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STANISŁAW LESZCZYCKI
INSTITUTE OF GEOGRAPHY AND SPATIAL ORGANIZATION
CENTRE FOR EUROPEAN STUDIES
POLISH GEOGRAPHICAL SOCIETY

EUROPA XXI

13

NEW SPATIAL RELATIONS IN NEW EUROPE



EDITORS:
TOMASZ KOMORNICKI and KONRAD Ł. CZAPIEWSKI

WARSZAWA 2005

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NEW RELATIONS IN NEW EUROPE—NECESSITY OF ITS COGNITION

Since May 2004 the European Union—as a result of accession of 10 new member states to EU, including 8 from Central and Eastern Europe—not only has expanded its territorial range, but also it has entered a new era of socio-economic processes, which is a qualitatively new experience in the development of the Old Continent. This has led to the emergence of new economic prospects for functioning of the European Union, which significantly differs, both in spatial as well as functional terms, from the situation existing before 2004.

With reference to the issues mentioned above, the 13th volume of *Europe XXI* focuses primarily on the research results concerning the spatial-economic relations and processes occurring within the EU member states after the EU enlargement, as well as attempting to prognosticate the consequences of these processes for the future of the EU. The volume features 15 papers, which are divided into two parts according to their contents.

The first part includes eight papers, whose central thread is reference to spatial dimension of the expanded the EU, as seen from economic viewpoints. This thematic unit highlights, among others, issues pertaining to the regional disparities and competitiveness in Central and Eastern Europe, as well as determining regions with particular needs for policy intervention after the EU enlargement. The subsequent papers bring up the questions related to spatial problems. The authors analyzed, among others, spatial impacts of the Trans-European Networks for the new the EU, spatial processes at macro, meso and micro level during the EU enlargement, as well as spatial aspects of logistic revolution in Central and Eastern Europe. Also, they drew attention to the process of internationalization of economy as a factor of transformation of Central and Eastern Europe. Apart from that they explained why metropolitan economic strategy is the key to generating sustainable prosperity and quality of life for the world, as well as referring to the problems affecting the cities in Central and Eastern Europe in the aftermath of post-socialist transition and pointing to some conceptual considerations about future challenges.

The papers included into the second part of the current volume are concerned with, broadly understood, transborder co-operation perceived as an element of regional development. In their papers, the authors discuss the concrete examples of various forms of close collaboration between member states of the EU in the selected geographical areas. Among them can be mentioned presentation of the development in rural microregions on the Czech-Polish state border and possibilities of the environmental co-operation in the

order regions of Hungary after the EU-accession. There is also extremely interesting look at the newly created transborder structure as part of the expanded EU, which is presented in the description of Austrian-Slovakian-Hungarian tri-border region. The author of this paper underlines that emergence of a new transborder unit provides good opportunities for spatial and socio-economic development. According to another author, the similar chances for development exist within Vienna-Bratislava area where can be observed new economic trends after accession of Slovakia to the EU.

Similarly, the development of transborder areas creates the need for co-operation not only at the governmental level but also at the local self-government one. This issue was highlighted in the paper 'International activity of the local self-government'. The author emphasized that one of the characteristic phenomena of the recent decades has been the increase in the intensity, scope and numbers of participants in international relations. EU funds are also used by international non-governmental organizations supporting foreign contacts of self-governments.

Also, the benefits of transborder co-operation viewed by the prism of the urban development are highlighted in the paper 'Cross-border co-operations as a new tool for urban development in border regions'. The author drew attention to the fact that cross-border co-operation became a popular field of action during the last years, in particular in preparation and after enlargement of the European Union. Pointing to Germany as an example, he indicated that there occurred significant growth in the number of cross-border activities between cities and regions on Germany's borders towards to Czech Republic and Poland.

The subject inextricably linked with the transborder co-operation is the issue of euroregions. The issue of euroregions became very topical in Europe from the beginning of the 90s of the last century. In the paper 'Geography of the Polish-Czech borderland: the case study of Euroregion Beskydy', the author presents the objectives of the the Euroregion, its organizational structure and some financial subsidies for the projects related with it. Concluding, the author underlines the benefits, both formal and economic, due to functioning of that Euroregion.

Along with the present publication having been given to you, let me leave you with an open question: Is a new relation in new Europe a necessity of its cognition? Those of you who have read the papers included into the present volume may try and answer this question. If the provided texts make it easy for you to form an opinion and view on the presented issues, this, undoubtedly, will be a great success of the authors who contributed to this publication.

The present publication is a joint editorial venture between Academic Branch of Polish Geographical Society and Institute of Geography and Spatial Organization Polish Academy of Sciences.

Marek Degórski

**SPATIAL DIMENSION OF EUROPEAN UNION
ECONOMIC FUTURE**

SPATIAL DIMENSION OF EUROPEAN UNION
ECONOMIC FUTURE

REGIONAL DISPARITIES AND COMPETITIVENESS IN CENTRAL AND EASTERN EUROPE

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Key words: Central and Eastern Europe, European Union, town, regional policy, regional diversity

INTRODUCTION

The community policy expresses the target of the member states solving certain tasks together. The common policies are mostly not regional developmental type and rather serve specific targets. Yet, the Maastricht Treaty set the impacts of territorial sectoral policies in a new light. The competency of the Commission was significantly extended since several important community policies (such as the common agricultural policy, transportation policy, Trans-European networks, structural policy, R&D, competition and environment policy) also serve regional development targets.

The lessening of the state borders' restricting power within the European integration, the institutionalised development of the European economic space and the eastern enlargement of the European Union set the development possibilities of cross-border regions into a new light. Besides community, national and sub-national frameworks European macro-regions may become important strategic units in the future as regards the improvement of continental competitiveness, the regions with high productivity are able to meet the requirements of the economy of scale and to increase efficiency.

The national and sectoral policies in the majority of European states and the cohesion strategy of the European Union consider the principle of *solidarity* as the starting point of social action. Exactly this characteristic distinguishes the European model from the social administration practices of other continents. The cohesion model in economic terms means the moderation of inequalities between regions and between social layers, enabling the widest possible scale of social layers to contribute actively to the establishment of the conditions of economic growth and to share the outcomes of growth.

The changes during the previous years imply that the space of regional policy at the very beginning of the new millennium—besides the self determining rules of economic development—will be determined by two marking factors: first by the organisational, functional and financing reforms of the European Union and its eastern enlargements and second—due to a high extent of the previous factor—by the new share of power within the national state, the decentralisation.

The new democracies and market economies in Central and Eastern Europe cannot withdraw themselves from the above processes. In the case if they intend to unite the advantages of integration for their national rise, they must decentralise their traditionally centralised state political systems and the sectoral management and administration established within the planned economy must be complemented by regional autonomies. The space winning and institutionalisation of regionalism in Central and Eastern Europe may become a new differentiating factor in the economic development ability and competitiveness.

Regional diversity in the European Union will increase sharply with the forthcoming enlargement, as will the competitiveness challenge. The present EU regions are already characterized by substantial income, employment and productivity disparities reflecting differing resource endowments and innovation performance. Despite the fact that there are competitive and uncompetitive firms in every region, there are common features that affect the competitiveness of all firms located there. These features include physical and social infrastructure, the skills of the work force, an institutional framework and culture conducting to innovation and the efficiency of public institutions (especially managerial capacity) at the regional level.

The lack of competitiveness of CEE economies reflects the long period before transition when they were protected from market forces. State planning led to a distorted allocation of resources and insufficient investment into sectors with the highest return in the long-term, and key aspects of competitiveness were often neglected.

This paper introduces the Central and Eastern European achievements of regional development. Besides the analyses of the transformation processes in the regions it draws a comprehensive picture of economic and political factors influencing competitiveness of the regions and localities in Central and Eastern European new member states and candidate countries.

SOCIO-ECONOMIC DISPARITIES BETWEEN REGIONS

In the countries of systemic change, depending on their level of urbanisation, the territorial expansion of rural areas and their level of backwardness display significant inequalities. With the exception of some regions of Poland, where urban population is growing, outward migration from rural areas has stopped. Moreover, in some countries, due to reverse migration from the towns and cities, rural population is growing. These recent demographic trends cannot be considered as unequivocally positive, since the economic bases of these rural areas are weak and most of those who returned there were forced to seek livelihood in agricultural production. The rate of working-age population is the

highest in these rural areas and in the traditional industrial areas. In metropolitan areas quite the opposite process is witnessed. In the age structure of the capitals, the weight of the older age groups is growing. In regions of dynamic development (like in Western and Central Transdanubia in Hungary, in the north-western regions of Poland, or in Southern Moravia of the Czech Republic) as well as in the northern and eastern Romanian and eastern Slovakian regions where birth rates are high, a favourable age structure is emerging, although in the latter regions a strong outward migration has negative impact on the rate of working-age population.

The territorial differences of the *labour markets* are the result of the previous economic structure and the structural transformations that have taken place in the emerging market economies. The economic activity rate is high in regions where the structural transformations have not started yet. Several heavy industrial regions in the Czech Republic and in Poland have not been set on a new development track, and there are also many rural areas in Eastern Europe where the high rate of agricultural employees (reaching 42 percent in Moldavia, Romania) is expected to cause sharp tensions. There are regions where the rapid growth of the previously neglected tertiary sector has counterbalanced the shrinking size of other sectors of the economy. A peculiar paradox of the Central and Eastern European transformation is that, with the exception of Hungary and the Czech Republic, the activity rates are the lowest in the more successful regions. From among the accession countries Hungary has the lowest activity rate (51.7 percent in 2001), while the rates of Central and Western Transdanubia are a few points higher than the national average.

The development of the diverse economic potentials of the accession countries is hindered by cohesion problems. At low levels of economic development, however, the performance gap among the regions within the same country are not greater than in Western Europe (Table 1). Yet, the gap between the worst performing region and the best one (Prague and the Romanian and Bulgarian regions) is greater (750 percent) than in

Table 1. Regional differences in GDP per capita in Central and Eastern European countries, 2000

Country	Least developed region		Most developed region		Difference
	Region's GDP per capita in PPS, EUR15 = 100				
Bulgaria	South-Tsentrall	21	South-western	38	1.81
Czech Republic	Central-Moravia	45	Prague	121	2.69
Poland	Lubelskie	27	Mazowieckie	59	2.19
Hungary	North Great Plain	31	Central Hungary	78	2.52
Romania	North-eastern	16	Bucharest	46	2.88
Slovakia	Eastern Slovakia	36	Bratislava	98	2.72
EUR15	Ipeiros	47	Inner London	241	5.13

Source: The author's calculations on the basis of the Regions: Statistical Yearbook, 2003.

Western Europe. On the whole, disregarding national inequalities, the Central and Eastern European economic space is relatively homogenous, with the majority of the regions performing below the European average; in Romania and Bulgaria even the capitals are quite under-developed (Figures 1–2).

Summing up, the radical transformation of the economic structure affected the different regions in different ways. The losers of transition, like in the most other European countries, where the areas were dominated by heavy industry and mining and, as a special Eastern European feature, the extensive agricultural areas. The emerging market economy brought about the strengthening of regional inequalities. Comparing the regional data of the Member States and the candidate countries we find that the Central and Eastern regions are at the bottom of the European ranking, while the Czech and two Hungarian regions are above the EU average, and one (West Transdanubia) is near at that level (Tables 2–3).

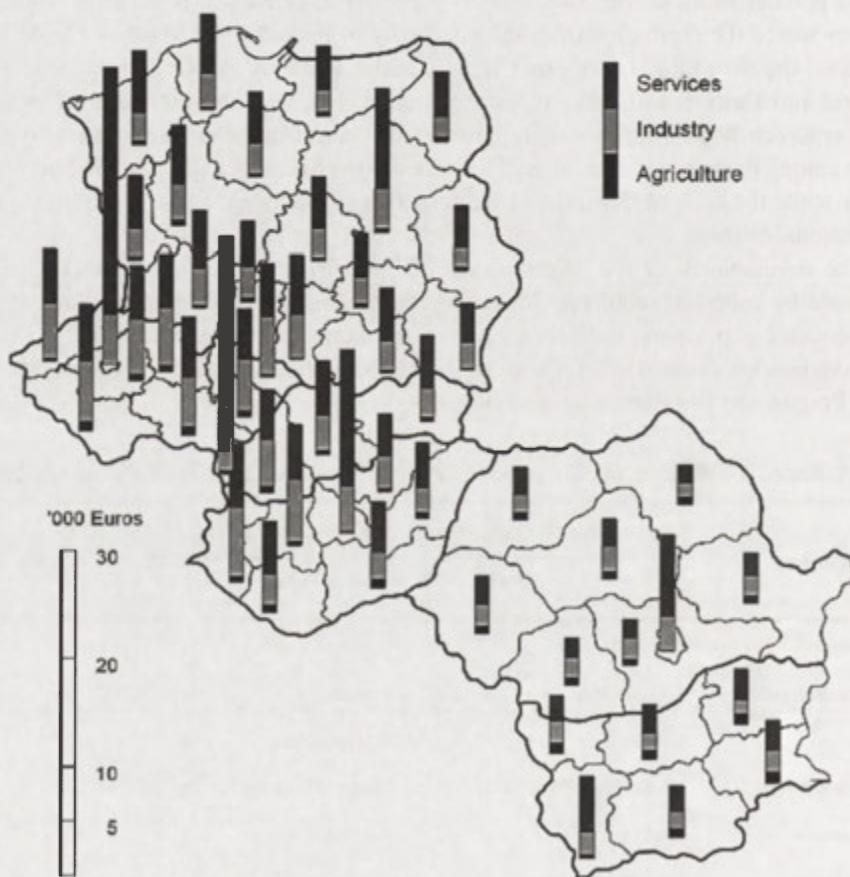


Figure 1. GDP per capita by region and sector in Central and Eastern Europe, 2000

Source: Designed by the author on the basis of the Regions: Statistical Yearbook, 2003.

Disparities can be demonstrated in comparison with the highest and lowest levels of income per head between regions reveal that, in 2000, the average level in Prague, the most prosperous region in Central and Eastern Europe, was more than 7 times higher than in North-east region of Romania (Table 3, Figure 3).

Two key issues which influence the regional economic performance are the urbanization level and the sectoral composition of economic activity. The following stylised classification of regions can be used for analytical purposes agricultural, industrial and regions with services orientation (Figure 4). For the purpose of identifying the typical manufacturing, agricultural and service regions, the highest concentration of employment in each sector were selected. (Criteria of designation were: percentage share of agricultural employment is more than 10 percent, of industrial employment it is more than 40 percent and of service employment it is more than 60 percent, Figure 4). The regions depending mostly on services are clustered around capital cities. The highest concentration of services

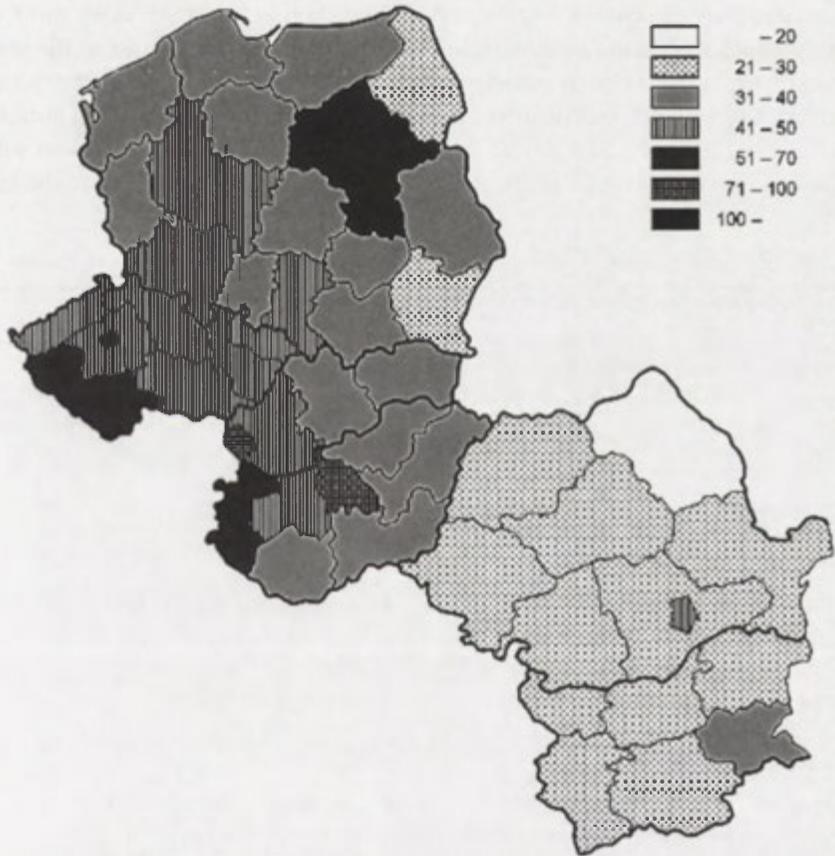


Figure 2. GDP per capita by region in Central and Eastern Europe, 2000, EU15=100

Source: Designed by the author on the basis of the Regions: Statistical Yearbook, 2003.

Table 2. Level of development of NUTS II regions, 2000

Level of GDP as a percentage of EU15 average	Percentage of population of the country					
	Bulgaria	Czech Republic	Hungary	Poland	Romania	Slovakia
Over 75	—	11.5	28.3	—	—	11.4
50–75	—	11.5	9.8	13.1	—	—
36–49	26.2	77.0	34.1	39.1	10.2	88.6
26–35	10.1	—	27.8	47.8	11.8	—
25 or less	63.7	—	—	—	78.0	—

Source: The author's calculations on the basis of the Regions: Statistical Yearbook, 2003.

is in Prague 76.6 percent). It is followed by Bratislava region (Slovakia) and Central Hungary, which have similar characteristics (72–71 percent). In contrast to the services, manufacturing is more closely associated with smaller cities and towns, like in the EU countries), and with polycentric urban networks. The most of the top 15 manufacturing regions are in the historical core territory of Central Europe. Fourteen regions with the highest concentration of agriculture are, as it would be expected, situated in the less de-

Table 3. GDP per capita in the richest and the poorest regions in Central and Eastern Europe

The richest					The poorest				
Rank	Region	Country	GDP per capita in PPS, Euro	As a percentage of EU15 average	Rank	Region	Country	GDP per capita in PPS, Euro	As a percentage of EU15 average
1	Prague	CZ	27,354	121	1	North-eastern	RO	3,678	16
2	Bratislava	SK	22,164	98	2	South	RO	4,328	19
3	Central Hungary	HU	17,094	78	3	South-eastern	RO	4,448	20
4	Mazowieckie	PL	13,316	59	4	South-western	RO	4,681	21
5	West Transdanubia	HU	12,788	57	5	Yuzhen Tsentralen	BG	4,781	22
6	Jihozapad	CZ	11,840	52	6	North-western	RO	4,894	23
7	Central Transdanubia	HU	11,279	48	7	Severen Tsentralen	BG	5,090	23
8	Jihovyhod	CZ	11,059	47	8	Severoistočen	BG	5,203	24
9	Bucharest	RO	10,878	46	9	Severozapaden	BG	5,414	24
10	Severovyhod	CZ	10,871	46	10	West	RO	5,428	24

Source: The author's calculations on the basis of the Regions: Statistical Yearbook, 2003.

veloped Romania and Bulgaria (all planning regions of the countries), and 11 regions in Poland and one region in Hungary. There are 24 regions where the percentage share of the agricultural employment is over 20 percent (as against the average of 4.5 percent for the EU as a whole).

