INDICATORS OF TERRITORIAL COMPETITIVENESS

Csilla Filó

Université de Pécs

Indicators of territorial competitiveness

INTRODUCE

The 21st century sees changes in modern society, social structure, territorial policy, public administration and other fields, generated by the European Union, which have a significant impact on the functioning and efficiency of society. For real competences to find their appropriate places and levels, a mature society are required as well as the investigation and improvement of the maturity of territorial levels prior to implementing any measures. To be able to induce these improvements, we first need to define the territorial unit where the process is to be

To be able to induce these improvements, we first need to define the territorial unit where the process is to be launched.

The broadest definition: A territorial unit is a (socio) geographical integration marked by a huge internal cohesion, a fundamental entity of our days. It is a socio-economic geographical unit based on the close cooperation and shared interests of its constituting parts, which cannot, however, always be defined by geographical boundaries.

The resulting definition of the improvable unit (region): A region is the functional connection and integration of geographically close urban areas, agglomerations, settlement units, and infrastructural networks characterized by the gradually growing importance of neighbourhood contacts. The basis of the creation of a region is the territorial blending of society and economy, and an awareness of close interrelatedness between local communities, based on historical grounds.

To reveal the development potentials of a given territory, we need to determine the measurement units relating to the processes we are observing. This unit cannot be but the competitiveness of each area.

THE REGIONAL COMPETITIVENESS

To approach the notion of competitiveness from a regional perspective has become productive in many ways recently. On the one hand, as a consequence of developing in a globalized environment, it has become necessary for theories relating to the region to introduce an umbrella term, and on the other hand, the previous use of the term on the macro- and micro-level lacked the intermediary level that, as a localised level, could refer to an economic field for developments and investments.

Competitiveness is often viewed as a key indicator of the success or failure of policy. The concept of competitiveness, however, while relatively clear when applied to enterprises, is more difficult to define and measure when applied to regions or countries. An industrial region, for example, is not directly competing against a predominantly agricultural region or a financial centre, so the measurement of its relative competitiveness is problematic. Moreover, the term itself tends to convey the impression of a win/lose situation, in which regions can improve their position only at the expense of others, whereas, in practice, there are mutual gains to be achieved from individual regions becoming more competitive.

UNDERSTANDING REGIONAL COMPETITIVENESS IN THE EU

The concept of competitiveness, as seen in the EU, could be summarised as "high and rising -standards of living and high rates of employment on sustainable basis".



The traditional measure of competitiveness/standards of living is generally calculated by the GDP per head, despite the fact that some other indicators should be defined in order to integrate the social, environmental, health and well-being dimensions. GDP per head can be broken into two main components: employment rate (proportion of working age population in work) and productivity (GDP per person employed).-Productivity is considered to be a good indicator of competitiveness following the assumption that productivity growth will increase competitiveness, which will in turn favour a higher growth of GDP. The growth of GDP will boost employment. Employment rate and productivity are closely linked to one another but they should be considered separately. Indeed, high level of one does not necessarily go with a high level of the other. For example, one can remind the period of "jobless growth" which struck the EU in the-80's, and which was characterised by high gains in productivity and poor gains in employment creation. Nevertheless, achievement of high employment growth and high productivity are not necessarily in conflict with one another. Indeed, if an economy growth above a given threshold- (2% for the EU) and this level is maintained over the long-term, there will always be net creation of employment. Therefore, we can say that in the long-term, there is always a positive relationship between productivity and employment creation. Lagging regions in Europe have always productivity below average while employment is most of the time (but not always) less important. Actually, in the EU, there are two types of lagging regions:

- regions with employment rates similar to the average but with lower productivity;
- regions lagging in both productivity and employment.

The challenge for lagging regions is to increase/boost productivity by a mix policy without having adverse effect on employment. The policy of the EU regarding competitiveness is to practice a non-price competitiveness in order to keep and improve the leaving standards, the social and the moral values/models of its societies as a whole. Consequently, the EU places emphasis on structural factors underlying competitiveness which determine the long-term growth, in particular research and innovation, information technology and human capital.

