálna ekonomika VI. Herľany, 11.-13. október 2006. s. 80-84. ISBN: 80-8073-721-5
  - [11.] PORTER, E.M. –KETELS, CH.: UK Competitiveness: Moving to the Next Stage. DTI Economics Paper. May 2003
  - [12.] DEAS, I. – GIORDANO, B.: Locating the competitive city in England. In: BEGG, I. (ed) Urban Competitiveness: Policies for Dynamic Cities, Bristol: Policy Press. 2002
  - [13.] MARTIN, R.: A Study on the Factors of Regional Competitiveness. A draft final report for The European Commission Directorate-General Regional Policy.
  - [14.] CAMAGNI, R.: On the Concept of Territorial Competitiveness: Sound or Misleading?, In: Urban Studies, vol. 39, no.13
  - [15.] KRESL, P.: The Enhancement of urban economic competitiveness: The case of Montreal. In: BEGG, I. (ed) Urban Competitiveness: Policies for Dynamic Cities, Bristol: Policy Press. 2002, s. 211-232
  - [16.] LUKOVICS, M.: Measuring Territorial Competitiveness: Evidence from Hungarian Local Administrative Units (LAU1) In: Local Governance and Sustainable Development, 47.-th Congress of the European Regional Science Association, Paris, 29.8. – 2.9.2007
  - [17.] What is urban competitiveness? In: Regional Studies Association International Conference: Regions In Focus? 2-5th April 2007

- 
- [18.] The world competitiveness scoreboard. In: Imd World Competitiveness Yearbook 2007, <http://www.imd.ch/research/publications/wcy/upload/scoreboard.pdf>
- [19.] Competitiveness and Regions: What is the regional impact of a competitive city? In: Regional Studies Association International Conference: Regions In Focus? 2-5th April 2007
- [20.] CONSTANTIN, D. L.: Recent Advances in Territorial Competition and Competitiveness Analysis. In: Romanian Journal of European Affairs, Available at SSRN: <http://ssrn.com/abstract=963286>
- [21.] HARMES-LIEDTKE, U.: Benchmarking Territorial Competitiveness. mesopartner working paper 09 / 2007. Buenos Aires 2007. ISSN 1613-298X, [http://www.mesopartner.com/publications/mp-wp9\\_Benchmarking.pdf](http://www.mesopartner.com/publications/mp-wp9_Benchmarking.pdf)
- [22.] KETELS, CH.: UK competitiveness – old labour market institutions, new collaborative roles, march 2006, Productive Partnerships: the role of employment relations in growing the UK economy
- [23.] MÜLLER, S. – KORNMEIER, M.: Globalisierung als Herausforderung für den Standort Deutschland. In: Aus Politik und Zeitgeschichte, B 9/2001
- [24.] MÜLLER, S. – KORNMEIER, M.: Internationale Wettbewerbsfähigkeit: Irrungen und Wirrungen der Standort-Diskussion, München 2000.
- [25.] SOTARAUTA, M. – LINNAMAA, R.: Urban Competitiveness and Management of Urban Policy Networks: Some Reflections from Tampere and Oulu. In: Cities at the Millenium, 17.12. – 19.12.1998. London.
- [26.] URBANČÍKOVÁ, N. ET ALL: Integrovaná štúdia podmienok ďalšieho rozvoja regiónu Slovensko – Východ. 2006, Karpatský rozvojový inštitút. ISBN: 80-969559-7-7
- [27.] WHITE, S.: Regional Competitiveness and State of the Regions May 2007, URN 07/259X, <http://www.dtistats.net/sd/rci/>
- [28.] ECORYS-NEI: International Benchmark of the Regional Investment Climate in Northwestern Europe, 2001