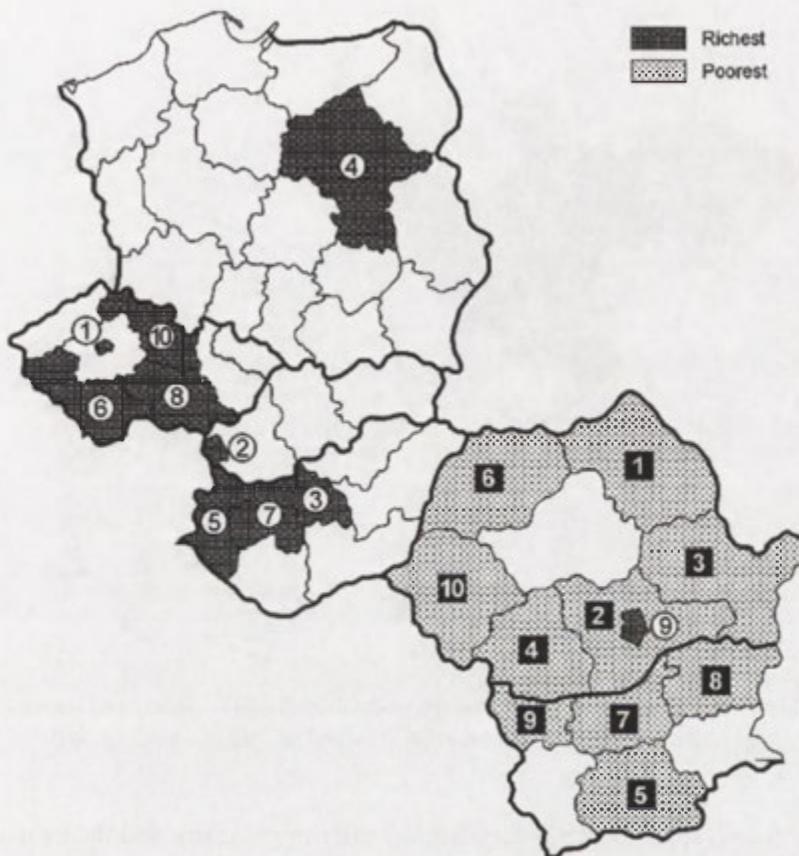


Figure 3. The richest and the poorest regions in Central and Eastern Europe, 2000

Source: Designed by the author on the basis of the Regions: Statistical Yearbook, 2003.

THREE FACTORS DETERMINING REGIONAL COMPETITIVENESS

Competitiveness is often viewed as a key indicator of the success or failure of policy. Competitiveness is defined as the 'ability to produce goods and services', while at the same time generating relatively high income and employment levels in sustainable way (*Sixth Periodic Report...*, p. 75). Competitiveness is measured in terms of GDP per capita and is divided into two components, which together determine its level: GDP per person em-

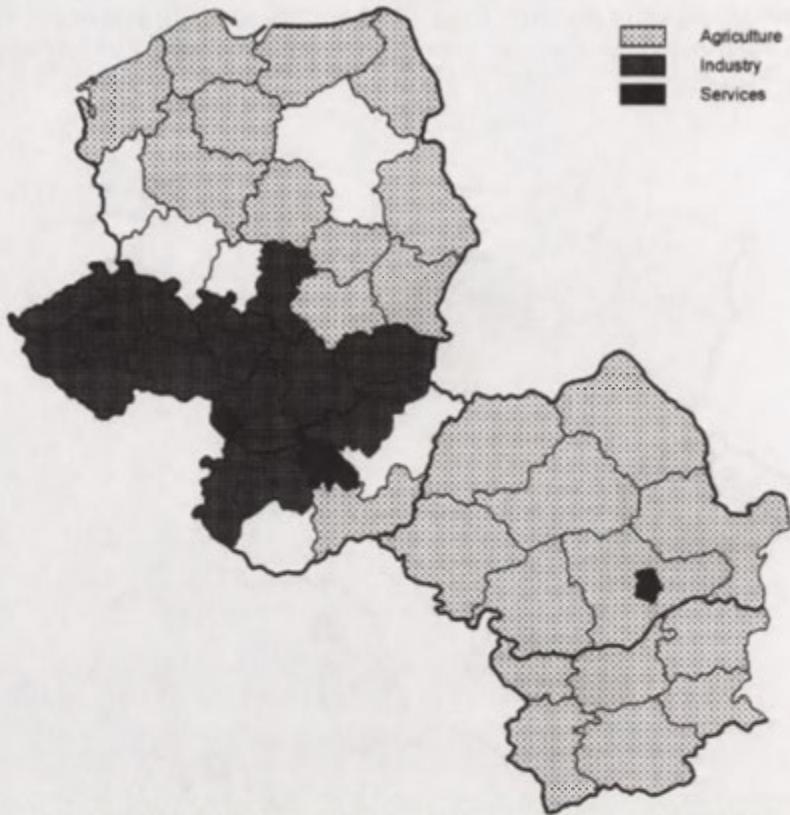


Figure 4. Regions with the highest employment in agriculture, industry and services

Source: Designed by the author on the basis of the Regions: Statistical Yearbook, 2003.

ployed, which is approximately equivalent to labour productivity, and the total number of people employed relative to working-age population, i.e. the employment rate. For a region to be competitive it should have both a relatively high level of productivity, and a large number of people in work

Factors emerged as being closely linked with regional differences in the GDP measures:

- the settlement network of the region, the urban hierarchy,
- the structure of economic activity, division of employment between agriculture, manufacturing and services, the regions with the highest levels of GDP per capita tending to have a relatively high concentration of employment in market services and/or manufacturing,
- the extent of innovative activity,
- regional accessibility,
- the skills of the work force,
- targets, tools and institutional system of the regional development policy.

This indicators explain the two thirds of the variation in GDP per capita between regions in the European Union (*Sixth Periodic Report...*, p. 80).

DIFFERENTIATED URBAN NETWORKS

Changes in the settlement structure in every countries during the state socialism were primarily quantitative. By the late 90s, the rate of urban population reached 69 percent in Bulgaria, 70 percent in the Czech Republic, and 63 percent in Hungary. The less urbanized country is Romania, where 55 percent of the population lives in towns and cities.

The weight of capitals, at the peak of the town hierarchies, is remarkable in Bulgaria and in Hungary. Sofia accounts for 14 percent, Budapest for 18 percent of the population of the country. Prague, Bratislava and Bucharest have more moderate share (6–10 percent) in population of respective countries. The role they play in the economy and in cultural life is more dominant than their share in the population. The important elements of the market economy are concentrated in the capitals (Table 4). Several elements of a decentralised development policy could be designed to decrease this unfavourable, decades-long territorial concentration.

Since the early 1990s, processes related to the changes that affected the whole society have influenced the settlement structure. One of these processes is sub-urbanisation, i.e. urban

Table 4. The weight of capital cities in some activities, in percent, 2001

Activity	Sofia ²⁰⁰⁰	Prague	Budapest	Warsaw	Bucharest	Bratislava
GDP	24.6	24.5	35.0	n.a.	16.5 ¹⁹⁹⁸	24.2
Industrial output	15.9	13.0	17.6	11.8	17.0	37.3
Foreign direct investment	49.9	25.7	56.5	33.0	46.7	71.2
Tertiary education students	43.3	31.4	49.2	16.7	32.4	83.0
Employees in R&D	72.7 ¹⁹⁹⁵	48.0	55.8	30.0	39.0	40.2

Source: Own calculations based on national statistical yearbooks.

population moving to the countryside, especially into the outskirts of large cities. This trend has emerged gradually, as it is observable in the slight decrease in the population of urban settlements and in the increase in the share of inhabitants living in smaller and/or rural settlements.

In the shaping of a decentralised development policy, the large and medium towns of the second level of the town hierarchy play an important role. The endowments of the countries are different in this respect. Bulgaria has three towns with populations over 200,000 (Plovdiv, Varna and Bourgas), and three towns (Rousse, Stara Zagora and Pleven) between 130,000 and 170,000. Hungary has one town over the population of 200,000 (Debrecen), while three regional centres (Miskolc, Szeged and Pécs) have populations of around 160,000. In Bulgaria's two towns (Sliven and Dobrich) the populations are between 100,000 and 130,000, while in Hungary there are three such towns (Győr, Nyíregyháza and Székesfehérvár). The urban network of Poland and Romania shows a relatively balanced hierarchy

and regional pattern (Figure 5). The second level includes 2–8 cities with over 300,000 inhabitants (e.g. Łódź, Kraków, Poznań, Katowice, Gdańsk in Poland, Cluj-Napoca, Timisoara, Craiova, Iasi, Constanca in Romania, Brno, Ostrava in the Czech Republic). This figure has to be compared with more than 20–30 similar towns in western European countries. These towns exert significant influence over wide area, this is why they are called potential regional centres. They have relatively good amenities to prevent their inhabitants from going to capital cities. They have academic tradition and cultural history. But they are often too weak, from an international point of view, to compete successfully with other large European cities.

The settlement structure of the Czech Republic is characterised by high density and disintegrated nature of settlements. A large portion of the population lives in urban settlements. Towns with over 50,000 inhabitants were among those most severely affected by the process of urbanisation; between 1993 and 2000 they posted a migration decrease of over 25,000 inhabitants. To the contrary, in terms of migration the largest increases were posted by settlements with over 10,000 inhabitants.

The settlement structure in Poland is characterised by:

- Moderate, polycentric concentration of population and economic activity in less than twenty medium size centres, relatively homogeneously localized over the country's territory,
- Relatively low share of the capital metropolis in the total of the country's population (Warsaw—4.2 percent),
- Low position of Polish metropolis type cities in European rankings (Warsaw—in groups V and VI in 8-group classifications),
- Low urbanization degree, below 62 percent, that has been remaining at the same level for the last 12 years,
- Highly dispersed settlements in rural areas, where as much as 38 percent of the Poland's population lives.

The medium town network, with populations between 50,000 and 100,000, includes 15 towns in Bulgaria and 12 in Hungary. The small town network, with towns of less than 20,000 inhabitants is dense in both countries: it includes 152 towns in Bulgaria and 160 in Hungary. The spatial organising functions of most of the small towns are weak. They can only provide low quality services to the rural settlements in their sphere of gravity, and they do not play an important role in the employment of the inhabitants of these settlements. In most of these towns, the majority of jobs were terminated with the closing down the former industrial sites after the change of regime.

The rural settlement structure is also rather differentiated. Bulgaria has a large number of villages (5,100), whereas in Hungary there are much fewer of them (2,900). Although in European comparison both countries have a high proportion of villages, this type of settlement is far more typical of Bulgaria. There, 83 percent of all villages have fewer than 1,000 inhabitants; this figure in Hungary is 59 percent. While in Bulgaria villages of over 5,000 inhabitants are rare (there were only 8 such settlements at the mid 1990s), in Hungary 38 settlements belonged to this category in 2001.

In countries having several economic centres, like most Western European countries, the difference between the population of the primary city and that of the regional centres is at most five-fold; in the case of countries dominated by the capital, this difference is ten to twelve-fold. In Poland and Romania, for instance, the capitals are followed by six to

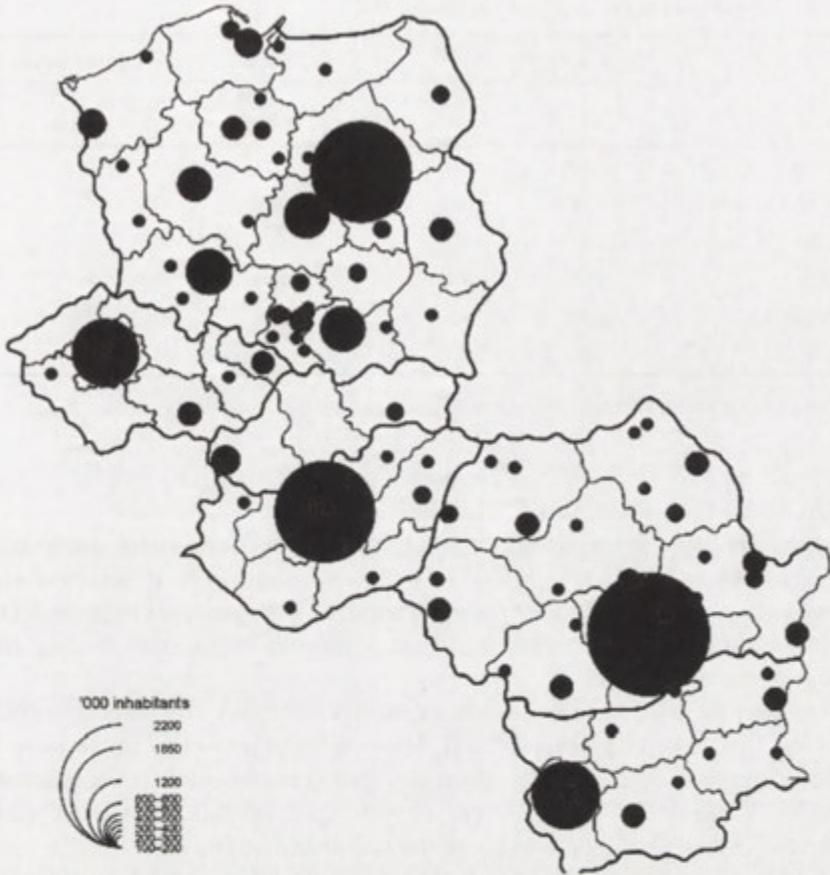


Figure 5. Urban centres in Central and Eastern Europe

Source: Designed by the author.

eight major cities with populations between 300 and 700 thousand, which have an impact on the spatial structure of the entire regions. Contrary to this, in Hungary, there are only four regional centres, whose population exceeds 150 thousand (Table 5).

At the same time, a particular Central and Eastern European characteristic is that the medium cities play important role in the organisation of the settlement structure. Many such cities function as territorial administrative centres, and the structure and scope of their institutional system and administrative organisations do not differ significantly from those of major cities. The unitary administrative and political system of the planned economies has worked towards homogeneity: the major cities could not assert their natural and traditional power in organising the spatial structure. It is not surprising therefore that after the first steps towards regionalisation and a decentralised development policy, sharp competition emerged among the territorial centres, different in size but of similar institution structure, to control the new functions of regional organisation.

Table 5. Population of the largest urban centres, 2001

Country	Capital city		The seven largest regional centres	
	'000	Per cent, country = 100	'000	Per cent, country = 100
Bulgaria	1,190	14.4	1,154	16.7
Czech Republic	1,193	11.7	1,288	12.5
Hungary	1,812	18.0	1,036	10.3
Poland	1,615	4.1	4,064	10.5
Romania	2,027	9.0	2,156	9.6
Slovakia	449	8.3	806	14.9

Source: National statistical yearbooks. Calculations by the author.

RESEARCH AND TECHNOLOGICAL DEVELOPMENT

During the previous regime, research and technological development was given high political priority, particularly in scientific areas and certain special industrial sectors. Consumer goods sectors and social sciences, however, were generally neglected. During the transition R&D has diminished significantly because of low state funding and the reduction of the staff.

In Hungary R&D expenditures as a percentage of GDP were 2.70 percent in 1987, 0.75 percent in 1995, and 0.94 percent in 2002. The number of personnel employed in R&D also shows a steep decline and the Hungarian figures are rather low in the international comparison. While in 1987 every 13th person with higher education was employed in the R&D sector, in 2001 this figure was 26, so the ratio decreased by half.

The bulk of research and technological development is carried out in publicly-financed research institutes, which are highly concentrated in Budapest. Around 60 percent of all employees in R&D institutions works in the capital and its surroundings (13,128 scientists and engineers). Only 18 of Hungary's 63 R&D institutes are located in non-metropolitan areas. Concerning corporate research and development units, 108 of 183 operate in Budapest. Many large regional centres such as Pécs, Szeged, Győr, Debrecen and Miskolc have run higher education institutions with research activities or other research institutions. These five cities account for another approximately 20–25 percent of all employees in R&D. Public R&D expenditure is almost insignificant in small and medium-sized towns. Only the Central Hungary (including Budapest) is over the average of 0.94 percent. The rest of the country carries out very little R&D activity (Figure 6).

Assessing innovation performance through the measurement of R&D expenditure and personnel implies that expenditure automatically leads to a new commercial product. Although this statement is not always true. During the communist regime, Hungary typically had high expenditures and high numbers of employees in R&D but produced few marketable products. Alternative indicators such as business expenditure on R&D (BERD) are more appropriate. Measuring BERD slightly alters the picture of Hungarian regions in terms of R&D activities. The preponderance of the central region is even more

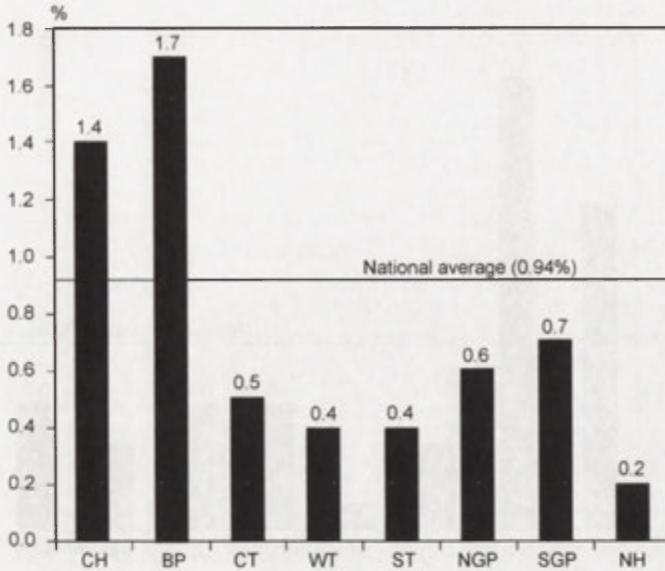


Figure 6. Gross R&D expenditure as a percentage of GDP in Hungary, 2001

Notes: CH—Central Hungary; BP—Budapest; CT—Central Transdanubia; WT—West Transdanubia; ST—South Transdanubia; NGP—North Great Plain; SGP—South Great Plain; NH—North Hungary.

Source: National statistical yearbook.

striking in business-related research. Budapest and its surrounding county absorb around 80 percent of expenditure and employ three-quarters of business R&D personnel in Hungary. The South Great Plain (the country's second-ranking scientific centre) primarily operates research institutes in the public sector, while West Transdanubia, which has considerable business research capacity, lacks university research centres. Research capacity in both sectors is rather weak in South Transdanubia and the North-eastern region.

Research and development expenditures in the Czech Republic have been increasing moderately since 1995. In 2001 internal expenditures on research and development in the Czech Republic accounted for 1.33 percent of GDP. The largest shares of expenditures on science and research in their regional GDP were posted by planning regions of Prague and Central Bohemia (Figure 7). The largest portion of the expended funds goes to the area of industrial productivity and technology (44 percent of the total internal expenditures) and to the area of general research at universities (12 percent).

COMPETITIVENESS OF REGIONAL POLICIES

At the beginning of the transformation period the emerging democracies cared little about the goals, tools and institutional system of regional policy. The same applies to Hungary. Yet, the paradigm shift first began in Hungary. This is proved by the 1998 European Commission report stating that Hungary seems the most prepared in regional

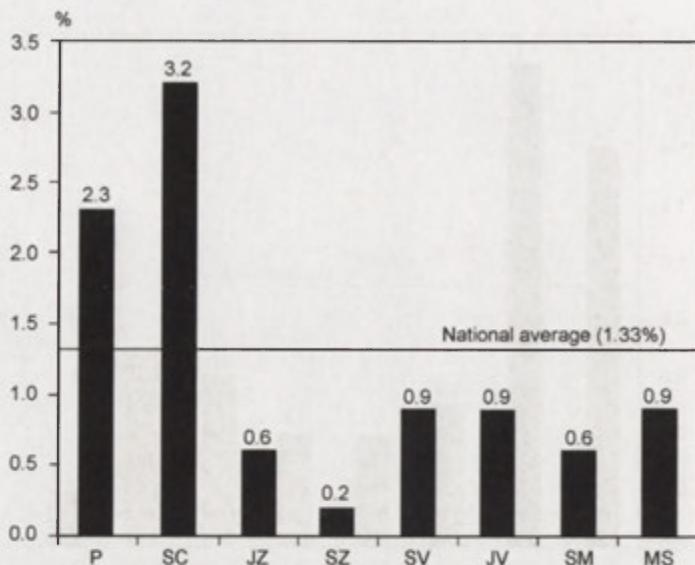


Figure 7. Expenditures on R&D as a percentage of GDP by regions in the Czech Republic, 2001.