This commitment was confirmed by the ultimate objective of the Lisbon European Council, which has stated that "the EU becomes the most competitive and dynamic knowledge-based economy in the world over the decade, capable of sustainable economic growth with more and better jobs and greater social cohesion". There is a clear relationship between innovation, human capital and information technology when it comes to competitiveness. Indeed, the capacity to innovate is perceived as the best answer to global competition, the needs to adapt to technological changes and to constantly produce new products, which are elements characterizing the post-Fordist production system. The capacity to constantly innovate and to absorb innovations is directly linked to the level of education of the population. Information technology is a key element when it comes to knowledge development and policy. In summary, in the EU, developing regional competitiveness depends on modernizing and diversifying the productive structure (by developing knowledge-based economic activities and innovation) once a sufficient endowment of physical infrastructure and human capital is attained. This has to be achieved respecting a horizontal condition, which consists in achieving a sustainable development in environmental terms.

According to the Sixth Periodic Report on the Social and Economic Situation and Development of Regions in the European Union, the main determinants influencing the competitiveness of regions are the following:

- research and technological development
- small and medium-sized enterprises
- direct foreign capital investments
- infrastructure and human capital
- institutions and social capital

The sixth regional report also includes the principal factors that usually characterize successful regions, namely, high rate of employment in business services and in the processing industry, the extent of innovative activities, favourable conditions of regional accessibility, skills of the workforce and a high proportion of university/college graduates.

- the capacity for economic structural change, especially the emergence of value-adding industries with multiplicative effect
- high proportion of value-generating service sector (business services, research and development, higher education, culture)
- typically knowledge-based production
- strong innovative skills
- the decision-making takes place in the successful region
- a strong and thriving middle class



- valuable settlement environment, an urban policy of high standards, and the availability of good quality public utilities and municipal services
- successful conflict management
- significant external (international) relations, integration into the system of towns and relations of an international region
- increasing income and employment

Measuring regional competitiveness has been traced back to four related economic categories: income generated in the region, labour productivity, employment rate and the openness. The notion of competitiveness obtained in this way cannot be used, however, to identify factors responsible for regional competitiveness or areas which are to be strengthened or developed by regional development policies and programmes for improved competitiveness. The *pyramidal model of regional competitiveness* seeks to provide a systematic account of these means and to describe the basic aspects of improved competitiveness (Gardiner-Martin-Tyler 2004, Lengyel 2000, 2004).

Factors influencing regional competitiveness can be divided into two groups of *direct* and *indirect* components. Of particular importance are programming factors with a direct and short-term influence on economic output, profitability, labour productivity and employment rate. But social, economic, environmental and cultural processes and parameters, the so-called 'success determinants', with an indirect, long-term impact on competitiveness are also to be taken into account (Jensen-Butler 1996).

Three levels can be distinguished with regard to the objectives of regional development programming and the various characteristics and factors influencing competitiveness:

- Basic categories of regional competitiveness (ex post indicators; revealed competitiveness): these categories measure competitiveness and include income, labour productivity, employment and openness.
- Development (programming) factors of regional competitiveness (ex ante factors; improving competitiveness): factors with an immediate impact on basic categories. These can be used to improve regional competitiveness by means of institutions in short-term programming periods.
- Success determinants of regional competitiveness (social and environmental conditions; sources of
 competitiveness): determinants with an indirect impact on basic categories and development
 (programming) factors. These determinants take shape over a longer period of time and their
 significance reaches beyond economic policymaking.

When characteristics determining competitiveness are placed on a chart one obtains the 'pyramidal model' of regional competitiveness (*Figure*): the components of long-term success are to be found in the base, the middle layer is constituted by the development (programming) factors, the basic categories included in the standard definition of revealed competitiveness are located one level higher, while the standard of living and welfare of the region's population, the ultimate objective, forms the peak of the pyramid. Competitiveness depends on a wide range of factors and conditions. The *five programming factors* (priorities of the regional development strategy) of pyramidal model underlying competitiveness included in the Sixth Periodic Regional Report of the EU (EC 1999), however, exceptionally significant (Lengyel 2003, 2004). These development factors shape, to varying extent, economic output, labour productivity as well as employment.

Improving individual programming factors forms the object of regional policies. They are likely to improve the competitiveness of regions directly and in the short run by means of regional partners, local institutions.

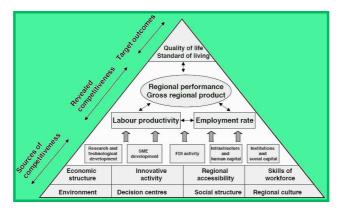


Figure 1: *The pyramid model of regional competitiveness* (Based on: Lengyel (2003), Begg (1999), EC (1999), Jensen-Butler (1996))



The social and economic factors essential for long-term successfulness form the base of the model, the determining factors are in the middle and the ultimate goal of higher standards of living and better quality of life for the population of the region is at the top.

