DANUBE REGION STRATEGY - ARGUMENTS FOR A TERRITORIAL CAPITAL BASED MULTILEVEL APPROACH

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During the last months the discussion on a strategy for the Danube Region as a new approach for a European macro-region has been intensified, predominantly within the area of Central and South-Eastern Europe. Evidently the territory of the Danube Region is characterized by a divergent group of countries concerning the process of integration and the preconditions in geographic, economic, cultural and socio-demographic terms. Besides, the region’s spatial development shows divergent trends causing increasing regional disparities. Therefore, territorial cohesion - understood as intensified functional interrelations and strategic cooperation - is jeopardized in manifold ways.

Hence, the main objective of this paper is to discuss the basic features of a strategy aiming at strengthening the polycentric development on different spatial levels. We start by assuming that the development of every city (as an element of the urban system) depends on its territorial capital and relevant assets providing location based advantages regarding its competitiveness on different spatial levels. Therefore we uncover what we understand as assets driving urban development. In this context the meaning of polycentric development and the importance of polycentric structures as an asset of a city’s territorial capital is being revealed.

Based on these conceptual considerations we examine some relevant features of the urban polycentric system in the Danube region and finally argue that a multilevel and evidence based approach should be evolved facing the differences in the preconditions and already existing assets of spatial development.

INTRODUCTION

Based on an initiative of Romania and Austria the discussion about forming a Danube Region started some years ago, first on bilateral, then on European level. Over the last months the talk regarding a ‘Strategy for the Danube Region’ has been intensified due to an invitation of the European Council to the European Commission to prepare an EU Strategy for the Danube Region (see http://ec.europa.eu/regional_policy/cooperation/danube/documents/council_conclusions.pdf). The strategy - expected to be presented by the EC before the end of 2010 - should consider the following aspects: meeting specific challenges facing in particular regions, covering several policy areas and interlinking them and concentrating on main issues which concern the entire macro-region.

But countries within this large region are meeting new challenges like an increasing competitive situation through the EU-isation of national policy and through the process of globalization (Hamilton, et al., 2005). And the development on urban and regional level is characterized by even stronger divergent processes in economic, social and environmental terms (EC, 2001; or 2007). Despite the efforts of regional policy and funding over the last years territorial cohesion - in terms of functional interrelations and strategic cooperative initiatives - is still one of the most important challenges.

In front of these different conditions and divergent trends the paper has the objective to discuss the features of a strategy aiming at strengthening polycentric development on different spatial levels as a precondition for territorial cohesion.

In order to elaborate these features we examine some relevant characteristics of the urban system due to their importance as the basis for polycentric development in the Danube Region. Based on this empirical evidence we elaborate the most important features of a multilevel and evidence based approach facing the differences in the spatial preconditions and already existing assets of development. We argue that the development of every city (as an element of the urban system) depends on its territorial capital and relevant assets providing location based advantages regarding its competitiveness on the interregional or European level. Finally we state that the development of the urban system should show polycentric features as a precondition and the outcome of the development of every city and at the same time for territorial cohesion in a
normative sense. Correspondingly, we discuss the mutual relation between urban development (cities with different sizes) and polycentric development on different spatial levels in a cross-border perspective. Based on this discussion the meaning of competition and in particular of cooperation as basic principles of strategic efforts are being described and some specific features regarding a polycentric strategy are being elaborated in a multilevel perspective.

BASIC FEATURES OF THE URBAN SYSTEM IN THE DANUBE REGION

The Danube Region shows some important characteristics:

• It contains an area of about 800,000 km² which in huge parts is some sort of “hinterland” of the river.

• 115 million citizens live in this area - a population strongly characterized by different identities in terms of language, traditions and religion.

• 14 countries (not all of them neighboring the river) are participating in the initiative. These countries experienced different processes in political, economic and socio-demographic terms and show different statuses of integration to the EU (see http://www.bka.gv.at/site/cob__36596/currentpage__0/6726/default.aspx).

• Very obvious, the Danube does not have the same meaning in economic and environmental terms or as a border across these countries. Thus, discussing the spatial development of such a large region the urban system seems to be more important than the fluvial topography. Accordingly, two important aspects of spatial development should be considered: the respective urban system in regard to the territory of every country and of the whole region and the borders of nations in duality to potential cross-border polycentric relations.