Notes: P—Prague; SC—Central Bohemia; JZ—South-West; SZ—North-West; SV—North-East; JV—South-East; SM—Central Moravia; MS—Moravia-Silesia.

Source: National statistical yearbook.

policy. In general, this document was rather negative on the structural and cohesion policies of the Central and Eastern European countries, stating that:

- the tools of regional policy are non-existent or very weak;
- the institutional system is under-developed; sectoral co-ordination in the co-financing of regional development projects is weak; the development tools of the local governments are poor and lacking in expertise;
- the budget sector needs radical restructuring: the central funds are difficult to mobilise in the co-financing of structural programmes; the amount of co-financing resources is unclear; the efficiency of the utilisation of the resources is not guaranteed; and there is no EU-compatible monitoring.

The Commission declared that the addressing of these deficiencies comprised the tasks before accession to the Union. In most countries significant efforts were to be made to address these tasks, while Hungary was an exception (Table 6).

The above brief survey indicates that in almost all of the countries important changes have taken place, partly for internal political reasons but mainly as a response to warning propositions from the European Union; part of the designated tasks, at least formally, were completed by the accession countries.

Table 6. The European Commission's recommendations for the accession countries on regional policy

Task	Bulgaria	Czech Republic	Hungary	Poland	Romania	Slovakia
Legal regulation	X	X		X	X	X
The establishment of institutions	X	X		X	X	X
To strengthen co-ordination among existing institutions	X	X	X	X	X	X
To ensure financial resources for regional development	X	X	X	X	X	X
Co-ordination of resources	X	X	X	X	X	X
Control	X	X		X	X	X
Regional statistics	X	X		X	X	X

Source: Enlarging the European Union. Accession Partnership. Edited by the author on the basis of the document.

CONCLUSIONS

Since the early stages of the transition, Central and Eastern European regional policies have gained strength, although they are still constrained by limited resources and institutional problems. The EU has not only provided financial and technical assistance to introduce the necessary legislation and improve policy design in all spheres of the economy but has also contributed to changes in the territorial organisation of the countries. New actors for territorial policy are now emerging, and new regional institutions have been given responsibilities for policy implementation. The gradual introduction of the Structural Funds-like system has increased the participation of lower tiers of government, notably through the partnership mechanisms, and has extended their consultative functions.

However, the new regional policy structure has led to a deconcentration of government administration rather than to a truly strengthened decentralisation, and has often complicated rather than purified the institutional system. Furthermore, local governments are strongly dependent on central governments. In consequence of this weakness, the intermediate level (regions) should be given extended competencies and sufficient taxation authority. A philosophy of flexible horizontal co-operation in associations, pacts and partnerships should be promoted to establish functional regions for different public services. Financial and other incentives should be created by raising the share of taxes that remain at local level.

Almost all elements of the system of objectives, tools and institutions of regional development struck root in Hungary for the first time in Eastern Europe. Bulgaria, where in the socialist period the territorial location of economic production followed the Soviet

model, undertook to introduce certain elements of the modern European regional policy only later. In these changes, the conditions required by the European Commission were more motivating than internal economic and social needs.

Despite the numerous similarities in the changes that have taken place in the territorial structures of the countries, the differences in the responses individual countries gave to the challenges of regional development and the varied results of their development efforts demonstrate that the 'Eastern European Bloc' is at least as heterogeneous as the European Union. This is a fact which the structural policy reforms of the Union have to take into account.

The analysis of the effective acts and regulations on the building of regions has revealed that the intentions of the legislative power and of the government regarding the future of the regions are not clear. Owing to ambiguous legal regulation and the lack of clear-cut concepts, the regions are the weakest element of regional development policy. As soon as a definite political stance is taken regarding the regions, the significant reform of the legal regulation of the regional level will be inevitable. First, the number of regions and their geographical borders have to be defined within the institutional system of regional development. After this, the regions should be assigned with scope of authority and resources, in a process of the parallel decentralisation of government. Underlying this is the fact that the building of regions only helps the emergence of an effective regional policy if it is done through decentralisation and not to the expense of the tools of the county and settlement levels. Empirical studies have shown that it is the sectoral ministries that exert the strongest resistance towards the decentralised model of region building; therefore, the government has to act in a very determined and disciplined manner.

The decentralised state organisational system can emerge through organic development and complex legal regulation. The principles creating the necessary preconditions are to be included in the constitution. These are the following:

- The state considers in the course of its development activities and economic policy the inter-relationships and correlation between the territorial features and the spatial elements, insures the necessary preconditions of fulfilling elementary social functions;
- The state enforcing the principle of social equity and justice contributes with its own means to the moderation of objective territorial inequalities in the living standards;
- The active regional policy of the state promotes the territorial decentralisation of economic activities and functions;
- The state divides its regional development tasks and tools with the local and territorial governments and other concerned actors and delegates to the co-ordination responsibilities and development resources to the territorial decision-makers.

The changes during the previous years imply that the space of regional policy at the very beginning of the new millennium—besides the self determining rules of economic development—will be determined by two marking factors: first by the organisational, functional and financing reforms of the European Union and its eastern enlargements and second—due to a high extent of the previous factor—by the new share of power within the national state, the decentralisation.

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SPATIAL IMPACTS OF THE TRANS-EUROPEAN NETWORKS FOR THE NEW EU MEMBER STATES

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Key words: transport Networks, TINA, accessibility, European Union

INTRODUCTION

The relationship between transport infrastructure and economic development has become more complex than ever. There are successful regions in the European core confirming the theoretical expectation that location matters. However, there are also centrally located regions suffering from industrial decline and high unemployment. On the other side the poorest regions, as theory would predict, are at the periphery, but there are also prosperous peripheral regions in the Nordic countries. The enlargement of the European Union has made things even more difficult as in the new member states there are fast growing regions both in the centre and at the periphery.

The European Union expects to contribute to reducing the socio-economic disparities between its regions by the development of the trans-European transport networks (TEN) in the old member states and the so-called Transport Infrastructure Needs Assessment (TINA) networks in the new member states. However, although the TEN and TINA networks are one of the most ambitious initiatives of the European Community, the programme is not undisputed.

Critics argue that many of the new connections do not link peripheral countries to the core but strengthen the ties between central counties and so reinforce their accessibility advantage. Some analysts argue that regional development policies based on the creation of infrastructure in lagging regions have not succeeded in reducing regional disparities in Europe, whereas others point out that it has yet to be ascertained that the reduction of

barriers between regions has disadvantaged peripheral regions. From a theoretical point of view, both effects can occur. A new motorway or high-speed rail connection between a peripheral and a central region, for instance, makes it easier for producers in the peripheral region to market their products in large cities; however, it may also expose the region to the competition of more advanced products from the centre and so endanger formerly secure regional monopolies. These issues have received new attention through the enlargement of the European Union by ten countries in Eastern and Southern Europe in 2004.

The consistent prediction and the rational and transparent evaluation of likely socio-economic impacts of major transport infrastructure investments has therefore become of great political importance. In several EU-funded research projects models for forecasting the economic and spatial impacts of large transport investments in Europe were developed. One of them was the project *Socio-Economic and Spatial Impacts of Transport Infrastructure Investments and Transport System Improvements* (SASI) conducted in the 4th Framework Programme for Research and Technological Development under the leadership of the Institute of Urban and Regional Research of the Technical University of Vienna (Wegener and Bökemann 1998; Fürst et al. 2000; Schürmann et al. 2001). The SASI model was further developed at the Institute of Spatial Planning of the University of Dortmund in the project *Integrated Assessment of Spatial Economic and Network Effects of Transport Investments and Policies* (IASON) in the 5th Framework Programme (Bröcker et al. 2002a; 2002b; 2004).

The main goal of the application of SASI in IASON was to forecast the impacts of transport infrastructure investments and other transport policies on socio-economic activities and developments in Europe with special attention to the spatial and temporal distribution of impacts. The extended SASI model was applied to a number of different scenarios of implementation of the TEN and TINA networks and of additional transport policies.

In this paper these results are presented with special emphasis on the impacts of European transport policy on the new member states. For this the list of scenarios studied in IASON was extended by two scenarios with specific assumptions about the implementation of the TINA networks in Eastern Europe provided by the Stanislaw Leszczycki Institute of Geography and Spatial Organization of the Polish Academy of Sciences. This paper is the result of that co-operation.

MODEL OVERVIEW

The SASI model is a recursive simulation model of socio-economic development of regions in Europe subject to exogenous assumptions about the economic and demographic development of the European Union as a whole and transport infrastructure investments, in particular of the trans-European transport networks, and other transport policies.

The main concept of the SASI model is to explain locational structures and locational change in Europe in combined time-series/cross-section regressions, with accessibility indicators being a subset of a range of explanatory variables. The focus of the regression approach is on the long-term spatial distributional effects of transport policies. Factors

of production including labour, capital and knowledge are considered as mobile in the long run, and the model incorporates determinants of the redistribution of factor stocks and population. The model is therefore suitable to check whether long-run tendencies in spatial development coincide with the spatial development objectives of the European Union. The application of the SASI model is restricted, however, in other respects: The model generates mainly distributive and only to a limited extent generative effects of transport cost reductions, and it does not produce regional welfare assessments fitting into the framework of cost-benefit analysis.

The SASI model differs from other approaches to model the impacts of transport on regional development by modelling not only production (the demand side of regional labour markets) but also population (the supply side of regional labour markets). A second distinct feature is its dynamic network database based on a 'strategic' subset of highly detailed pan-European road, rail and air networks including major historical network changes as far back as 1981 and forecasting expected network changes according to the most recent EU documents on the future evolution of the trans-European transport networks.

The SASI model has six forecasting submodels: *European Developments*, *Regional Accessibility*, *Regional GDP*, *Regional Employment*, *Regional Population* and *Regional Labour Force*. A seventh submodel calculates Socio-Economic Indicators with respect to efficiency and equity. Figure 1 visualises the interactions between these submodels.

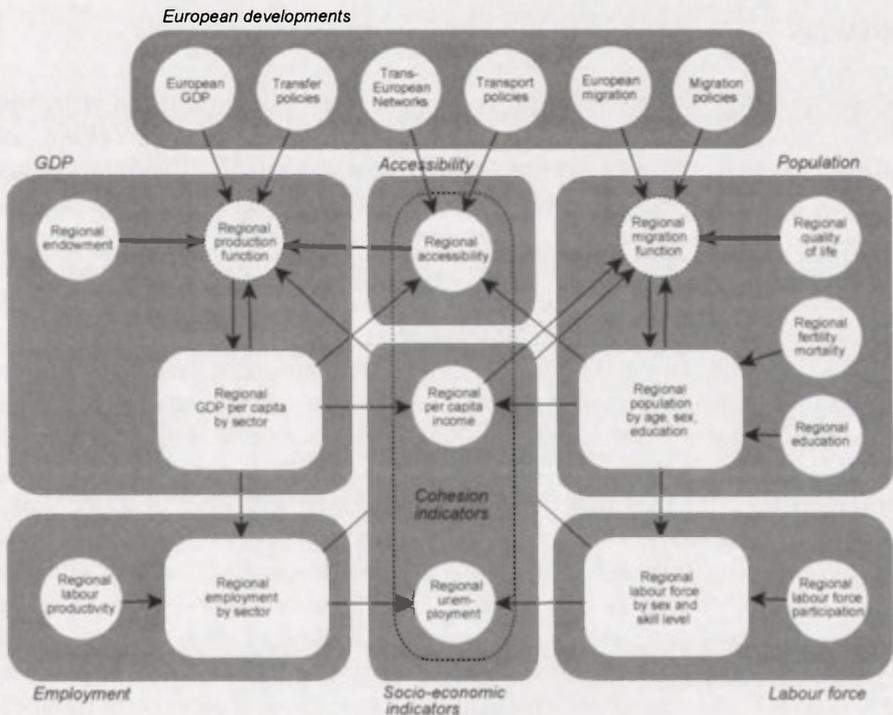


Figure 1. The SASI model

The spatial dimension of the model is established by the subdivision of the European Union plus Norway, Switzerland, Bulgaria and Romania in 1,321 regions and by connecting these by road, rail and air networks. For each region the model forecasts the development of accessibility and GDP per capita. In addition cohesion indicators expressing the impact of transport infrastructure investments and transport system improvements on the convergence (or divergence) of socio-economic development in the regions of the European Union are calculated.

The temporal dimension of the model is established by dividing time into periods of one year duration. By modelling relatively short time periods both short- and long-term lagged impacts can be taken into account. In each simulation year the seven submodels of the SASI model are processed in a recursive way, i.e. sequentially one after another. This implies that within one simulation period no equilibrium between model variables is established; in other words, all endogenous effects in the model are lagged by one or more years.

A detailed description of the original SASI model and the model extensions implemented in IASON can be found in Schürmann et al. (2001) and Bröcker et al. (2002a). The common spatial database used in IASON is documented in Bröcker et al. (2002b). All simulation results achieved with the SASI model are described in Bröcker et al. (2004).

SCENARIOS

A scenario in IASON is a time-sequenced programme of implementation of transport policy options. A base or reference scenarios, in which no network improvements after 2001 are assumed serves as the benchmark for comparing scenarios. The transport policy scenarios studied in IASON included network scenarios in which different schedules of implementation of transport infrastructure projects were assumed and pricing scenarios, in which different schemes of transport pricing were examined and various combinations of the above. In this paper only the reference scenario and four network scenarios relevant for the new member states are considered (see Table 1).

All scenarios rely on the trans-European transport network GIS database developed by the Institute of Spatial Planning of the University of Dortmund. The strategic road and rail networks used in IASON are subsets of this database, comprising the trans-European networks specified in Decision 1692/96/EC of the European Parliament and of the Council, further specified in the *TEN Implementation Report* and latest revisions of the TEN guidelines provided by the European Commission (2002) and the latest documents on the priority projects (European Commission 2003), the TINA networks as identified and further promoted by the TINA Secretariat (2002), the Helsinki Corridors as well as selected additional links in eastern Europe and other links to guarantee connectivity of NUTS-3 level regions.

The reference scenario, the benchmark for comparing the results of the policy scenarios, represents the actual development of the road, rail and air networks in Europe between 1981 and 2001. For all future years the reference scenario preserves the state of the networks in the year 2001, i.e. no further network development after 2001 is foreseen.

Table 1. Transport scenarios simulated in IASON

Scenario	Code
Reference scenario	000
Implementation of all TEN priority projects (Essen list)	A1
Implementation of all TEN and TINA projects	A3
Implementation of new priority projects	A51
Scenario A3 plus implementation of additional TINA projects	A61
Scenario A3 plus implementation of maximum TINA projects	A62

Scenarios A1, A3 and A51 assume different time schedules for the implementation of the TEN and TINA networks:

- **Scenario A1** assumes the implementation of the priority projects adopted in 1996 and in 2002 in the so-called Essen list (European Communities 1996; European Commission 2002). The Essen priority list put most emphasis on projects in central Europe and the so-called cohesion countries Portugal, Spain, Italy and Greece.

- **Scenario A3** considers all projects included in Decision 1692/96/EC of the European Parliament and of the Council (European Communities 1996) and reported in the *TEN Implementation Report* (European Commission 1998) as well as all projects reported in the *TINA Final Report* and *TINA Status Report* (TINA Secretariat 1999; 2002). Compared to the priority project scenarios, the scenario includes many more projects because the priority projects are only a subset of all TEN projects.

- **Scenario A51** assumes the implementation of the most recent proposal for the further development of the priority projects. The proposals date back to the high-level group on trans-European transport networks, the so-called Van Miert group (High Level Group 2003) and were subsequently revised by the European Commission (European Commission 2003). The new priority list for the first time includes projects in the new member states and the candidate countries Bulgaria and Romania, such as the high-speed rail lines from Trieste to Budapest, from Athens via Sofia and Budapest to Vienna and via Prague to Nürnberg and from Gdansk via Warsaw and Katowice to Brno/Zilina and the Rail Baltica from Tallinn to Warsaw.

In addition, two variants of the TINA outline plans for Eastern Europe were suggested (Komornicki and Korcelli, 2003). Both scenarios assume the same network development as in Scenario A3 in the countries of the European Union before its enlargement, i.e. the full implementation of the all TEN projects. With respect to new member states and the candidate countries Bulgaria and Romania, both scenarios are modifications of the TINA networks (TINA Secretariat 1999; 2002)

- **Scenario A61** represents a more realistic scenario which compared to the full TINA outline plan reduces the number of transport projects implemented. However, the scenario is more optimistic with respect to the general upgrading of the transport networks in the new member states. Almost all major roads are upgraded to motorways or

dual-carriageway roads and all main railway lines are upgraded to high-speed, including the rail connections between Berlin and Warsaw and Vienna and Budapest that were not included in the TINA outline plans, and the railway line Riga-Tallinn.

- **Scenario A62** represents a maximum development scenario featuring more transport projects than Scenario A61 but still less than in the TINA outline plan, in particular with respect to rail. Whereas the TINA outline plan mainly removes existing bottlenecks and Scenario A61 improves the access of capital cities, Scenario A62 connects all regional cities (defined as cities with a population of more than 300,000). Figures 2 and 3 shows all projects in the new Member States and Bulgaria and Romania included in the two scenarios.

RESULTS

The following paragraphs present the model results for scenarios A1 and A3 and A51 and A62 in terms of changes in accessibility and GDP per capita and their effects on cohesion.

ACCESSIBILITY

Accessibility is a core concept of the SASI model. Figures 4 and 5 show the changes in accessibility caused by the policies in the selected scenarios (i.e., the difference between the accessibility in the policy scenario and in the reference scenario in 2020). The classes of the legend and the colour code are identical in all maps to allow easy comparison. Dark colour shades indicate stronger positive differences (i.e. the accessibility in the policy scenario is higher).

As to be expected, the network scenarios A1 and A3 improve accessibility everywhere but to a different degree and not equally in all parts of Europe. The TEN priority projects of the Essen list (Scenario A1) aimed primarily at improving the accessibility of the peripheral regions in the Mediterranean and the Nordic countries (see Figure 4 left). Today, with the enlargement of the European Union, the task of better linking the new member states and the candidate countries Bulgaria and Romania to the European core has become more important. If all network links designated as TEN and TINA are assumed to be implemented as in Scenario A3, the gains in accessibility are much larger and more evenly distributed across the European territory (see Figure 4 right).

Figure 5 presents the effects of the additional network scenarios on accessibility. If one compares the accessibility effects of the new list of priority projects of Scenario A51 (Figure 5 left) with those of the Essen list of Scenario A1 (Figure 4 left), the differences seem not very great. However, the new projects in Poland and the Baltic states, which also improve accessibility in Finland, can be clearly identified. Figure 5 (right) showing the effects of the most optimistic interpretation of the TINA outline plan in Scenario A62 should be compared with Figure 4 (right), in which only the minimum implementation scheme of TINA projects in Scenario A3 is assumed. The results are quite spectacular with accessibility increases in Poland, Slovakia, Romania and Bulgaria and the Baltic states between 40 and 50 percent. Again, Finland participates in these gains, but also central Europe gains because of the improved access to eastern markets.



Figure 2. Scenario A61: additional TINA projects
<http://rcin.org.pl>

GDP PER CAPITA

The major policy-relevant output of the SASI model is regional GDP per capita, i.e. GDP totalled over all economic sectors divided by population.