- *Economic structure*: in successful regions most of the people employed work in business services and the processing industry, which are characterised by high added value, intensive multiplicative effects and great flexibility.
- *Innovation culture*: successful regions are characterised by extensive innovative activities, the effective diffusion of innovation, and a large number of patents. It should manifest itself not only in research and development institutions and universities; adequate business capacities and well-prepared, innovative small and medium-sized enterprises are equally important.
- Regional accessibility: successful regions are easy to access, with convenient transport connections and geographical location. Supplemented by the transport
- and communications infrastructure, these form an integral whole.
- *Skills of workforce*: in successful regions the proportion of qualified labour within the workforce is relatively high, which obviously requires an effective education system focusing on the actual demands of the labour market.
- *Social structure*: in successful regions a strong and thriving middle class emerges, which helps the region develop by virtue of its discerning demand and higher income.
- Centres of decision: successful regions are the regional bases of companies, they are units that undertake important activities of the enterprises operating there, and have decision-making competencies. New, innovative, strategic units are typically developed in the region or town where the company headquarters are found.
- Quality of the environment: successful regions possess high-standard settlement environment (public safety, pleasing urban architecture, good quality accommodation, efficient public transport etc.) and healthy natural environment.
- Social cohesion of the region: successful regions have an ability to manage conflicts, no matter whether
 they arise from economic structural change, dynamic economic growth or from inequalities among
 areas or communities within the region. The municipalities aim at cooperation and regional identity and
 local pride become stronger.

The indirect factors can be divided into two groups, one including those that determine short-term economic output (economic structure, innovation culture, regional accessibility, skills of work force) and the other including those that show their influence only in the long run (social structure, centres of decision, quality of environment, social cohesion of the region).

Following a different classification, we can put the indirect factors of the pyramid into five groups:

- a group of socio-economic activity (which includes the factors best expressing the economy and income potential of town): economic aspect, regional accessibility
- a group of functional and organisational innovation: innovation culture,
- a group referring to employment, intellectual resources and skills of the work force: skills of work force
 - a group relating to demographic factors and to the traditional and new functions of centres: centres of decision, social structure, social cohesion,
- and treating quality of environment as a separate category, as it does not fit into any of the previous groups clearly

Regional competition can be seen as a process in which certain groups try to influence the development of regional or local economy through local policies, in explicit or often implicit ways, in competition with other regions. Consequently, competitiveness of a region is made up of several components, which can be described with various indicators.

CONCEPT OF TERRITORIAL COMPETITIVENESS

This concept of competitiveness aims to achieve a local specialization that enables different territories to cooperate in a context of general development.

Territorial competitiveness means:

taking the area's resources into account in a bid for overall coherence;



- involving different players and institutions;
- integrating business sectors into an innovation dynamic;
- cooperating with other areas and linking up with regional, national and European policies as well as with the global context.

Our concept of territorial competitiveness has gained ground in academic, policy and practitioner circles. In particular, regional competitiveness has generated a large literature. These are described formerly. But the territorial competitiveness differs to regional competitiveness. This difference offers to approach. According to dynamism and spatial analyzing the territorial determination oversteps on the regional competitiveness. The base of regional competitiveness is the incoming and the product contrary with territorial competitiveness where the base is the innovate process in sustainable development.

Sum up, the territorial competitiveness diverges from regional competitiveness so that applies the methods of analysing but it considers in process the information concern this information will be jointed to challenge sustainable development.

Territorial competitiveness is an integrated and proactive approach to shaping the future of territories, regions and larger geographies – to some degree it can also be referred to as spatial planning. It goes beyond traditional regional policy as it brings together economic, social and environment opportunities and concerns as well as other factors which influence where activities takes place, how different places function and are connected, and what conditions are offered for living and doing business.

Territorial competitiveness strategies can help exploring potentials for economic growth and jobs and at the same time support an enhanced quality of life by helping to meet the challenge of sustainable development.

CHALLENGE OF TERRITORIAL COMPETITIVENESS IN SUSTAINABLE DEVELOPMENT

Sustainable development is a socio-ecological process characterized by the fulfillment of human needs while maintaining the quality of the natural environment indefinitely. The linkage between environment and development was globally recognized in 1980, when the International Union for the Conservation of Nature published the World Conservation Strategy and used the term "sustainable development." The concept came into general usage following publication of the 1987 report of the Brundtland Commission — formally, the World Commission on Environment and Development. Set up by the United Nations General Assembly, the Brundtland Commission coined what was to become the most often-quoted definition of sustainable development as development that "meets the needs of the present generation without compromising the ability of future generations to meet their own needs." Although commendable, this definition is not operational and has created much antagonism and cognitive dissonance.