Examining the urban system

The elaboration of characteristics of the urban system is important because it constitutes the basic structure for future demographic and economic development and potential driving forces for spatially differentiated trends of urbanization and settlement growth. The differences of urban systems of the respective territory are described as follows.

City sizes

The first approach tries to give an overview of the cities within the territory of the Danube region to identify the most important agglomerations and to establish a basis for further analysis within the Danube Region territory.

The result shows what was obvious to those already familiar with the region. No city within the territory has a population higher than 2 million people. Instead there are 7 cities with a population between 1 and 2 million people of which 6 are national capitals. This leads to the assumption that - at least on a national level - the Danube Region is characterized by a strongly centralized urban system.

To get a more detailed view on the urban system the degree of urbanization is then being examined. To find out about how national populations of the Danube Region countries are distributed between cities on a national level the Rank-Size-Distribution is afterwards being analyzed. This lets us conclude on potential migration flows as well as on the preconditions for polycentric development.

Degree of urbanization

In comparison of countries this indicator gives first evidence about the potential of rural-urban migration as a driving factor of future trends of urbanization. The empirical distribution shows differences across different countries and at the same time any empirical distribution can be compared to the theoretically expected rank-size distribution providing normative conclusions regarding a more polycentric system.

Here the degree of urbanization is calculated through a simple division of the population of the biggest cities of a country by the whole national population. To receive results that
better portray the tendency of urbanization in a country only those cities were considered that have at least 1/10th of the population of the largest city of a country. The territories of the countries which are part of the Danube Region show the following results:

These results indicate strong differences in the degree of urbanization and in the number of cities included. Facing this fact we can conclude that the further process of urbanization will vary across all national territories. Territories with a low degree of urbanization will be affected through outmigration and loss of population in rural areas the lower the economic standards will remain in the near future. Potential migration flows are not easy to predict but size, distance and attractiveness of cities as potential destination as well as specific resistance to movement will play a crucial role in the structure of migration flows. The weight of borders plays an important part as well. The stronger barriers are the more migration will take place within the territory leading to urbanization in the own country. The weaker they are and the more integrated territories are the stronger migration flows to cities in other territories might become. In this case European metropolises are likely to become even more predominant as destinations of migration.

**Rank-Size-Distribution of cities within their respective territory**

To get an idea of the current state of the polycentric structure of cities on a national level within the countries of the Danube Region the Rank-Size-Rule is being used. The rule says that the size of any city in a given territory is determined by the size of the largest city and its rank within all cities of the respective territory. This rule in logarithmic form corresponds to a linear functional relation. (Heineberg, 2006, p. 76 ff) The empirical and theoretically expected rank-size-distributions of the territories of all considered countries show the following characteristics.

The results show that three different groups of countries can be distinguished concerning the deviation between empirical city sizes and theoretically expected ones:

1) **Dominant Primate City**

The first group shows a strong primacy of the capital city against the observed distribution of medium- and/or small-sized cities. Austria is one of the countries showing a primacy of its capital city. Other countries belonging to this are Croatia, Moldova and Macedonia to a strong extent as well as Bulgaria and Hungary to a weak extent. In these countries the distribution indicates a non-polycentric structure as a precondition of polycentric development.

2) **Flat Distribution**

The second group shows a flat distribution where medium sized cities show values larger than to be expected. Countries with a city-size-distribution of this type are Bosnia-Herzegovina, Slovakia and partly German cities of Baden-Württemberg and Bavaria. In these countries the city-size-distribution already indicates a polycentric structure as a good precondition for further polycentric development.

3) **Rank-Size-Equal**

This group of countries shows an observed city-size-distribution which corresponds to the theoretically expected values. Countries with a city-size-distribution of this type are Czech Republic, Serbia and Slovenia. In these countries the city-size-distribution indicates an urban system that is undecided regarding a polycentric structure.

To conclude, the analysis of the observed rank-size-distribution indicates from a normative point of view that the urban systems of most of the considered countries are not really balanced or do not show polycentric characteristics. Countries show the less adequate preconditions for polycentric development the more their city-size-distributions indicate a primacy distribution dominated by the size of the capital city.