Figures 6 and 7 show the changes in GDP per capita caused by the policies in the same set of policies as for accessibility (i.e., the difference between GDP per capita in the policy scenario and GDP per capita in the reference scenario in 2020). Again, the classes of the legend and the colour code are identical in all maps to allow easy comparison. Dark shades indicate positive differences (i.e. the GDP per capita in the policy scenario is higher), whereas light shades indicate negative differences. However, in contrast to the accessibility maps, now the regional GDP per capita are standardised as percent of the EU27+2 average, so that the generative effects of the GDP forecasts are neutralised and only the distributional effects are shown. This serves to demonstrate that even if the model predicts that all regions gain in GDP per capita, there are relative winners and losers.

Figure 6 demonstrates that regions that gain in accessibility also gain in GDP per capita. A comparison of Figure 6 with Figure 4 shows that if the TEN priority projects of the Essen list are implemented as in Scenario A1, the network improvements in the cohesion countries Portugal, Spain and Italy are successful in promoting economic development in these countries as intended. Figure 6 (right) shows that, as in Figure 4 (left), the implementation of all TEN and TINA projects would spread the impacts over a wider area including the new member states and candidate countries Bulgaria and Romania in eastern Europe.

The same relationship between accessibility and GDP per capita holds true for the two remaining scenario examples. The changes in GDP per capita resulting from the new priority projects in Scenario 51 (Figure 7 left) correspond with the changes in accessibility in that scenario in Figure 5 (left). A comparison with the GDP per capita in Scenario A1, in which the 'old' priority projects are implemented (see Figure 6 left), shows that the economic effects of the two priority lists are very similar, except that the new priority projects redress some of the disadvantages of the peripheral regions in eastern Europe. Not surprisingly, the massive network policies in Eastern Europe in Scenario A62 lead to significant additional economic growth in the new Member States and the candidate countries Bulgaria and Romania (Figure 7 right).

In this unstandardised form, all network scenarios have a positive effect on GDP per capita. As with accessibility, the largest effects are associated with the more comprehensive investment programmes: all TEN projects (Scenario A1) and all TEN and TINA projects (Scenario A3). The strongest effects are associated with Scenario 62 which assumes the maximum additional projects in eastern Europe. This confirms the hypothesis that massive improvements of the transport infrastructure in the new member states and the candidate countries Bulgaria and Romania would significantly help these countries to economically catch up with the old EU members states.

COHESION

Strengthening cohesion between the regions in the European Union and reducing the economic and social disparities between them is one of the main goals of the European Union. Transport policy is one of the major policy instruments of the European Union to



Figure 3. Scenario A62: maximum TINA projects
<http://rcin.org.pl>

serve this goal in conjunction with the goal to increase the economic competitiveness of regions. With the enlargement of the European Union, cohesion issues become of growing importance.

There are many possible ways to measure the cohesion effects of transport policy measures. Five indicators of territorial cohesion were applied to the results of the scenario simulations. The five indicators are:

- *Coefficient of variation (CoV)*. This indicator is the standard deviation of region indicator values expressed in percent of their European average. The coefficient of variation ranges between zero (no variation) and one (extreme polarisation).

- *Gini coefficient (Gini)*. The Gini coefficient measures the area between the accumulated distribution of sorted indicator values and the straight line representing an equal distribution. Like the coefficient of variation, the Gini coefficient ranges between zero (equal distribution) and one (extreme polarisation).

- *Geometric/arithmetic mean (G/A)*. This indicator compares two methods of averaging among observations: geometric (multiplicative) and arithmetic (additive) averaging. If all observations are equal, the geometric and arithmetic mean are identical, i.e. their ratio is one. If the observations are very heterogeneous, the geometric mean and hence the ratio between the geometric and the arithmetic mean go towards zero.

- *Correlation between relative change and level (RC)*. This indicator examines the relationship between the percentage change of an indicator and its magnitude by calculating the correlation between them. If the correlation between the changes in GDP per capita of the region and the levels of GDP per capita in the regions is positive, the more affluent regions gain more than the poorer regions and disparities in income are increased.

- *Correlation between absolute change and level (AC)*. This indicator is constructed as the previous one except that absolute changes are considered.

The coefficient of variation, the Gini coefficient, the ratio between geometric and arithmetic mean and the correlation between relative change and level measure relative differences between regions and classify a policy as pro-cohesion if economically lagging regions grow faster (in relative terms) than economically more advanced, i.e. more affluent regions. However, one percent growth in a poor region in absolute terms is much less than one percent growth in a rich region. Even if poorer regions grow faster than rich regions (in relative terms), in most cases the income gap between rich and poor regions (in absolute terms) is widening. Which concept of cohesion (or convergence or divergence) is applied, is a matter of definition—and political preference. It is therefore of great importance to clearly state which type of cohesion indicator is used in an analysis.

Tables 2 and 3 summarise the information gained from the five cohesion indicators for accessibility and GDP per capita.

The two tables show that with respect to accessibility, all network policies contribute to cohesion if one applies one of the first four indicators measuring relative convergence or divergence. However, if one consults also the fifth indicator, the picture is more complex as often the sign of the indicator is reversed. In terms of GDP per capita, the choice of the indicator is even more critical as now even the relative correlation indicator signals polarisation where the coefficient of variation and the Gini coefficient signal cohesion.

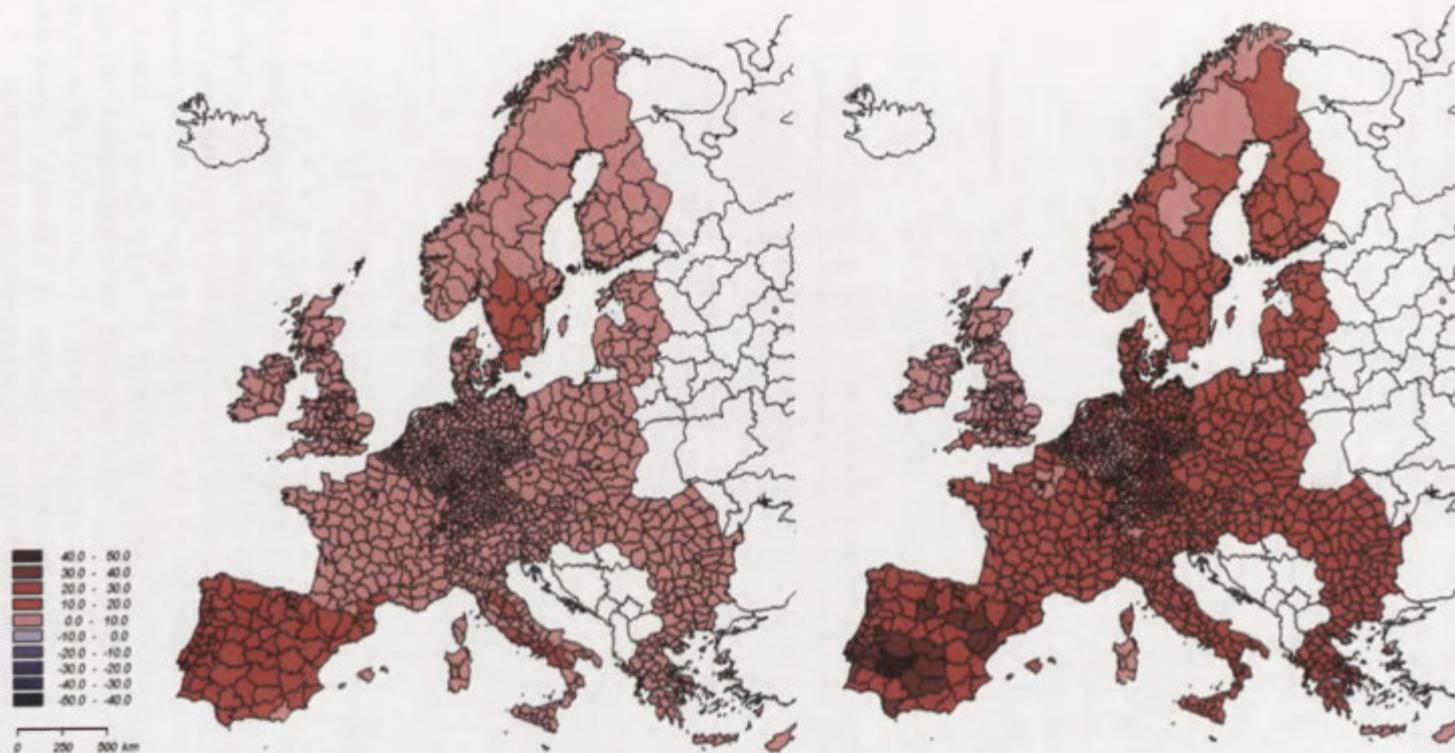


Figure 4. Percent change in accessibility rail/road/air (travel). Scenario A1: TEN priority projects (left), Scenario A3: all TEN/TINA projects (right)

<http://rcin.org.pl>

However here, too, the convergence effect, though only in relative terms, seems to be strongest in those scenarios in which transport investment is largest, i.e. in Scenarios A1 and A62.

Table 2. SASI model: accessibility cohesion effects

Scenario	Accessibility cohesion effects (+/-)				
	CoV	Gini	G/A	RC	AC
A1 TEN priority projects	+	+	++	+	-
A3 All TEN/TINA projects	++	++	++	++	-
A51 New priority projects	+	+	++	++	-
A61 A3 + additional TINA projects	++	++	++	++	-
A62 A3 + maximum TINA projects	++	++	++	++	-

+ / + + Weak/strong cohesion effect: disparities reduced,

- / - Weak/strong anti-cohesion effect: disparities increased,

· Little or no cohesion effect.

Table 3. SASI model: GDP per capita cohesion effects

Scenario	GDP per capita cohesion effects (+/-)				
	CoV	Gini	G/A	RC	AC
A1 TEN priority projects	+	+	·	-	--
A3 All TEN/TINA projects	+	+	·	+	--
A51 New priority projects	+	+	·	-	--
A61 A3 + additional TINA projects	+	+	+	+	--
A62 A3 + maximum TINA projects	+	+	+	+	--

+ / + + Weak/strong cohesion effect: disparities reduced,

- / - Weak/strong anti-cohesion effect: disparities increased,

· Little or no cohesion effect.

CONCLUSIONS

The main general result from the scenario simulations is that the overall effects of transport infrastructure investments and other transport policies are small compared with those of socio-economic and technical macro trends, such as globalisation, increasing competition between cities and regions, ageing of the population, shifting labour force participation and increases in labour productivity. These trends have a much stronger impact on regional socio-economic development than transport policies. If one considers that under normal economic circumstances the long-term growth of regional economies is in the range between two and three percent per year, additional regional economic growth of less than one or two percent over twenty years is almost negligible.

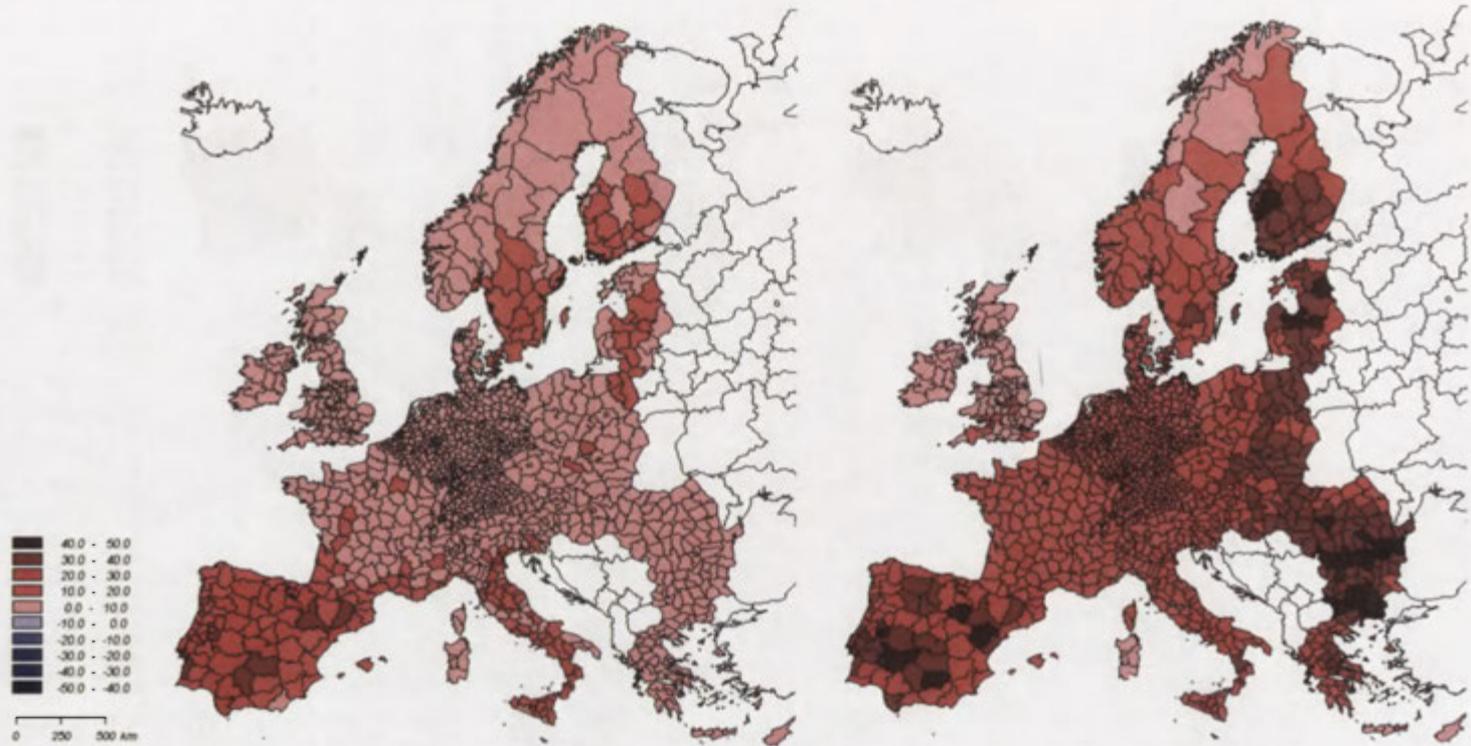


Figure 5. Percent change in accessibility rail/road/air (travel). Scenario A51: new priority projects (left), Scenario A62: Scenario A3 plus maximum TINA projects (right)

<http://rcin.org.pl>

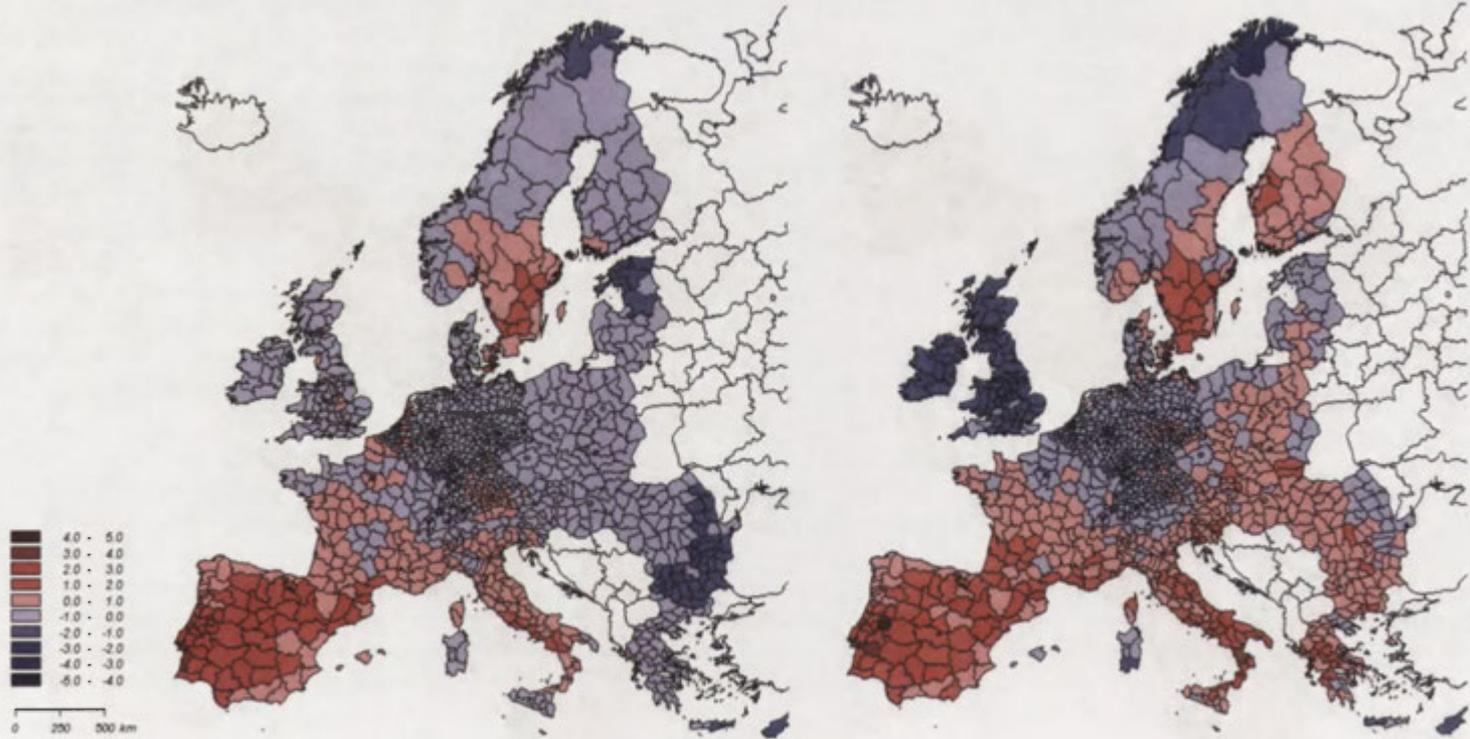


Figure 6. Percent change in GDP per capita (EU27+2=100). Scenario A1: TEN priority projects (left), Scenario A3: all TEN/TINA projects (right)

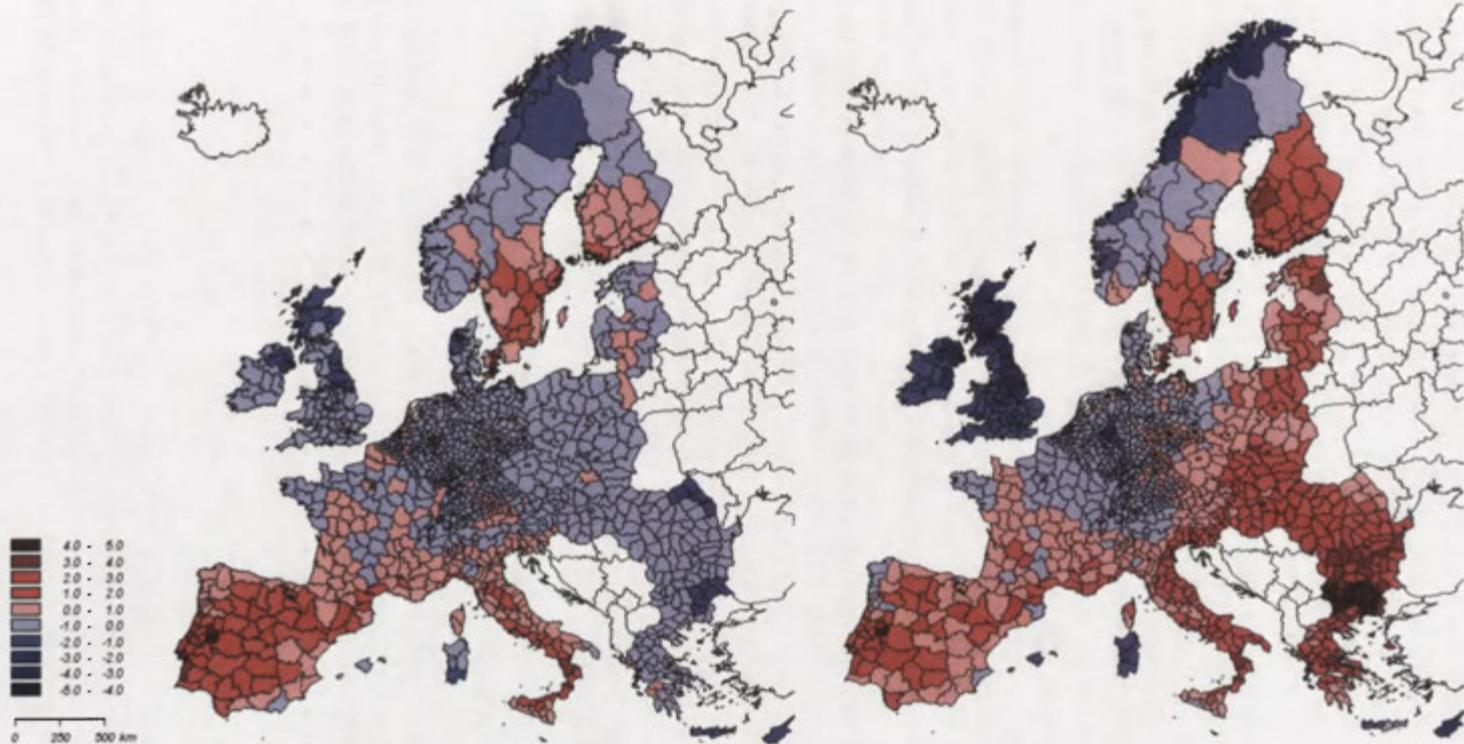


Figure 7. Percent change in GDP per capita (EU27+2=100). Scenario 51: new priority projects (left), Scenario A62: Scenario A3 plus maximum TINA projects (right)

<http://rcin.org.pl>

The second main result is that even large increases in regional accessibility translate into only very small increases in regional economic activity. However, this statement needs to be qualified, as the magnitude of the effect seems to depend strongly on the already existing level of accessibility. For regions in the European core with all the benefits of a central geographical location plus an already highly developed transport and telecommunications infrastructure, additional gains in accessibility through even larger airports or even more motorways or high-speed rail lines may bring only little additional incentives for economic growth. For regions at the European periphery, however, which suffer from the remote geographical location plus an underdeveloped transport infrastructure, a gain in accessibility through a new motorway or rail line may bring significant progress in economic development. But, to make things even more complex, also the opposite may happen if the new connection opens a formerly isolated region to the competition of more efficient or cheaper suppliers in other regions.