The field of sustainable development can be conceptually broken into three constituent parts: environmental sustainability, economic sustainability and social-political sustainability.

Sustainable development policies encompass three general policy areas: economic, environmental and social.

CONCLUSION

The competitiveness territories have the high rate of qualify labour in the group of able to works. The education system is efficient because on the one part it fits for the creative and innovative activities the younger, on the other hand it follows the demand of labour market in flexibility. The successful and competitiveness regions have the level of knowledge base level and the labour culture, in additional the labour forces able to adapt plainly to changes (in trainings and courses the active labour force retrain able), ambitious with their environment.

In successful and competitiveness regions the new economic structure the knowledge base economical activities and the recovery of economic services enhance the social cohesion. Unschooleds are crowded out from labour market and the local society polarizes. The active gentility animates the regional development with utilize of higher incoming.

To sum up we can enhance the territorial development process with complex human resource survey. We can open up the social disadvantages in additional can find solution to this problem if we can survey the complex problems.

REFERENCES



BADDELEY, M., MARTIN, R.L. and TYLER, P. (1998) European regional unemployment disparities: Convergence or persistence? European Urban and Regional Studies, 5,3, pp.195-215.

CAMAGNI, R. (2002): On the Concept of Territorial Competitiveness: Sound or Misleading? Urban Studies, 13, pp. 2395-2411.

EUROPEAN COMMISSION (2004): A new partnership for cohesion - Third Report on Economic and Social Cohesion. European Commission, Brussels.

EUROPEAN COMMISSION (1999) Sixth Periodic Report on the Social and Economic

EVANS, P. (2000) Income dynamics in countries and regions, in Hess, G.D. and van Wincoop, E. (Eds) Intranational Macro-economics, Cambridge: Cambridge University Press, pp. 131-155.

FUJITA, M. and THISSE, J-F. (2002) Economics of Agglomeration: Cities, Industrial Location and Regional Growth, Cambridge: Cambridge University Press.

FUJITA, M., KRUGMAN, P. and VENABLES, A. (1999) The Spatial Economy: Cities, Regions and International Trade, Cambridge, Mass: MIT Press.

GARDINER, B., - MARTIN, R., - TYLER, P. (2004): Competitiveness, Productivity and Economic Growth across the European Regions. University of Cambridge, Cambridge.

JENSEN-BUTLER, C, (1996) Competition between cities, Urban performance and the role of urban policy: A Theoretical Framework, in Jensen-Butler, C., Schacher, A. and Weesep, J. van (Eds) European Cities in Competition, Aldershot: Avebury, pp. 3-42.

KOVÁCS P. – PETRES T. – TÓTH L. (2005): A New Measure of Multicollinearity in Linear Regression Models. International Statistical Review (ISR), Volume 73 Number 3, International Statistical Institute, Voorburg, The Netherlands, pp 405-412. KOVÁCS, P. – LUKOVICS, M.: Classifying Hungarian Sub-regions by their competitiveness 12

KRUGMAN, P. (1994) Competitiveness: A Dangerous Obsession, Foreign Affairs, 73, 2, pp. 28-44.

KRUGMAN, P. and VENABLES, A. (1996) Integration, specialisation and adjustment, European Economic Review, 40, pp. 959–967.

LENGYEL I. (2004): The Pyramid Model: Enhancing Regional Competitiveness in Hungary. Acta Oeconomica, Vol. 54 (3) pp. 323-342.

LENGYEL, I. (2000) A regionalis versenykepessegrol (Regional Competitiveness). Kozgazdasagi Szemle, 47, pp. 962-987.

LENGYEL, I. (2005): On the interpretation of territorial competition and competitiveness. In HORVÁTH, GY. (ed): Competitiveness of the Hungarian Regions and Places in the European Economic Space. Centre for Regional Studies, Hungarian Academy of Sciences, Pécs, p. 37. (forthcoming)

OECD (1999a) The OECD Territorial Reviews: a conceptual framework. Territorial Development Service, DTPC, November.

PORTER, M. E. – SCHWAB K. (2003): Global Competitiveness Report 2002-2003. World Economic Forum, Geneva, Switzerland.

PORTER, M. E. (2000) Location, competition and economic development: local clusters in the global economy, Economic Development Quarterly, 14, 1, pp. 15-31.

PORTER, M. E. (2003) The economic performance of regions, Regional Studies, 37, 6/7, pp. 549-578.