On the other hand the rank-size-distribution for the whole Danube Region shows a rather interesting result. Here a clear non-primacy distribution can be seen. Medium-sized cities seem to be larger than expected theoretically. This indicates formally a well elaborated polycentric structure in the Danube Region - at least on the level of medium-sized cities. However, there is still the risk that one city will
establish as the most important one according to rank-size-rule if conditions for development are unequal across the metropolises. At the same time it becomes obvious that recently many medium-sized cities constitute a good base for polycentric development. But they are at the same time under an increasingly competitive situation the more integrated the Danube Region becomes.

Combining both information (Rank-Size-Distribution-type and Degree of Urbanization) further conclusions can be made: cities in territories with a low degree of urbanization show high potential immigration from their own hinterland. The risk of migration flows being directed to cities in other countries which show higher attraction increases as barriers between regions of origin and destination disappear and if socioeconomic disparities are still huge. Therefore, the more the Danube Region represents a territory with decreasing barriers the more the risk of population concentration in large metropolitan agglomerations with higher socio-economic standards will increase. Consequently, this development will jeopardize existing urban systems in less developed countries and regions.

**Borders of nations in duality to potential cross-border relations**

Borders of nations predominantly indicate the territorial hegemony in political and administrative terms. But such borders do not necessarily correspond with regions defined by cultural or ethnic criteria or by historic functional and social experiences. Facing the variations in the integration process, cross border situations can be distinguished basically along with Martinez (1994) as follows:

a) Borders strictly separate border regions because of strong political, economic, religious or cultural differences and potential conflicts.

b) Borders separate border regions and guarantee independent spatial development but allow few and strictly controlled relations due to national interests.

c) Borders integrate border regions in a controlled way according to bilateral interests on the national level. Cooperative relations in the economic and social sphere are allowed.

d) Borders integrate border regions in a multifaceted and self-defined way through cross border partnerships and cooperative relations in all spheres according to regional objectives.

However, this classification emphasizes the differences in the dimension of separation – integration in a multidimensional perspective. It basically indicates that borders may have a different meaning on the local, regional and national level for the recent and future integration process in Europe.

Based on this perspective, future development of cities in border regions will strongly differ due to their geographic situation in relation to borders and their meaning as barriers. Hence, we will now discuss the urban system in its geographic distribution focusing in particular on the situation of cities in relation to borders. (see Fig.6) Doing this kind of research a completely different perspective will be discussed in comparison to ESPON 1.1.1 (2005) In these studies polycentricity is analyzed only within national territories. It does not consider any cross-border-situation of groups of cities explicitly. Two aspects are worked out under the aspect of borders:

(1) Large cities or capital cities are regarded as potential metropolises with their potential ‘hinterland’ (defined by an approx. 100km radius). However, this group of cities differs in size. Considering their geographic position it becomes evident that

- … some of these cities like Prague or Budapest figure as potential nodes in a European network which are not close to other cities or border regions.

- … the most integrated triangle of large cities is Stuttgart, Nürnberg and Munich which belong to an integrated territory with characteristics of a polycentric structure.

- … Vienna and Bratislava show rather good preconditions for integration as they are in a distance of less than 100 km, both at the river Danube because the meaning of borders decreases in importance as barrier through the integration process at least since 2005.

- … capital cities of Ljubljana and Zagreb are relative close to each other providing new potentials of metropolitan growth. The meaning...
of borders between both states still decrease with the integration of Croatia into the EU.

• … other metropolises like Belgrade, Sofia, Bukarest and Kisch nau show enhanced potentials if borders will disappear or decrease as barriers. However, these potential metropolitan areas the integration process if ever started is still weak.

Facing this geographic distribution it is obvious that this group of cities experiences different conditions of metropolitan polycentric development.

(2) In general cities are regarded as motors of regional development in a decreasing importance the smaller cities are. Consequently, border regions experience new disadvantages if there are no cities spreading out corresponding positive effects. New peripheries within the Danube region will emerge even if the meaning of borders as barriers is decreasing. However, this risk of new and inner peripheries will increase the stronger barriers remain and the smaller and less dense the groups of cities in border regions are.