As regards the cohesion goal, the situation is complex. There are several methods and indicators to measure the contribution of a policy or policy combination to the cohesion objective. However, these methods and indicators give partly contradictory results. In particular the most frequently applied indicators of cohesion, the coefficient of variation and the Gini coefficient, tend to signal convergence where in many cases in fact divergence occurs. Beyond these methodological difficulties, it has become clear that many infrastructure investment programmes of the past have been anti-cohesion, i.e. have contributed to widening the spatial disparities between central and peripheral regions in Europe. This is even true for the 'old' list of TEN priority projects. The 'new' list of priority projects is a clear advance in this respect. However, there is room for improvement, as some of the scenarios have shown. The simulations have demonstrated that rapid upgrading and extending of the rail and road infrastructure in Eastern Europe would contribute to the economic and social integration of the new Member States after the enlargement of the European Union.

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DETERMINING REGIONS WITH PARTICULAR NEEDS FOR POLICY INTERVENTION AFTER EU ENLARGEMENT—A QUANTITATIVE APPROACH

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Key words: policentric development, EU's enlargement, sustainable development, European space

INTRODUCTION

The European Spatial Development Perspective (ESDP) aims at achieving a balanced and sustainable development of the territory of the European Union. Hereby the development of a polycentric urban system is seen as a key tool to fulfill the objectives of competitiveness and cohesion. The interest in polycentric development is fuelled by the hypothesis put forward in the ESDP that polycentric urban systems are more efficient, more sustainable and more equitable than both monocentric urban systems and dispersed small settlements. There are various spatial relevant development trends affecting the European territory. Along with each trend comes the pressure to adapt to changes leading to reorganisation of the national and European urban system(s) at varying speeds and levels. The outcome of reorganisation, however, will be different for different structural types of regions and will also depend on which impact integrational forces issuing from enlargement (Europeanisation) may have. Against this background we set out to apply a composite perspective asking where in the ESPON space¹ there are structural types of regions that may be in need of various policy interventions to attain the normative territorial goals of competitiveness and cohesion, in particular when taking into account the EU's enlargement. Hereby we seek to identify those parts of the territory, which are likely to be problematic in the development of a spatially balanced polycentric structure, allegedly crucial to the realisation of the normative territorial goals. The work on determining regions with particular needs for policy intervention after EU enlargement is conducted

¹ ESPON space refers to EU25 plus Bulgaria, Norway, Romania and Switzerland.

as part of the ESPON 1.1.3 project². What follows is a shortened version out of the preliminary results from the project's 3rd interim report including first tentative reflections on possible policy implications.

APPROACH

In order to target all regions of the ESPON space and hence to build European-wide typologies of regions with particular needs for policy intervention after EU enlargement we focus on those characteristics allowing for complete quantitative observation at NUTS 3 level. The selection is based on implicit hypotheses on what constitutes the region's strengths and weaknesses in the new economic integration process. Assumptions are made for particular structural types of regions for which enlargement may mean extraordinary pressure to reorganise their urban structure in a way counteracting the development of a balanced polycentric spatial tissue across the ESPON space.

The theoretical foundations for these hypotheses are linked to fields of regional economy as economy of scale, agglomeration theory, path dependency and network theory. Empirical evidence of spatial implications registered after the previous enlargement involving new member states with considerable handicaps in terms of economic performance and income standards, i.e. the accession of Greece, Portugal and Spain in the 1980s, form another basis for selecting criteria for the typologies.

Each typological scoping is approached as follows:

- Step 1: Formulating a hypothesis on a certain problematic structural type of region.
- Step 2: Deriving a set of indicators suitable to identify these type of region.
- Step 3: Determining regions with particular needs through combination of extreme indicator values.

PRINCIPLES AND INDICATORS

Following a hypothesis on a certain problematic structural type of region an indicator set of five indicators is defined describing five regional characteristics relevant to the assumption made. By looking at the extreme indicator values it can be ascertained firstly, to which extent the structure of a region may be problematic within the context assumed (i.e. number of indicator values in highest or lowest quartile) and secondly, which characteristic(s) are most relevant to give the region a problematic structure (i.e. type of indicator value(s) in highest or lowest quartile). The more extreme indicator values (positive or negative) are evident in a region the more the region may be exposed to the assumed effect of enlargement.

Based on the current availability of harmonised data for the entire ESPON space at NUTS 3 level the following regional characteristics can be observed:

- *Total population* reflecting the current size or mass of the respective region as such and the potential regional labour supply in general.

² ESPON 1.1.3: Enlargement of the European Union and the wider European perspective as regards its polycentric spatial structure. For further information visit www.espon.lu.

- *Demographic trend* describing an increasing or declining regional population.
- *Economic performance* indicating the level of wealth as well as the costs of labour in the region.
- *Trend in economic growth* indicating the development of the regional economy in general and in comparison to the total European economy (diverging or converging).
- *Industrial specialisation* reflecting the dependence on primary, secondary and tertiary sector production.
- *Potential accessibility* reflecting both the region's advantage in location within the European and its respective national context.

In an enlarged EU we suppose four structural types of regions to be in particular need for coordinated policy intervention at EU, national and regional level, namely the 'Shrinking', 'Rust-belt', 'Fringe' and 'Rustic' Communities. For the latter two types of regions an introduction is given below.

REGIONS WITH PARTICULAR NEEDS FOR POLICY INTERVENTION AFTER EU ENLARGEMENT

The following draft typologies identify regions that are likely to be affected negatively by enlargement. Here it is observed how many of the five indicators do score their values in the lowest quartile, e.g. in the negative extreme. At the same time there are also regions that will experience positive impact of enlargement. Both types of regions should be discussed together if one aims to conclude on policy needs to develop i.e. a balanced polycentric tissue for the ESPON space. However, this remains to be incorporated.

EU'S 'FRINGE' COMMUNITIES

Ceteris paribus, regions with peripheral location, low population density, low level of economic wealth and currently slow economic growth are expected to be less attractive for private investors and qualified mobile labour than other regions. We assume that a low level of wealth and slow economic growth in the recent past reflects poor competitiveness of the regional economy in a situation where international competition was less fierce than in the enlarged EU. Based upon experiences from previous enlargements we also assume that the centre periphery pattern will be accentuated as competition is strengthened.

Three groups of indicators are used to distinguish the EU's 'Fringe' communities (regions), namely accessibility indicators, population indicators and economic indicators. The complete set is listed in Table 1. Low indicator values (or decrease) indicate 'Fringe' characteristics.

Figure 1 depicts the EU's 'Fringe' communities. Indicator I11 (accessibility) is here used without the national dimension, which remains to be incorporated. There are no extreme 'Fringe' communities in the ESPON space. However, for some three percent of the ESPON space NUTS 3 regions score at least four indicator values in the lowest quartile. These regions are mainly located in Romania, Bulgaria, Greece, Portugal, Scotland and in the coastal parts of East Germany. Furthermore Haute-Alpes in France, the Swedish regions of Jämtland and Gotland as well as Kainu and Ita-Uusimaa in Finland also belong to this group. The region

of Itä-Uusimaa located adjacent to Helsinki receives its strong 'Fringe' status mainly due to a small total population and a relative decrease of its GDP (PPS) per capita as compared to the EU15 since the population strongly increased during the period in question.

'Fringe' regions tend to be located at just the periphery of the European space. Primarily due to their low population density and their distance from major hubs of economic activity (with important exceptions for Portugal and Greece) it could be assumed that these areas are important areas of natural conservation and/or experience relatively few pressing environmental problems in the rural areas. Therefore any policies attempting to increase accessibility and economic growth in these areas should be careful to not do this at the expense of nature or cultural landscapes and this may be a fine line to tread. At the same time the problems associated with social cohesion may be the most pressing problems requiring Structural fund intervention and national policy interventions. By means of national policies, extended social policy should be developed to *secure key service provision* in Europe's 'Fringe' communities. The EU should provide guidelines for which services should be considered as minimum standard for service accessibility in small cities of Europe. Extended Neighbourhood policies should be addressed to capture the fringes and border regions of the enlarged EU.

Table 1: Indicators for determining 'Fringe' communities

Indicator	Year(s)
I11 Accessibility (European + EU15 +EU10/AC2 + National)	2001
I12 Population density (inhabitants/km ²)	2000
I13 Total population	2000
I14 GDP (PPS) per capita	2000
I15 GDP (PPS) per capita, relative change to EU15 average	1995–2000

EU'S 'RUSTIC' COMMUNITIES

Regions specialising in primary production with low income levels and a slow rate of structural transformation towards the secondary and tertiary sector in the recent past are more likely to experience poor economic growth rates in the near future than other agriculture-dominated regions. We assume that current low income and technology levels in agriculture will not attract investments in agriculture in these communities as much as in other more high technological agricultural regions. We also assume that the slow rate of transformation from the agrarian economy in the past reflects the fact that the manufacturing and service sectors did not find these regions attractive as economic locations in the pre-accession situation, when international competition was less fierce than after enlargement.

The EU's 'Rustic' communities are determined by looking at the regional industrial structure with focus on the primary sector. In addition, productivity is indicated for the total regional economy and for the primary sector. In the latter case the size of agricultural land per person employed in the primary sector is measured. Here it is assumed that fewer workers are needed to exploit a square kilometer of agricultural land as the primary sector becomes more competitive. Unfortunately using agricultural employment instead of primary

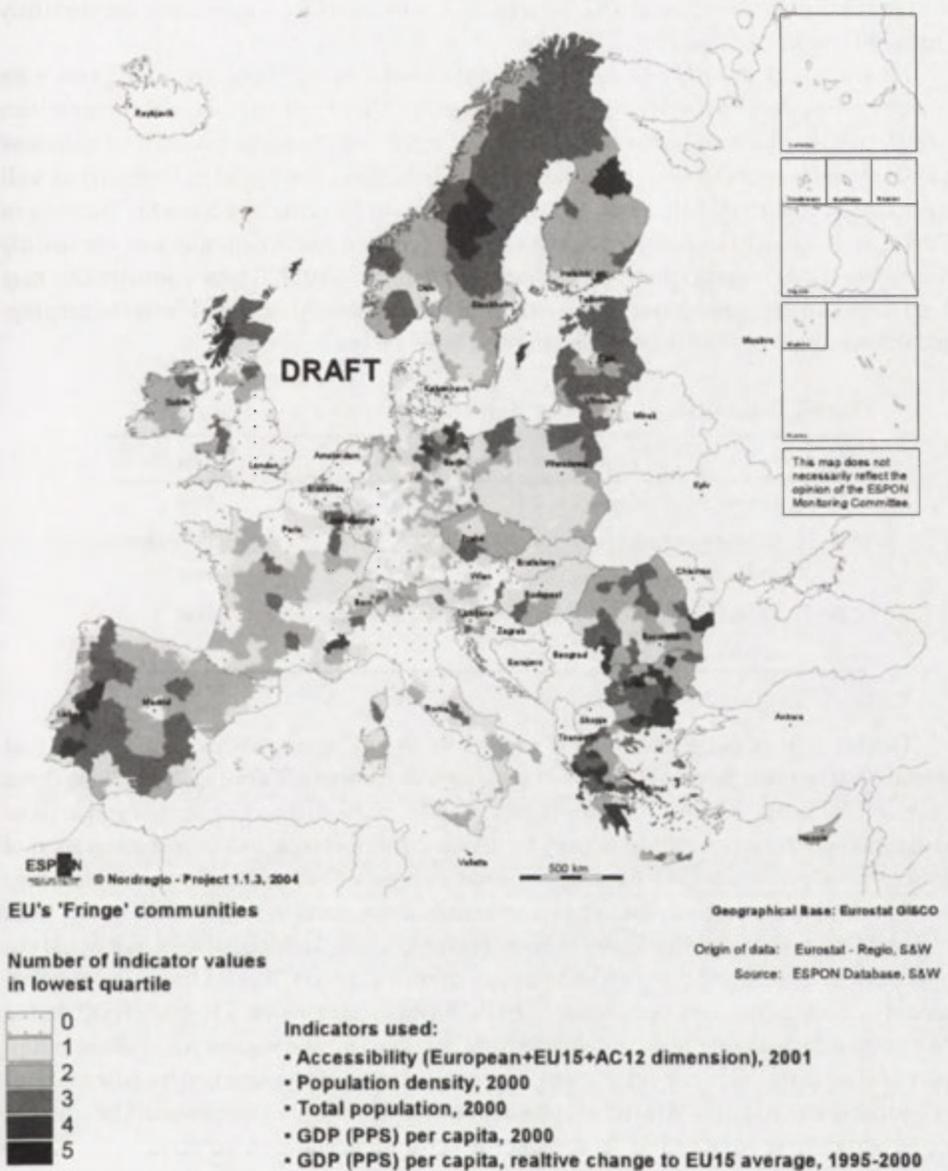


Figure 1. EU's 'Fringe' communities

sector employment was not possible due to data gaps. Hence regions with a high share of employment in fishery or forestry tend to also turn out as being less competitive in this regard.

Table 2 shows the complete set of indicators. Generally low indicator values make a region more 'Rustic'. The exception here is the primary sector employment where

a high value indicates 'Rustic' characteristics. Unfortunately all indicators are currently just available for the mid 1990s.

Figure 2 puts the EU's 'Rustic' communities on a map. There are six regions with all indicator values in the lowest (highest) quartile. These extreme 'Rustic' communities are all together located in Romania. The very rustic communities having four indicator values in the lowest (highest) quartile are primarily also to be found in Romania as well as in Bulgaria, Latvia, Lithuania, the Czech Republic, Slovenia and Slovakia but even in Portugal, Italy and Greece. Hence the extreme types of rustic communities are mainly located in the accession countries and new EU member States. These communities may tend to be heavily agricultural areas. However, this can hardly be stated from the employment data since they also include fishing and forestry.

Table 2. Indicators for determining 'Rustic' communities

Indicator	Year(s)	
I21	Primary sector employment, share	1996
I22	Primary sector employment, share, change p.a.	1991–1996
I23	GDP (PPS) per person employed	1996
I24	Agricultural land (km ²) per person employed in primary sector	1990
I25	Tertiary sector employment, share	1996

The key type of policy intervention needed for 'Rustic' communities may be those that revitalise the growth process but do so in a sustainable manner not drastically breaking down the resource base on which the employment is founded. Achieving economic cohesion in these communities will be primarily a priority for EU and national policy. Coherent integration of sectoral policies (such as CAP funding, environmental policy and national resource laws) may be of particular importance here. These communities may stand to benefit most greatly from increased accessibility and measures to boost polycentrism at the national level as it would enable them to more easily bring goods to major economic centers. Rural Development Policy should respond to the enormous needs in EU's 'Rustic' communities. The EU's RDP should be broadened to focus more on sustainable rural development and suggest possibilities to support funding of the often risk-filled attempts to switch to more environmental friendly methods of agricultural production. The RDP budget in old and new member states should be adjusted to the particular needs for rural development and environmental management.

FORTHCOMINGS

The next steps envisaged are the finalisation of the typological work including improvement and updating of the typologies at hand as well as elaboration of the typologies on the two structural types of regions not got into here; that is 'Shrinking' and 'Rust-belt' communities. All four typologies are expected to be available with the final report of the ESPON 1.1.3 project to be delivered in December 2005.

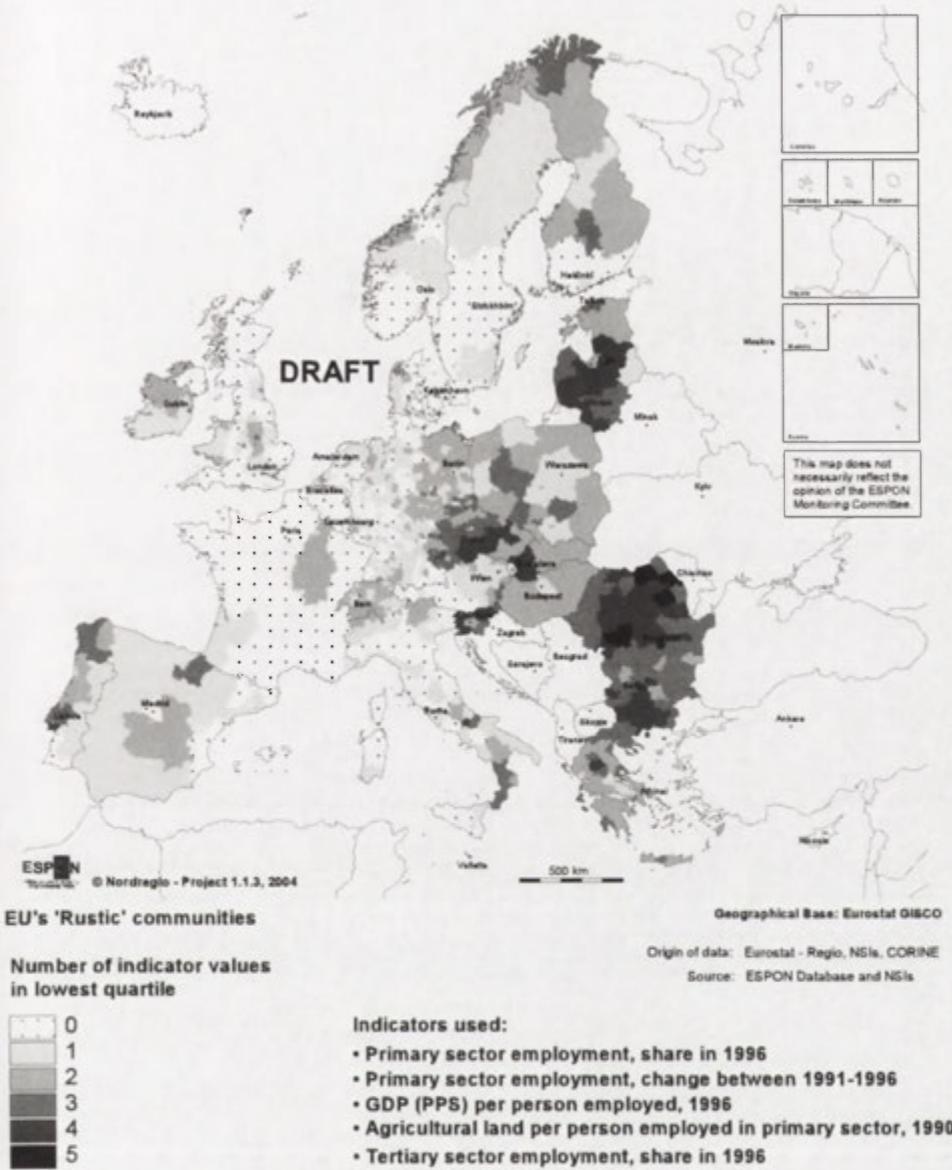


Figure 2. EU's 'Rustic' communities

DRAFT

INTERNATIONALIZATION OF THE ECONOMY AS A FACTOR IN THE TRANSFORMATION OF EAST-CENTRAL EUROPE

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Key words: East-Central Europe, transformation, internationalization of economy, foreign investments

Leaving apart the debatable problem of where the borders of the East-Central Europe (E-CE) region might be, we shall conventionally use this term to describe the post-communist countries of this part of the continent.