Fig. 6 indicates such areas which potentially will become new inner peripheries because of the lack of urban impacts. According to the differences in the integration status regarding European Union and the lack of city influence we may distinguish following types of potentially new peripheries:

(a) New peripheral regions between old and new member states through a clear lack of integration countries: examples are border regions between Hungary and Rumania or Rumania and Bulgaria.

(b) New inner periphery regions between newly integrated countries: examples are border regions between Hungary and Rumania or Rumania and Bulgaria.

(c) Border regions between new members of EU and neighboring non-EU-countries. Examples are border regions between Moldova and Romania or Hungary and Latvia.

(d) New inner periphery regions between non-EU-member states and countries of the Southwest Balkan.

Probably one may distinguish a group (e) describing such border situations where border regions are still in the influence of metropolises but lacking small and medium sized cities. Examples are regions between Slovenia and Carinthia or Slovenia and Croatia.

FEATURES OF A LEARNING BASED MULTILEVEL STRATEGIC APPROACH

Facing the differences in the preconditions and already existing assets of spatial development (urban system, borders) a multilevel and evidence based approach will be elaborated subsequently.

Territorial Capital: its implications for a strategic approach for the macro-region

Facing the strong variation in regional endowment and heterogeneous governance capacities (OECD, 2001) academic attention is directed towards supply related approaches since some years. Such approaches provide an adequate theoretical view on the fact of high differentiation of urban developments in front of globalization and economic restructuring as global phenomenon. In this perspective the term ‘territorial capital’ was introduced by OECD (2001, p. 13) recognizing that "prosperity is increasingly a matter of how well each city, each region, can achieve its potential. It is a supply-side concept. Territory capital refers to the stock of assets which form the basis for endogenous development in each city and region, as well as to the institutions, modes of decision-making and professional skills to make best use of those assets." Accordingly, specific features of territorial capital make the return of certain investments higher than in other regions and generate a higher return for certain kinds of investments than for others (OECD, 2001, p. 15). Evidently, same amount of investments or same external economic demand will lead to different effects on regional and urban development due to its specific ‘territorial capital’.

Territorial capital and assets of urban competitiveness

Starting from this point of supply related view the question “What do we understand by assets driving urban and regional development?” is answered in its basic arguments. For a detailed discussion see Camagni (2008; 2009) or Giffinger et al. (2009)

• Basic endowment and functional related elements are natural features, material and immaterial cultural, technical and social heritage. These are fixed assets as infrastructures and endowment related qualities of distinct places. Basic relational elements are 'untraded' interdependencies (like customs, informal rules, understanding) or specific environments (institutions, rules and practices, common strategies and policies). The second kind of elements becomes very important for competitiveness because they are necessary for the identification and activation of potentials.

• In a more taxonomic perspective, Camagni (2008, p. 123) identifies 9 different goods as elements which describe the character of a city’s territorial capital and he differentiates them into tangible and intangible goods. They are providing respective relative and absolute comparative advantages.

Anyhow, spatial development at any spatial level (urban, regional, metropolitan, national) is finally driven through soft relational factors which in combination activate resources and mobilize perceived potentials and transform them to assets. In this perspective spatial development at any urban and regional level is the outcome or result of the activation of relevant potentials through competitive or
cooperative forms of initiatives.

To conclude, a Danube strategy which is based on the territorial approach has preliminary to foster such governance efforts which try to identify, select and activate endowment related resources and potentials in a strategic way – both in form of competition providing predominantly tangible goods as well as in form of cooperation providing predominantly intangible goods. Thus, the Danube strategy mainly should focus on the different forms of relational capital and in particular encourage spatial governance in form of strategic efforts which have the capacity to translate endowment related resources and potentials into real assets for the respective territory (Giffinger et al., 2009).

**Perceptual aspect: identification, assessment and activation**

The existence of endowment related resources and potentials are only important and contributing to spatial development if they are perceived, assessed and activated by corresponding stakeholders. Any form of initiative regarding urban development needs therefore the focus on actors' behaving and social relationships. Such initiatives finally will become important asset in urban and regional development only if this process of transformation is realized efficiently including the interests of different actors and in accordance to common goals. Thus, identification of stakeholders with the territory, their ability to cooperate and their capacity to behave creatively to common challenges are decisive preconditions for the creation of new assets.

Obviously, there is an important perceptual impact on urban - regional competitive development so far endowment factors are not identified by relevant actors comprehensively and potentials are not transformed in a productive way. If these preconditions for the transformation process are not given, there are no impulses or activities likely to occur which may yield corresponding assets. This process therefore presumes common interests, more or less positive experiences and corresponding capacities of respective stakeholder who should be involved in cooperative initiatives.

In the Danube region this process of perception, assessment and activation of potentials becomes important under the following aspects:

- Despite the integration process and in front of several historical experiences in Central and Southeast Europe countries national borders are still a strong and important instrument regarding national interests and corresponding national political, administrative and planning systems. From a border's point of view border regions in the Danube region still have rather different status of integration, some are regarded as integrated since a long period of time, others are recently in process of integration and others still have the status of at least co-existing. Very obvious, in a historic dimension border regions in the Danube region experienced even alienated forms and moved over to more integrated forms. Of course, the perceptual challenge in the concept of territorial capital presumes integrated or at least cooperative border regions. Such perceptual challenges are likely to be more complicated the longer alienated forms of borders dominated the development in border regions.

- There is a wide range of historical, political and socioeconomic factors which influence the understanding of regional policy and spatial planning across countries, regions and cities. Thus, there is no common approach in understanding as well as in planning practice in recent years. Although there is awareness against the problems of activating relevant potentials in cross-border situations, relevant planning approaches had been elaborated and implemented only since some years and experiences are rather inhomogenous.

**Urban system and polycentricity as an asset**

The existence and development of cities is based on different arguments. Besides traditional interpretations (as central places of a wide range of goods and services which are supplying population in the respective hinterland), urban agglomerations are regarded nowadays as the motors of urban and regional development in a globalized world and as important nodes with corresponding metropolitan functions. Cities differ from each other due to its centrality function in a traditional meaning and through its specialization (driven through creativity, innovations and new metropolitan functions) in a more postmodern understanding.

In order to look at urban systems in a more comprehensive spatial perspective the term ‘polycentrism’ was introduced under the use of analytical as well as normative criteria. The term ‘polycentrism' describes a system of cities which are interconnected and mutually encourage themselves (Schubert und Klein, 2006). In a spatial perspective it means a dynamic concept in which cities are not regarded only as centers of supply but also as motors of development. (Schindelsgger et al., 2002) Cities are not only elements in a system but more or less important nodes regarding different forms of interlinkages. „A polycentric urban system is a spatial organization of cities characterized by a functional division of labor, economic and institutional integration, and political co-operation” (Tatzberger, 2004).

Under these perspectives polycentrism on the one hand side regards cities as competitors which are interlinked in a functional way through trade of goods or flows of commodities or information, resp. which are related to each other through migration or commuters. This we call functional or structural polycentrism which is based on complementarities and attractivity. On the other side a city is part of a polycentric system if there exist strategic relations of stakeholders between cities which are based on cooperation. Such cooperative efforts are necessary and are likely to exist in order to define and realize common goals which cannot be subject of single actions. This we call
strategic polycentricity based on cooperative efforts which may have a wide range of goals reaching from political commitments via institutional agreements until projects on common technical and social infrastructure. (ESPIN 1.1.1, 2005, p.47)

Of course, the character of functional and strategic polycentricity varies with the spatial level. One distinguishes usually the micro, meso and macro level. On the European (macro) level polycentricity describes the urban system of metropolises which should provide the base for European integration zones from a normative point of view. Good connectivity on European or global level is necessary in order to open up the "hinterworld" enhancing and improving the competitive conditions regarding metropolitan development. On the national or transnational (meso-) level polycentricity describes the urban system of a metropolitan region consisting of networks of smaller cities usually enhancing the attractiveness of the metropolis through complementary economic specialisation. Very often such metropolitan regions are fragmented through national borders which hamper functional or strategic relations to other cities. On the national or even regional (micro-) level polycentricity describes the urban system with its characteristics of the "hinterland" which provides larger potentials of demand and workforce, higher diversity in housing and living quality, different types of area bounded advantages regarding the allocation of new metropolitan functions.