There are many processes accompanying the transformation of the economies of these countries, including:

- deregulation of the previous interventionism of the state as regards the scope and methods of management,
- changes and transformations in the material sphere of production structures,
- liberalization in regard to the creation of markets,
- privatization and attempts at re-privatization,
- internationalization expressed through the integration of the economy and internal markets into international markets, as well as the enhanced mobility of people (Kostrubiec and Łoboda 1997).

Economic integration (Makac 2001) also means the elimination of the borders between economies and the competition associated with this process (Daszkiewicz 2003).

In this context, the process of internationalization of the economy gains a special meaning (Komorowski 1999), which, although being defined differently, always means the broadening of the economic activity of a country and its entry onto foreign markets. Different aspects of the internationalization process combine with the diversity of the factors affecting it to allow for a wide variety of studies and interpretations thereof.

The present dissertation of necessity confines itself to three essential aspects of internationalization, i.e.:

- the state (i.e. the scope, pace and directions) of foreign direct investment in E-CE

- the extent of and changes in the current linkages of the countries in question when it comes to their foreign trade with other countries (with whom the E-CE countries exchange goods the most)
- the provision of services during the transformation of the economies and the income and expenditure connected with foreign tourism

FOREIGN DIRECT INVESTMENT

E-CE countries, which are centrally situated in Europe and have a large market of more than 350 million people, are still considered inferior to other markets in the world, because they used to produce many defective/inalienable goods. The changes that have occurred in their economies during the transformation period have triggered off the introduction of necessary but expensive investments in the modernized sectors. At present, with the co-operation of international economic entities, they are trying to make up for the backlogs in both domestic and foreign investments. However, the scale of these investments is still not very large.

We should moreover bear in mind that foreign direct investment creates new jobs, and—by modernizing the economy—allows for an increase in export and consequent activation of economic growth. According to the UNCTAD conference in 2001, most of the investing capital comes from 63,000 corporations which run over 800,000 branches abroad and which sell their goods for an amount twice as great as the value of world exports.

Investment capital is usually located in the highly-developed countries, first and foremost the USA. Western Europe is the only region which exports more capital than it attracts. Over 95% of all the capital is attracted by just 30 countries, among which the EU member states, USA and Japan were responsible for exchanges worth over one trillion USD. Together, the E-CE countries attracted only 2% of all foreign direct investment.

The earliest inflow of foreign capital to E-CE countries in transition came in 1967, in the case of the former Yugoslavia. This was followed by Hungary and Poland. However, the legal arrangements and various settlements connected with the founding of mixed-capital output and service-sector firms was only settled in most of the E-CE countries in 1990/91, or as late as in 1992 in the cases of Latvia, Moldova and Russia.

Since that time, foreign direct investment has ceased to be of political and ideological significance, becoming instead a normal export of capital, linked more and more strongly with the processes of globalization of the economy.

Most of the FDI located in the E-CE area in the years 1990–2000 (in such various forms as the purchase of an industrial plant, entry into co-operation with local firms or creation of a new firm from scratch) went to Poland—36.5 billion USD, the Czech Republic—21 billion USD, Hungary—19.9 billion USD and Russia—19.2 billion USD.

In terms of capital per capita, the most significant amount of FDI has been attracted to Hungary, the Czech Republic, Estonia, Slovenia and Poland.

The year 2000 proved a record one for Poland, as 10 billion USD flowed in. A similar situation applied to the other E-CE countries, other than the Russian Federation, in which these processes were delayed significantly. In the first years of the 21st century, the level of

Table 1. Foreign direct investment in the period of 1990–2000 from the beginning of realization

Countries	1990	1995	2000	1990	1995	2000	1990	1995	2000	1990	1995	2000
	in mln USD			in % of gross domestic product			in mln USD			in % of gross domestic product		
	Foreign direct investment inside the country						Foreign direct investment outside the country					
Belarus	=*	50	1243	=	0,3	8,3	=	8	16	=	=	0,1
Bulgaria	108	445	3404	0,5	3,4	19,8	=	105	88	=	0,8	0,7
Croatia		447	4927	=	2,5	20,2	=	703	1052	=	3,7	5,1
Estonia	=	674	2840	=	18,6	47,9	=	68	429	=	1,9	5,3
Lithuania	=	352	2334	=	5,8	19,4	=	1	29	1,0	1,3	3,6
Lativa	=	616	2081	=	13,8	26,9	=	231	241	=	5,2	3,7
Poland	109	7843	36475	0,2	6,6	17,2	95	539	1491	0,2	0,5	0,9
Czech Republic	1363	7350	21095	4,3	14,5	33,0	=	345	784	=	0,7	1,3
Russian Federation	=	5465	19245	=	1,6	4,4	=	3015	11637	=	0,9	2,3
Romania	766	1150	6439	2,0	3,2	16,1	66	121	122	0,2	0,3	0,4
Slowakia	81	1268	4892	0,6	7,3	14,6	=	374	320	=	2,2	1,5
Slovenia	666	1763	2865	3,8	9,4	13,0	258	504	655	1,5	2,7	2,9
Ukraine	=	910	3843	=	2,5	10,5	=	97	106	=	0,3	0,3
Hungary	569	10007	19863	1,7	22,4	39,9	197	383	2012	0,6	0,9	3,2
World	1888672	2937539	6314271	9,2	10,3	17,3	1717444	2879380	5976204	8,6	10,2	16,7

* No data available

Source: Year – book of International Statistics 1990, 1995, 2000

investment of this kind has fallen inter alia in Poland (from 5.7 billion USD in 2001 to 4.2 billion USD in 2002) and Hungary [respective figures of 2.4 and 0.9 billion USD].

Thus far most FDI in Poland has been located by the French (8.5 billion USD as of 2001), Americans (7.4 billion USD), Germans (6.3), Dutch (4.4), Italians (3.4), British (2.6), as well as by international corporations.

The commonest and largest investments were those made in the financial institutions (12.4 billion USD), transport, machine production and communications (5.6), food products, drinks and tobacco production (5.4), transport equipment production (5.3), and trade and repair (4.4 billion USD).

During the last decade, Poland has gained around 55 billion USD from investors all over the world, ensuring that it accounted for one-third of all of the FDI in the E-CE countries. The investors were mainly attracted to Poland by its economic growth, cheap labor and privatization.

FDI has begun to play a significant role in the generation of GDP in the E-CE countries. This was in particular demonstrated in the decade in question for Estonia (47% of gross domestic product), Hungary (40%), the Czech Republic (33%), Latvia (27%), and Poland (17%). This leaves that last at somewhat below the world average of 17.3%.

In comparison to domestic investments, the foreign investments of the E-CE countries are minute. Only the Russian Federation has located 11.6 billion USD in other countries in the period 1990-2000, which nonetheless was only 2.3% of its gross domestic product. The proportionality between foreign investments and gross domestic product was relatively most favorable in Estonia and Croatia (around 5% of GDP) and Latvia and Hungary (more than 3%). In Poland they were quite low, at around 1%.

Nonetheless, Polish firms are investing more and more abroad. Our foreign direct investment over the last 9 years was as follows (numbers given in million USD according to the National Bank of Poland):

1994–461	1999–1024
1995–539	2000–1018
1996–735	2001–1156
1998–1165	2002–1453

What is more, there are cases of takeovers of foreign shareholders, as for example when Unimil Co. in Krakow bought out their owner, the German holding Condomi AG (the company produces condoms); Big Star Limited in Kalisz (they represent the clothing branch) bought brand-name rights back from its Swiss mother-company and anticipates its takeover; and Grajewo Co. (a company producing fiberboards) has bought out shares in a sister firm Propan Co., which is a part of the currently crisis-hit German concern Pfeiderer (Newsweek 38-2004). This is a symptom of the loosening of the financial bonds of the old companies, creating prospects for the E-CE companies to take their place on the European market, as well as being a signal of changes ongoing in European economic space.

In general, we may notice that there is a great variety of foreign investments in individual countries of the region and that the amount of money invested is a reflection of the state of their economies and owned resources, the time of joining the free market, and most especially the disparity between the labor costs of neighbor countries and origin countries of investors (Haas and Loboda 1999). The size of the internal market seems to

be of significance as well, although the greater part of the output of those economic entities with foreign capital is anyway being directed to other countries.

Although the three most recent years have brought a significant decrease in the scale of inflow of foreign investment into the E-CE countries (i.e. Poland and Hungary), as a result of a wider economic recession (currently slowing down), the enlargement of the EU to include 10 new accession countries (including E-CE countries), creates a chance for their renewed, diversified and dynamic growth.

FOREIGN TRADE

There was previously a monopoly on foreign trade in Poland, as well as in other post-communist countries. In practice this meant full control and effecting of foreign trade engaged in by state-owned headquarters and specialized branches. Thus, trade served foreign policy and was subject to shaping of its size, structure and spatial distribution from above. It also influenced the administration of funds earned.

As a result, trade was generally oriented towards the nearest political partners, and above all aimed at neighbors and partners at a similar level of development (and only then to more highly-developed countries or countries under development).

We may formulate a general thesis that the E-CE countries were and still are 'not very commercial', which is to say that they have low foreign trade indices in general and quite low indices for import and export per capita, to say nothing of the minute share of world foreign trade they take (Łoboda 1996).

In 2001, Russia accounted for the largest share of world exports of any of the countries in question (1.7%), followed by the Czech Republic and Poland (0.6% each), Hungary (0.5%) and Latvia (0.3%). Other countries took shares of around 0.1–0.2%. The shares in world export were somewhat alike: Poland had the biggest share at 0.8%, Russia a share of 0.7%, the Czech Republic and Hungary of 0.6% each, and the other countries of 0.1–0.2%. This signifies a little improvement in relation to the situation between 1980 and 1994, when there was an apparent breakdown in trade turnover of the countries mentioned with foreign countries (Kostrubiec and Łoboda 1997). Currently, Poland, the Czech Republic and Hungary are improving their position in this respect.

In 1995 Russia had the highest figure for the value of exports—78,217 million USD, followed by Poland—22,885 million USD, the Czech Republic—21,657 million USD, Ukraine—13,317 million USD and Hungary—12,867 million USD. Seven years later (that is in 2002) the order was similar, but Hungary, Slovenia, Slovakia and Romania had all improved their positions.

In 1995, Russia also took first place as regards its imports, worth 46,709 million USD, though its share of imports had decreased to 41,579 million USD by 2002. Poland had taken its place, with 55,113 million USD in 2002 (cf. 29,265 million USD in 1995). The next places were taken by the Czech Republic and Hungary, while more distant places were held by Romania, Slovakia and Slovenia.

That said, it needs to be noted that a more informative and reliable index in the present context would be the turnover with foreign countries per capita.

Table 2. Imports and exports (current prices) in 1995 and 2002

Countries	1995	2002	1995	2002	1995=100	1995	2002	1995	2002	1995=100
	Imports in mln USD		Imports per capita in USD		Dynamics	Exports in mln USD		Exports per capita in USD		Dynamics
Belarus	5563	8141	541	817	=	4707	7484	458	751	=
Bulgaria	5655	7806	672	1002	=	5352	5578	636	716	=
Estonia	2545	4810	1720	3534	=	1838	3166	1242	2530	=
Lithuania	3649	7709	984	2094	=	2705	5406	729	1487	=
Latvia	1818	4054	724	1695	=	1305	2284	520	955	=
Poland	29050	55113	753	1442	229	22895	41010	593	1073	211
Czech Republic	25265	40723	2446	3973	185	21657	38359	2097	3742	199
Russian Federation	46709	41579	315	288	=	78217	99233	528	687	=
Romania	10278	17802	453	800	251	7910	13876	349	621	215
Slovakia	8770	16626	1636	3074	=	8632	11849	1610	2674	=
Slovenia	9492	10932	4470	5513	143	8316	10357	4179	5223	154
Ukraine	16052	=*	310	236**	=	13317	=	257	231	=
Hungary	15446	37612	1512	3812	251	12867	34337	1258	3480	268
WORLD	5083736	6002045	898	978	139***	5045095	5803882	891	946	141***

* no data available; ** Estimative data,*** Excluding ECE and former USSR

Source: Statistical Yearbook 2003, GUS, Warsaw

In terms of export per capita in 1995, the highest values were those attained by Slovenia (4179 USD per capita), then the Czech Republic—2097 USD, Slovakia—1610, Hungary—1258 and Estonia—1242 USD. The figure for Poland was of barely 593 USD. The order was comparable in 2002, but Hungary has gone up to third place after Slovenia and the Czech Republic. Poland, though still having a lower figure than the other E-CE countries, had doubled its share over the 7 years.

Slovenia also noted the highest indices for import in the time in question, these having risen from 4470 USD in 1995 to 5513 USD in 2002. The Czech Republic came second, with 2446 USD in 1995 and 3973 in 2002. Estonia was next with 1720 USD in 1995 and 3534 in 2002. The corresponding figures for Slovakia were 1636–3074 USD, Hungary 1512–3812 USD, and Poland just 753–1442 USD.

Hungary has displayed the greatest dynamic to turnover with foreign countries in the recent seven years, its figure being one-third above the world average.

The discussed period also witnessed a change in the E-CE countries in the structure of commodity imports and exports. In 2002, the dominant commodity groups dominating in almost all of the countries were products of industrial processing, and machines, devices and means of transport. Belarus and Ukraine represented exceptions here, in that their main foreign trade was in mineral fuels, greases and their derivatives.

In the years since 1990, all of the post-communist countries (including those in Table 2), have adopted a new system of trade accounts based on exchangeable currencies and world prices. Consequently, the years since 1991 have seen new trade rules between the E-CE countries adopted, with a resulting decline in turnover between them and an increase in the volume of trade with developed countries.

From that time, and especially since 1994, it has been possible to speak about certain tendencies for individual countries and groups thereof as regards the shaping of relations with the most important partners.

The first group of countries that are close to each other in terms of their economies and spatially are the CEFTA countries: Poland, the Czech Republic, Slovakia and Hungary. Their most important export partner is Germany (Figure 1).

While another important partner for Poland is France, in the case of the Czech Republic it is Slovakia, in the case of Slovakia—Italy and in the case of Hungary—Austria. The USA, UK and The Netherlands are also of significance to the E-CE countries in terms of export. Germany is also of the greatest significance as regards imports to the E-CE countries, with Russia being another great partner for Poland, the Czech Republic and Slovakia, while Italy is of importance for Hungary. Moreover, Russia and Italy take third position where imports to Poland and Slovakia are concerned. When it comes to imports to the discussed countries, France, Austria and Great Britain took fourth and fifth positions.

A distinctly different arrangement of trade links is characteristic of Russia, Belarus and Ukraine (Figure 2). Although Germany is the most important partner in terms of export for Russia, the Russian Federation plays the most important role for both Belarus and Ukraine. Other important export partners are Latvia, Lithuania and Poland for Belarus, Italy, Belarus, China and Ukraine for Russia and Turkey, Germany, the USA and Italy for Ukraine. The dominant partners where import to the aforementioned group of countries is concerned are Germany and Russia. Russia is of greatest importance as re-

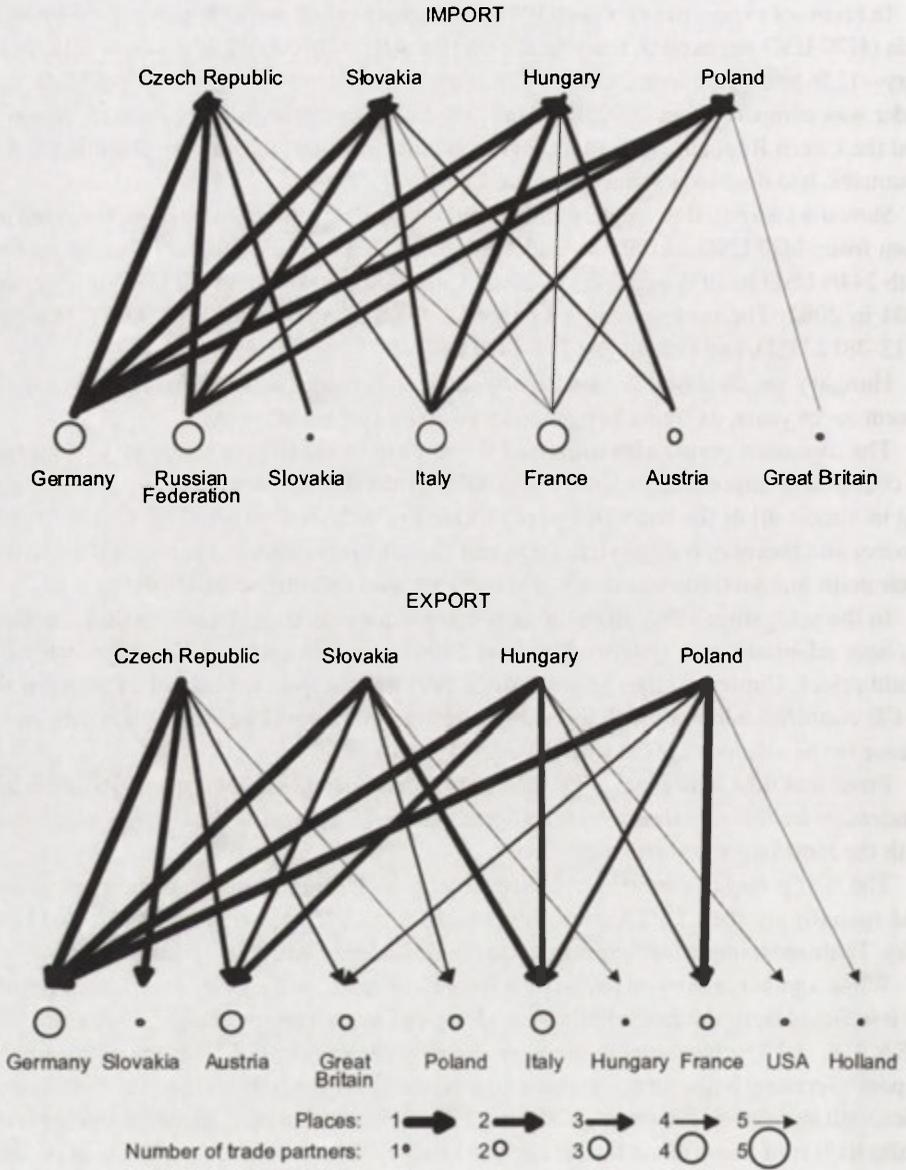


Figure 1. The main trading partners of the Czech Republic, Poland, Slovakia and Hungary in 2002
 Source: Yearbook of International Statistics 2003, GUS (Central Statistical Office), Warsaw.

gards imports in the cases of both Belarus and Ukraine. On the other hand, Belarus and Ukraine are still among the most important partners for the Russian Federation, holding second and third positions respectively. Other important import partners in this group of countries are Italy, the USA, Kazakhstan and Turkmenistan.