Basically, competition between cities drives functional interrelations if cities try to specialise and position them into niches making flows of goods, persons and information necessary. Of course, metropolitan growth areas (MEGAs) (ESPON, 1.1.1, 2005) compete for metropolitan functions (Krâtke, 2007) which drive metropolitan development. Competition on the meso or micro level concentrate even more on regional and local economic activities or even households as residents. Opposite to functional polycentricity, strategic polycentricity between metropolises focuses on different issues than on the meso or micro level and concerns different aspects of positioning, infrastructure and economic niches in a hierarchical way.

CONCLUSIONS: BASIC FEATURES OF A MULTILEVEL APPROACH

Taking territorial capital and assets into consideration a Danube strategy basically should show following features:

- Emphasis on enhancement of cultural, social and relational capital as intangible assets for urban and regional development;
- Strengthening of place-specific assets, that cannot be reproduced by moving people and goods, and stem from local culture, values, and norms;
- Empowerment of specific forms of cooperative efforts with strategic planning character which in combination yield competitive advantages for the attraction and realization of important economic functions according to city size and positioning;
- In a conceptual perspective, the Danube strategy should obtain the following features regarding spatial governance in a perceptive perspective:
  - In particular cross border cooperative initiatives should be enforced in border regions which are still less integrated or even fragmented. First and basic efforts should concentrate on provision of information, discussion of strengths and weaknesses and common learning processes how to meet challenges.
  - Predominantly those cross border initiatives should be empowered which aim at the identification and assessment of regional potentials or which try to support and integrate regional identities as a base for future activities.
  - An evidence based learning approach has to be implemented. It should predominantly support cooperative initiatives in a bottom-up way in order to learn from local experts about local and (inter-)regional potentials and it should provide information on European perspectives and support the activation and transformation of potentials into assets in a top-down manner.
  - Support of corresponding capacity building is necessary in particular in small (and medium) sized cities in border regions.
  - Finally, taking the concept of polycentricity into consideration a Danube Region strategy should contain the following features:
    - Initiatives of cities aiming at the improvement of its competitiveness should be empowered through the Danube strategy: corresponding instruments on the micro- and meso-level should empower cooperative efforts; on the meso- and macro-level they should improve competitive conditions inducing new economic relations.
    - In particular strategic efforts for metropolises in border regions should be defined including a clear concept for infrastructure investments and for those measures which help to jeopardize national interests hampering cross border developments. Strategic polycentricity should be enforced through the flow of information and production of knowledge regarding the positioning of other metropolises.
    - Strategic efforts in form of cooperative initiatives should be enabled in those border regions where are only medium and small sized cities. These border regions in particular need specific capacity building measures.
    - Along with the improvement of technical infrastructure which improves competitive conditions or standards of living a special focus of strategic polycentrism should concentrate on the creation and empowerment of social networks in different spheres of development and on different levels.

Considering the different spatial levels with respective challenges, effective measures improving its "hinterland" on the micro and meso level or its "hinterworld" on the macro level are necessary to be defined and to be implemented in this strategy. Cooperation and competition as two complementing governance approaches have to be enforced in an efficient way through the Danube strategy.

- The strategy has to guarantee the coordination of instruments and measures between the 3 levels: the multilevel approach has to consider the implications of competitive and cooperative efforts on the macro-meso-micro level.
- In particular, functional and strategic polycentricity easily is jeopardized through borders hampering interregional relations. A specific instrument aiming at this problem should be defined in order to improve network effects in form of spill-overs which strengthen competitiveness of distinct cities and steer territorial cohesion in an effective way.

To sum up, the degrees of urbanization and the rank-size-distributions vary remarkably across the countries of the Danube region. Very obviously, the respective urban systems in combination with the different meaning of borders provide rather strong differences and deficits in polycentric development conditions. Hence, polycentricity will only become an asset of respective cities and regions if strategic efforts will strengthen it in an effective way on the different spatial levels.

The concept of territorial capital emphasizes that urban-regional development is not only based on some endowment factors providing potentials in a functional sense but needs specific knowledge for the transformation of
potentials into assets. Thus, corresponding instruments on the European level are needed in order to support those efforts which strengthen relational elements. In a successful strategy knowledge about the potentials as well as about the meaning of assets is necessary and should be supported through corresponding initiatives. Thus, the main goal of governance in Danube region is to facilitate the coordination and steering of collective actions, in particular in border situations.

References