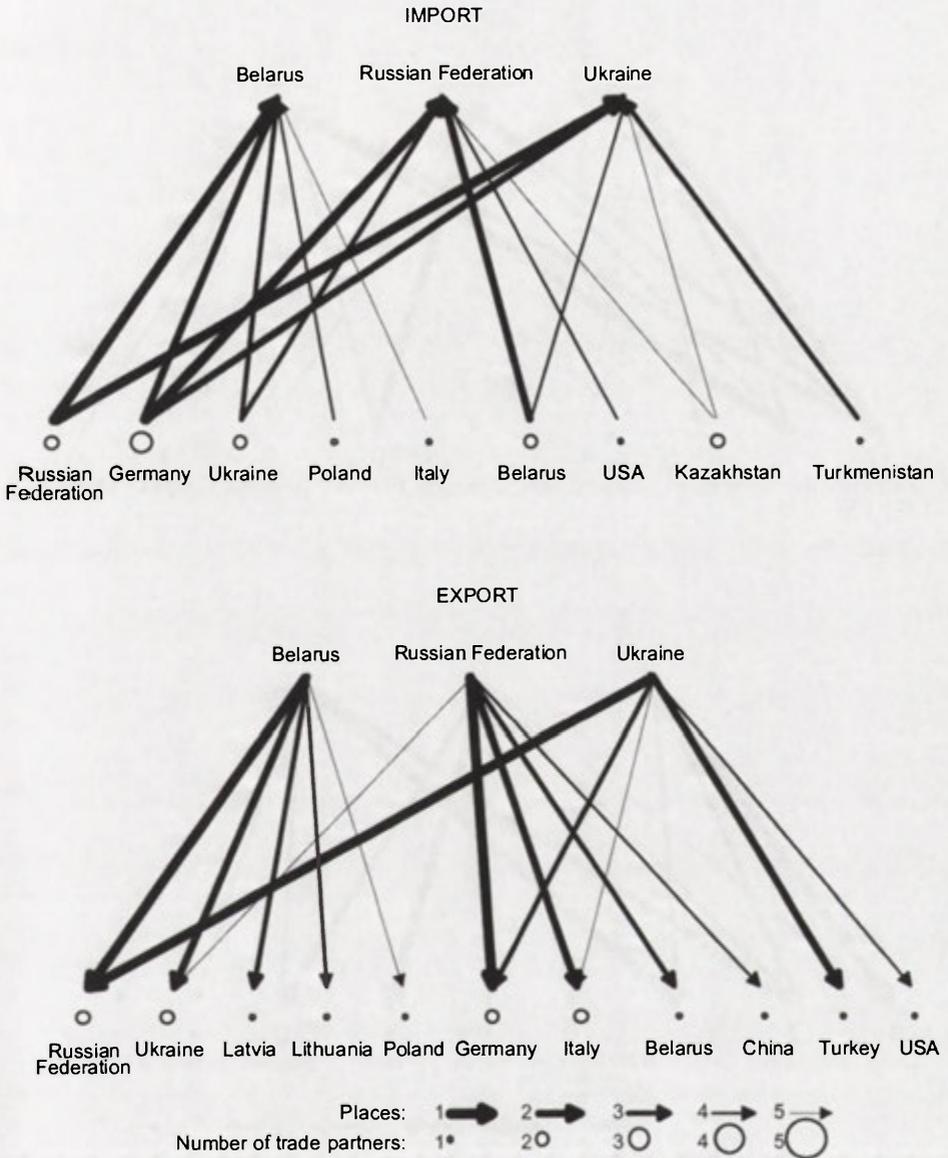


Figure 2. The main trading partners of Belarus, the Russian Federation and Ukraine in 2002
 Source: Yearbook of International Statistics 2003, GUS (Central Statistical Office), Warsaw.

The Baltic E-CE countries, i.e. Estonia, Latvia and Lithuania find themselves in a specific and characteristic situation. The most important partner for Estonia in export is Finland, followed by Sweden, Latvia, Germany and Russia. Lithuania exports most to Latvia, Germany, Great Britain, Russia and Poland, while Latvia sends most to Great

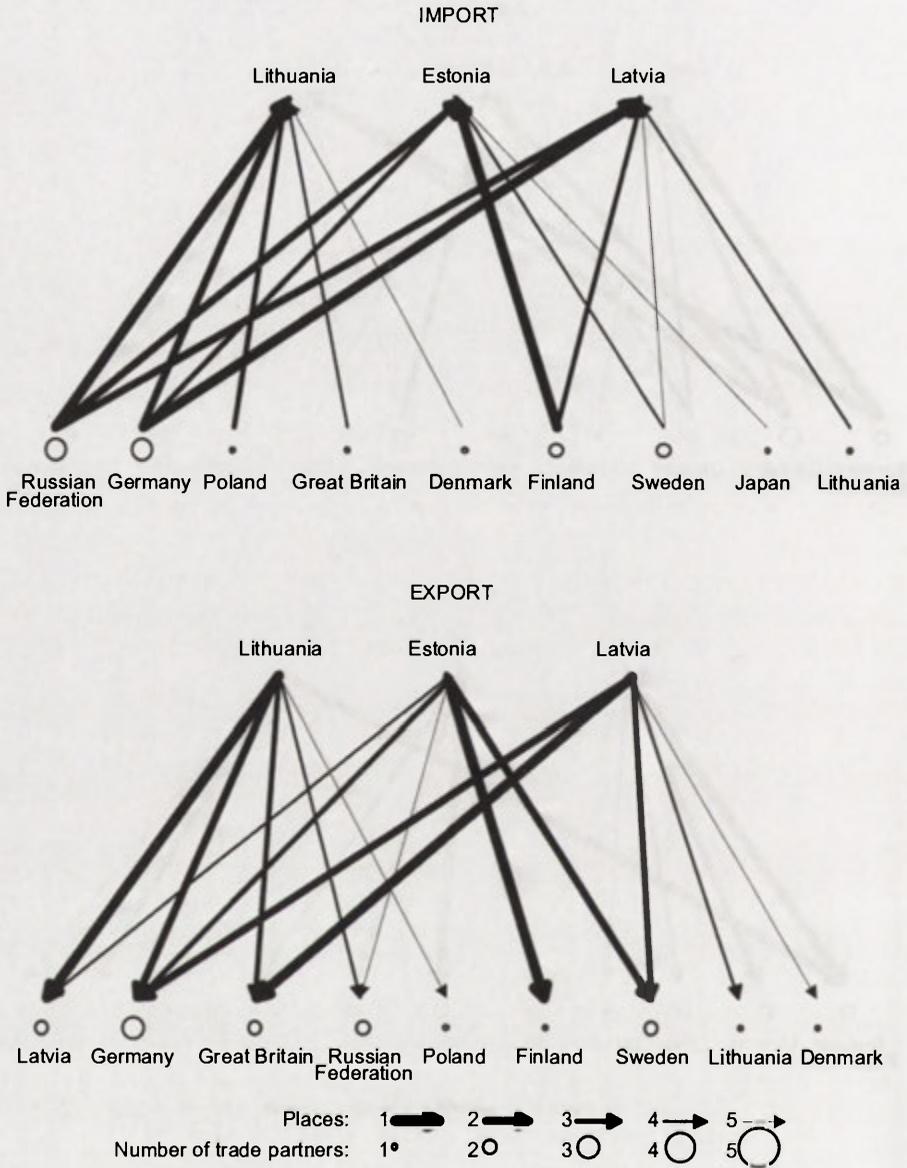


Figure 3. The main trading partners of Lithuania, Estonia and Latvia in 2002
 Source: Yearbook of International Statistics 2003, GUS (Central Statistical Office), Warsaw.

Britain, Germany, Sweden, Lithuania and Denmark. Estonia imports the most from Finland, Russia, Germany, Sweden and Japan, Lithuania from Russia, Germany and Poland, and Latvia from Germany, Russia, Finland and Lithuania. In general, then, the most important partners for members of this group are their neighbors (Figure 3).

The last, diversified group of E-CE countries consists of Bulgaria, Croatia, Romania, Serbia and Montenegro, and Slovenia. For most of these countries the most important partners for export and import are Germany and Italy, but in terms of import the third position is taken by Russia; while other important partners are Austria and France for Slovenia, Turkey for Bulgaria, and Bosnia-Herzegovina for Serbia and Montenegro (Figure 4).

The relations mentioned above are a manifestation of changes in the links formed and beginning to stabilize in foreign trade over the past 15 years in the E-CE region. The decrease in foreign trade between the post-communist countries is apparent. Among the five most important foreign partners in export for the Czech Republic only Slovakia occupies a strong position, similarly to that for import, alongside Russia. With regards to imports to the Czech Republic, only Slovakia and Russia play important roles. For Slovakia, it is Poland that counts especially in terms of exports, and Russia in the case of imports. For Hungarians, Russia is also an important import partner.

Rather stronger trade links exist between the countries from the second group and the post-communist countries. The exports and imports of Russia, Ukraine and Belarus mainly take place among those countries. From the group of post-communist countries, the most important trading partners for Poland as of 2002 were the Russian Federation and Czech Republic.

Subsequently, in the remaining groups of countries it is links with neighboring states and with highly-developed countries that dominate. The gradual growth in importance of Russia as an important trading partner in this part of the continent is observable. Russia is the only country among those surveyed to note a positive balance in foreign trade.

In the light of the regularities and generalizations stated here, we may notice that the E-CE countries are above all showing a preference for the development of trade links with less-developed countries. The enlargement of the EU by 10 new countries, mostly from the E-CE region, will undoubtedly reinforce this trend existing hitherto. That is because an EU consisting of 25 countries that are territorially close to each other and with an open and capacious market of good quality, will certainly allow for raising of the level of mutual trade, and contribute to integration of the entire continent and the creation of a large free-market sphere.

The trends mentioned above are accompanied by ongoing specialization of foreign trade in the individual E-CE countries (Olszewski, Kundera, Szmyt 1993), something that seemingly brings those countries closer to the more-developed ones, not only on our continent. Progress with specialization at a time of liberalization and the establishment of many new agreements on free-trade zones is becoming an essential element of the internationalization, not only of the E-CE region, but also of the whole continent and world (Hirst and Thomson 1992).

There are currently over 250 free-trade zones, reviving the development of many countries and regions. These represent a major challenge, not only for the E-CE countries, but also for the entire EU, since it has recently been announced that some new free trade zones will come into being. These would be: the free-trade zone of the two Americas (FTAA) and the free-trade zone of the South Asian countries (SAARC). Additionally, the South American countries of Mercosur will trade under preferential terms with the EU among other places. We may foresee a future trade agreement being established be-

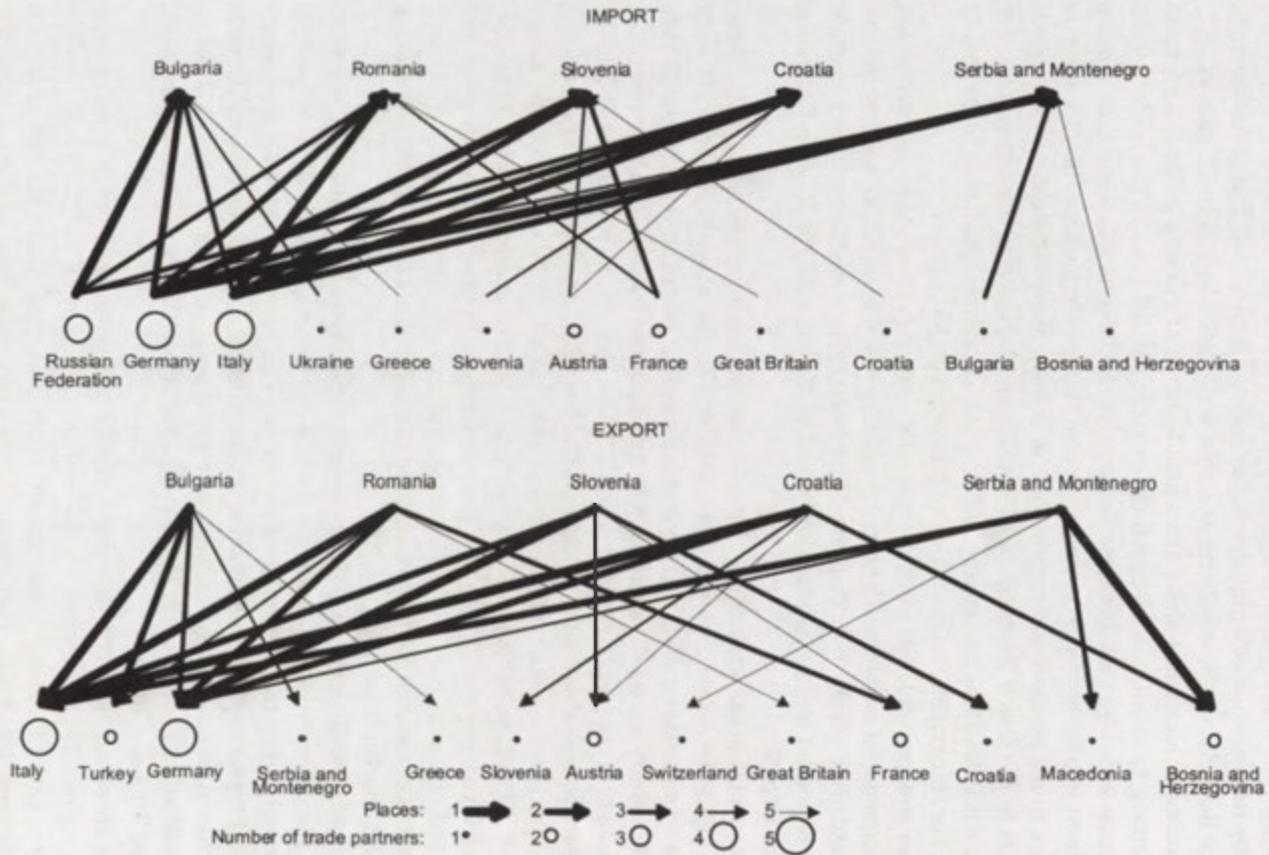


Figure 4. The main trading partners of Bulgaria, Croatia, Romania, Serbia and Montenegro and Slovenia in 2002

Source: Yearbook of International Statistics 2003, GUS (Central Statistical Office), Warsaw.

<http://rcin.org.pl>

tween both Americas and Europe, while the APEC countries (including the USA, China, Japan and Russia) are to have created a free-trade zone by 2020.

To date, the turnover in the free-trade zones has been as follows:

The existence of free-trade zones should result in the establishment of a global sphere in free trade, and come to serve as a chance for a better life for the global population – including in the E-CE countries. Whether this chance will be taken advantage of remains another question.

Table 3. Free trade zones

Zone	Percentage of total export	Member countries
Europe		
CEFTA	12,4	Bulgaria, Czech Republic, Croatia, Hungary, Slovakia, Slovenia
EU	61,2	Austria, Belgium, Denmark, Finland, France, Greece, Spain, Netherlands, Ireland, Luxembourg, Germany, Portugal, Sweden, United Kingdom, Italy
North America		
NAFTA	54,8	Canada, Mexico, USA
Latin America and the Caribbean		
CACM	15,0	Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua
MERCOSUR	20,8	Argentina, Brazil, Paraguay, Uruguay
Africa		
VEMOA	13,5	Benin, Burkina Faso, Ivory Coast, Guinea Bissau, Mali, Niger, Senegal, Togo
SADC	10,9	Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia, Zimbabwe, Congo, RSA, Seychelles, Namibia, Mauritius
Asia, Near East		
ASEAN/AFTA	22,4	Brunei, Cambodia, Indonesia, Laos, Malaysia, Burma, The Philippines, Singapore, Thailand
GCC	5,1	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE
SAARC	4,9	Bangladesh, Bhutan, India, The Maldives, Nepal, Pakistan

Source: World Trade Report 2003

FOREIGN TOURISM

The global development of tourism in the second half of the 20th century and early 21st century is one of the crucial manifestations of civilizational progress, which is also being observed in the E-CE countries.

Europe so far holds the dominating position in the world with regard to arrivals of foreign tourists, and we may assume that because of the continuing process with integration among the countries of the EU and the maintenance within it of one large tourist market, the share of Europe in overall tourist reception will remain the largest. It is estimated that expenses on tourism account for 18% of world gross product (Warszyńska 2000). Therefore, tourism is becoming a very active factor in economic development and internationalization. The good conditions for the development of foreign tourism in E-CE favor this (Wyrzykowski 2001).

The most frequently-visited E-CE countries are: Poland, Hungary, the Czech Republic and Russia. By 1997, each of these countries was already receiving over 15 million tourists. From the fragmentary data from 1999 it seems that the most tourists came to Poland—89.1 (?) million, Russia—18.4 million and Hungary—17.3 million.

Amongst the visitors to the E-CE countries, the citizens of neighboring states are the most numerous. Germans are the most mobile in this regard. Most commonly they come to Poland, the Czech Republic, Hungary and Croatia. Austrians are the most common visitors to the Czech Republic, Hungary and Croatia. The Italians often visit Croatia and Romania and Swedes and Finns have taken a liking to Estonia, Latvia and Russia. At present a renaissance of interest in Bulgaria and Romania is being observed.

The greatest income from foreign tourism in 1995 was recorded in Russia (7.5 billion USD), Poland (6.1 billion USD), the Czech Republic (3.1 billion USD), Croatia (2.5 billion USD) and also Ukraine (2.1 billion USD). There are of course some expenses connected with that field of business, but they are more than compensated for by incomes.

As a consequence, it seems reasonable to hypothesize that the internationalization of the E-CE countries as influenced by foreign tourism will continue to progress, as this is a region with great potential in terms of natural landscape and valuable cultural features. Moreover, the local and state authorities are aware of the need to develop foreign tourism. There are also large potential pools of labor able to take up activity in the tourist business. What is

Table 4. Incomes and expenses of foreign tourist in 1990, 1995 and 1999

Countries	1990	1995	1999	1990	1995	1999
	incomes			expenses		
	in mln USD					
Belarus	=*	23	13	=	87	116
Bulgaria	320	473	932	189	195	526
Croatia	1704	1349	2493	729	422	751
Estonia	=	353	560	=	90	217
Lithuania	290	=	=	=	=	=
Latvia	=	20	118	=	24	268
Poland	358	6614	6100	423	5500	3600
Czech Republic	419	2875	3035	455	1633	1474
Russian Federation	=	4312	7510	=	11599	7434
Romania	106	590	254	103	697	395
Serbia and Montenegro	419	42	17	=	=	=
Slovakia	70	620	461	181	330	339
Slowenia	721	1084	954	=	573	539
Ukraine	=	3885	2124	=	3041	1774
Hungary	824	2640	3394	477	1056	1191

* No date available

Source: According to Yearbook of International Statistics 1990, 1995, 1999, GUS, Warsaw.

more, these countries have suitable programs for the development of communication networks that will better connect them with Western Europe and the rest of the continent.

FINAL REMARKS

The analyses carried out here confirm the thesis that the internationalization of the economy of the E-CE countries is a positive process, in that it contributes to an increase in activity of business entities and to their efficiency in participating in the international division of labor.

In all of the E-CE countries conditions have been put in place that favor the internationalization of their economies: a wider and wider opening of the borders to international cooperation, an extension of the market economy, ongoing privatization, the creation of the institutions allowing for and effecting international contracts, a raising of employers' qualifications and an increase in mobility, and finally a change in economic structures, resulting in better and better technical and organizational conditions for economic activity and management—including the management of space.

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SPATIAL PROCESSES AT MACRO-, MESO- AND MICRO-LEVELS DURING EU ENLARGEMENT

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Key words: EU enlargement, spatial tissue of Europe, convergence/divergence process, polycentricity

THE CHALLENGE OF ENLARGEMENT

When the European Union increased in population by 28 percent and expanded its territory by 34 percent in 2004, new challenges and possibilities of the enlarged Union advanced to the forefront of the European spatial development agenda, particularly with regard to territorial cohesion interventions and sustainable economic, social and ecological development. For this fifth wave of enlargement, the process of integration of new Member States into the EU has been an ongoing task for the European Union—a process of cohesion, assimilation and convergence that was begun many years prior to the accession date and will continue on for many years to come. Yet enlargement also represents opportunities for the EU as a whole to increase international competitiveness, and through sustainable growth, attempt to become the most competitive and dynamic knowledge based economy in the world in terms of the Lisbon/Gothenburg strategies.

Effects of enlargement and integration are already being seen and these present, not unsurprisingly, a mixed bag of results: Growth rates in the enlargement area are above the old EU-15 average, but real economic convergence remains limited. Economic restructuring is occurring in the enlargement area from primary sectors to the service sectors, but employment levels have fallen.

This paper derives from an ongoing research project within the European Spatial Planning Observation (ESPON) programme that concerns enlargement of the European space¹. The aim is to highlight preliminary findings on spatial processes at the macro, meso and micro levels, which call for coordinated policy intervention. Throughout the

paper, needs are outlined for further empirical and theoretical research on the possibilities to achieve more balanced spatial developments in the mid and long term future.

The spatial challenges and possibilities that enlargement poses have not taken the Union by surprise, as indeed efforts towards enlargement have been underway since the process to develop the European Spatial Development Perspective (ESDP) began in 1993. ESPON 2006 is one of the current efforts to address the spatial tissue of the Europe in its near entirety (currently 25 Member States, 2 candidate countries as well as Norway and Switzerland) with its mandate to indicate, map and diagnose spatial development of the European territory.

Polycentricity at all levels is one of the core concepts of ESPON. Following the ESDP, the promotion of a 'balanced polycentric urban system' is one of the most frequently cited policy objectives of the programme. The interest in polycentric development is fuelled by the hypothesis put forward in the ESDP that polycentric urban systems are more efficient, more sustainable and more equitable than both monocentric urban systems and dispersed small settlements. If we assume this to be so, then one of the territorial tasks of the enlargement process is to utilize the tool of polycentric development to boost competitiveness, social and economic cohesion and conservation of natural and cultural resources.

This paper takes up the particular effects of enlargement on the polycentric spatial tissue with special attention on the barriers implicit in this process. In order to do this, we pose the following relevant research questions:

- Which are the current processes of polycentric development in the enlargement area?
- What is the existing diagnosis of the spatial tissue in the EU-25 with emphasis on the EU-10?
- Where are the particular areas at risk in the Enlargement area with regard to sectoral specialization?

These questions are all approached in the ESPON 1.1.3 project by empirical analysis based on available European-wide statistics at NUTS 3 level. The implications of preliminary findings are interpreted as far as possible, and the needs for further empirical studies to qualify the findings are discussed.

The final research question addressed in this paper is:

- In response to processes induced by EU enlargement, what policy combinations at all levels could be efficient in order to enhance competitiveness in all parts of the EU?

NORMATIVE GUIDELINES AND MULTI-LEVEL SPATIAL GOVERNANCE

The objectives of the ESDP, competition, cohesion and conservation (or sustainability) are not strictly codified in terms of EU policy legislation. Spatial development policies, in which these three objectives are operative, remain the formal and legal domain of na-

¹ This paper is based on ESPON project 1.1.3 'Enlargement of the European Union and the wider European perspective as regards its polycentric spatial structure' which is financed by the European Commission and with Royal Institute of Technology (KTH) in Stockholm, Sweden as the lead partner. Throughout the text of this paper, we refer to the work of ESPON 1.1.3 and have attributed the research specifically performed by our 1.1.3 Partners accordingly. The paper does not necessarily reflect the opinions of the Monitoring Committee of ESPON.

tional, regional and local governments. However, while the EU does not have full competence in the area of spatial development, it has been active in producing a set of common objectives or norms for the area. We will address these objectives as normative objectives, which prescribe or proscribe the range of acceptable actions for an actor (governmental or non-governmental) that adheres to a certain identity, in our case a European identity. As Kratochwil (1989: 11) states, 'norms are therefore not only 'guiding devices', but also the means which allow people to pursue goals, share meanings, communicate with each other, criticize assertions, and justify actions.'

These 'norms' also guide the scientific efforts and to a large extent also policymakers on the EU, national, regional and local levels. Europe 'should' be one of the most competitive areas in the world, capable of sustainable growth. Social and economic cohesion in terms of leveling out socio-economic disparities throughout the European space 'should' be the task of regions and countries. And careful husbandry of the natural and cultural resources upon which our economic and social systems are based is an implied imperative. While these normative statements appear common sense, their integrated manifestation in spatial development policies is not always easy to facilitate. In any situation there can occur a conflict of interests with regard to the weighting of these normative goals. At the same time these normative goals may be interpreted or valued differently by various levels of governance in implementing or adopting spatial policies.

Thus there is a call for a system of multi-level governance and a need to address appropriate policy implications at the macro (EU), meso (national and regional) and micro (local) levels. The effects of policy interventions directed towards achieving polycentricity will have various effects on different levels, and these effects must be analysed. Indeed the vertical integration of policy interventions is a great challenge due to the wide variety of territorial concerns and institutional capacity in the nations and regions of the enlargement area.

Neither is horizontal integration of sectors and planning areas to achieve the goals of a regional development strategy a straightforward task at the European level or at the regional level. To produce synergies among the three normative goals of the ESDP it is necessary to create novel means of at least coordinating, if not integrating, diverse policy and planning sectors such transport, business competition, agriculture, environment and culture.

EMERGING POLYCENTRIC STRUCTURES IN EASTERN EUROPE

One of the most widely spread 'norms' in the European spatial planning community is that of polycentric development of the territory. Polycentricity so defined is associated with the major policy objectives of the European Union: Countries with a polycentric urban system are in general assumed to be economically more successful and environmentally more sustainable than countries with a dominant capital city, but not necessarily spatially more equitable if also rural regions are included.

Polycentrism is an analytical concept and a policy option as well as a normative goal. The ESDP, and the ESPON programme, put forth a widely accepted political objective linked to polycentricity at the European level: to counterbalance the 'Pentagon' (embracing Paris, London, Hamburg, Munich and Milan) and 'overdevelopment' of some cities and regions at the expense of lesser developed regions, at all territorial levels of the EU

space. Thus, we need to give priority to the study of those elements of the analysis such as the role of the cities (and urban systems) in spatial development.

As stated, a major polycentrism challenge in the EU is to reinforce the development of major urban regions outside the 'Pentagon' so that they become capable of competing with this European core area. Major urban regions of the enlargement area tend to be weaker than their EU-15 rivals and the level of integration of the Transnational Regions (TR) of the enlargement area is lower than that of the TRs of the EU-15. So, while the polycentrism policy should cover the entire EU territory, a much stronger effort—and funding—should and will be focused on the enlargement area. The nature of the urban regions' problems also differs in the enlargement area compared to the EU-15, for instance, transport infrastructures necessary for the networking between urban nodes tend to be weaker in the case of the new Member States.

In taking a closer look at the particular European level of polycentricity in relation to the enlargement area, Angelidis (2004) has found only few accelerators in the enlargement area that could compete with the Pentagon, the most important being the capital cities of Warsaw, Budapest, Prague and Bratislava. However, considering actual trends as well as the impact of the new rail and motorways networks we could discern a few spatial entities of the enlargement area that could potentially 'compete' with the Pentagon; the potential TRs in the Baltic Sea Region (including the countries to the east and the new neighbour of Russia, the 'Triangle of Central Europe', and the potential TR of the Interreg IIIB cooperation area 'CADSES'. While there appears to be great potentials in the enlargement area for boosting polycentricity in terms of transnational regions for competing with the 'Pentagon', the question remains of how polycentric the enlargement area actually is today.

For the ESPON programme, including the ESPON 1.1.3 project, Wegener (2004) developed a methodology for measuring polycentricity. For this a comprehensive indicator of polycentricity consisting of the components size, location and connectivity was defined.

The method was applied to functional urban regions (FUAs) in the accession countries. Spiekermann and Wegener found that the accession countries (particularly Poland and Slovenia) on average have more polycentric urban systems than the old EU Member States. This is primarily due to the location index. The connectivity index of the EU10+2 is much lower than in the EU-15. This indicates that communication investment strategies should be considered particularly important to improve polycentricity in eastern Europe.

The method was further developed to forecast the impacts of transport policy scenarios on polycentricity (ESPON 2.1.1). It has been observed that the polarisation of the urban systems in the accession countries has increased since their transition from planned to market economies in the 1990s and is likely to increase further in the future. This is a clear and expected reflection of the forces to geographical concentration embedded in market economies.

This creates goal conflicts for future EU spatial policy oriented at a balanced polycentric territorial structure of Europe. If, for instance, the goal is to strengthen major urban centres outside the 'Pentagon', this will increase spatial disparities between the already too dominant capital cities in countries, such as the Baltic States, Hungary or the Czech Republic. However, if the promotion of balanced urban systems in these countries is a common goal, substantially more Structural Funds and transport infrastructure would

have to go into the peripheral regions of the new Member States, and this would go at the expense of their capitals.

TERRITORIAL COHESION AT THREE LEVELS

In first making a diagnosis of the European we step back and visualise a snapshot of economic and population distribution of the enlargement area in relation to the EU-27 on the eve of accession, both at the meta (EU-27&ESPON space) level, and at the meso (national and regional) level and micro-level. This has been done in the ESPON 1.1.3 Third Interim Report². To capture 'micro'-level processes that are operative at a national scale we refer to a study the banking sector and Foreign Direct Investment (FDI). As a vital part of the diagnosis of the spatial tissue of Europe, we then quote a study of the spatial association of development patterns in Europe.

MACRO-LEVEL PROCESSES

The 1990s has witnessed important shifts in the spatial centre of gravity of both the economic and demographic structure across Europe. At the macro-level we can distinguish the position of the enlargement area in relation to EU27 regarding changing contribution to population and GDP. However, statistical observations of the total NUTS 3 regions in the ESPON space for our purposes are only available for the years between 1995-2000; a period too short to allow for conclusions within a long-term economic cycle. Yet the visual examination of spatial trends in population and economic terms indicates that by understanding the ESPON area as a market entity:

- The three Baltic States suffered significant population losses during the last decade. At the same time the Baltic States enjoyed strong growth during the period in many regions and hence could improve their contribution to total EU GDP significantly. The success is based on growth in capital regions disfavoured other parts of the countries. Yet the capital regions together have the possibility for creating polycentric dynamic macro-region.
- Poland's pattern of population gain was diversified, with the regions at the Baltic Sea gaining significantly. But in terms of wealth contribution to the total of the European space it almost entirely on the rise. Polycentric structures may have contributed to the total favourable wealth contribution at least to some extent, but determining this will preclude the use of more detailed studies.
- The urban system of the eastern axial extension of the Pentagon i.e. Czech Republic, Slovakia, Hungary and Slovenia largely formed a pattern of relative loss of population. But while the Czech Republic faced dramatic losses in GDP contribution (except for Prague), this monocentric structure cannot be recognized in Slovakia and Hungary. Slovenia is gaining in wealth.
- Romania and Bulgaria were almost entirely losing in population and displayed an economic decreasing pattern, with Varna, located at the Black Sea coast and being the only exception.

² Report available at <www.espon.lu>

MESO-LEVEL PROCESSES

At the meso- or national/regional level we investigated the convergence/divergence process with regard to regions within the EU-15 and the accession countries. It is obvious that in the new Member States GDP per capita on average has been growing, but that the gap between poor and rich regions has been widened at the same time. Particularly within the Baltic States, the Czech Republic, Hungary, Poland and Slovenia, dispersion in GDP per capita has grown significantly between 1995 and 2000. Variation among regions was more apparent within the 10 accession countries than with in the EU-15 Member States. Only Greece, Italy and Portugal showed some signs of convergence.

Apart from economic convergence, policy makers should pay an interest to social convergence. A high GDP per capita does not automatically imply a low unemployment rate. In for example Madrid and Rome, high GDP per capita goes along with high unemployment rates. In those regions many inhabitants do not benefit from economic welfare. Regions with low GDP per capita together with low unemployment rates also occur, particularly in Portugal, Central Europe, and parts of the UK, Ireland, and Sweden. Large parts of Hungary, Romania and Cyprus have relatively low unemployment, while Poland, the Czech Republic, Slovakia and the Baltic States have relatively high unemployment as the situation stood in 2000.

MICRO-LEVEL SECTOR, SPECIFIC APPROACH

At the micro-level, or sector level Corpataux (2004) identifies the effects of the enlargement process on economic and urban structures in a context of financial and monetary integration and how this affects polycentricity.

Banking sectors in most of the new EU Member States differ widely from those of the Western countries due to their past. During the socialist period banks were primarily bookkeepers for the planned allocation of resources. Thus the decision for the allocation of credit was not taken by the banks, but by the planning system. Today they are on average to a higher degree concentrated, state owned, but also show a high degree of foreign penetration. Nevertheless financial systems in new EU Member States are still heavily bank-based. Stock markets still play a secondary role compared to the banking sector within the financial systems of those countries. Spatially, bank based systems are generally more polycentric than finance based ones. Moreover a polycentric banking system can irrigate in a better way the whole economy of a country. A liberalisation process and the corollary move to a more finance based system generally provoke the concentration of financial activities in the main financial centres at the national scale as well as at the international one. Peripheral regions and SMEs could therefore suffer from credit rationing.

Corpataux (2004) looks at FDI inflows received by the new ED Member States and notices that in 2001 three countries caught almost 80 percent of FDI inflows: Poland got the most important part (almost 34 percent) followed by the Czech Republic (29 percent) and Hungary (14 percent). All the others countries got less than 10 percent of the whole. The poorest position is occupied by Latvia with 84 EUR per capita. Nevertheless if FDI inflows certainly contribute to the growth of a country their effects can strongly vary sectorally and geographically. It is an understatement to say that they are not generally spread homogeneously on the territory of a country—East European capitals provide by far the most attractive sites for foreign investors.

Obviously, several detailed sector studies need to be pursued and compiled in order to provide input to policy combinations at that level across Europe. This is a clear challenge to the spatial science community in each and all Member States.

SPATIAL ASSOCIATION—THE SPREAD OF DEVELOPMENT PATTERNS

It is part of the established wisdom in spatial studies that regions with similar development patterns, either positive or negative, tend to locate close to each other. In an integrated Europe, and especially as a consequence of the EU's recent eastward enlargement, this kind of spatial dependence can be expected to strengthen. Regions become more and more closely connected due to constantly increasing mobility of goods and production factors, as well as through intensifying interregional cooperation among public and private agencies, businesses and institutions. In the EU cohesion policy context, this raises a growing need for analysing the spatial aspects of regional growth, as well as for incorporating the implications of the results into the policy recommendations. Hirvinen's (2004) demonstration of spatial association aims at measuring spatial patterns—at NUTS 3 level—of regional disparities across the ESPON space by means of the Moran I spatial autocorrelation statistic as utilized in the ESPON 1.1.3 Third Interim Report.

The results of this exercise emphasize the importance of spatial proximity with respect to the evolution of regional disparities across European space. For all the three measures of regional growth, a positive univariate spatial autocorrelation is detected. This means that growth rates of regions are characterised by neighbourhood dependence: the more a region is surrounded by regions with positive dynamics, the higher is its own growth rate. This clearly manifests a need both for a systematic analysis of the role of spatial factors in economic growth, and for considering its implications for the EU cohesion policy.

There are clear disparities in spatial patterns across European space. Most countries and parts of Europe seem to form clear macro clusters of economic performance. However, when we turn to look at regions in the 'Pentagon', no systematic tendencies for clustering—at least in terms of the NUTS3—are visible. This mosaic-like spatial pattern in the 'Pentagon' can be considered as polycentric: the existing spatial regimes, both positive and negative developments, are territorially scattered and relatively small in their size.

The results indicate some evidence for the cohesion at the macro level. The regions surrounded by regions with a low GDP per capita seem to grow faster than regions with more prosperous neighbours. This pattern is also characterised by clusters and country-effects, implying the existence of different spatial regimes between and within the cohesion countries and the EU's Objective 1 regions.

DETECTING REGIONS WITH SPECIFIC NEEDS

In examining regional trends with the goal of developing preliminary typologies, we analyse patterns and trends in regional economic structure and address the growing concern

about the potential vulnerability of European regions due to increasing economic integration and globalisation.

Firstly, the main worry is that the processes of integration and globalisation may affect the degree of regional specialisation and the geographic concentration of economic activities. If regional specialisation increases, industry-specific shocks may become region-specific shocks and sector-specific policies might become region-specific policies making regions more vulnerable.

Secondly, higher specialisation and greater concentration might lead to increased productivity via increasing economies of scale. Regional performance is also related to economic specialisation, even though the nature of this relationship changes with the economic sector and therefore caution should be used in making inferences between the positive or negative impacts of regional specialisation. We suggest two typologies: Regional specialisation, which describes changes occurring within regions and how they are late to regional performance and geographic concentration, describing geographic concentration as changes occurring between regions and at the wider geographic scales in terms of trends towards concentration or dispersion.

Besussi's (2004) comparative analysis of geographic concentration for the ESPON 1.1.3 Third Interim Report shows that most of the transformations that are occurring within the EU-15 (growth of the service sectors, decline of employment and increase in concentration in the primary sectors, decline of employment and dispersion in the secondary sectors) are also occurring in the new Member States. But within the boundaries of the EU-12 geographic system transitions as growth of the service sectors, a decline of employment and an increase in concentration in the primary sectors have both a faster pace and a stronger manifestation.

This leads to the tentative conclusion that policy combinations at EU, national and regional level already implemented in EU-15 to strengthen positive specialization—where appropriate—or diversification—where that is the appropriate remedy, could be expected to work also in the new Member States. Another plausible recommendation is that since the needs are much stronger in the new Member States than in the past, *the policy has to be loaded with much more resources and more targeted than in the past to be efficient.*

MEETING NEEDS IN FRINGES, RUST BELT, RUSTIC AND SHRINKING COMMUNITIES

Along with each spatially relevant trend elaborated in this paper and in the ESPON 1.1.3 work comes the pressure to adapt to changes leading to reorganisation of the national and European urban system(s) at varying speeds and levels. Finding appropriate remedies for strengthening specialization/diversification or dealing with restructuring of the economic base in the enlargement countries demands further typologies for the various structural types of regions.

Against this background we set out to apply a composite perspective asking where in the EU space there are structural types of regions that may be in need of various policy interventions to attain the normative territorial goals of competitiveness and cohesion, in particular when taking into account the EU's enlargement. Hereby we seek to identify parts of the territory that are likely to be problematic in the development of a spatially balanced polycentric structure, allegedly crucial to contributing to realisation of these

normative territorial goals. In order to target the regions of the EU we focus on those characteristics allowing for complete quantitative observation at NUTS 3 level and this involves a range of indicators. We identify 'Fringe', 'Shrinking', 'Rustic' and 'Rust belt' communities (Neubauer and Persson 2004). Assumptions are made for particular types of regions for which enlargement may mean extraordinary pressure to reorganise their urban structure in away counteracting the development of a balanced polycentric spatial tissue across Europe.

- 'Fringe' Communities: Regions with peripheral location, low population density, low level of economic wealth and currently slow growth rate are expected to be less attractive for private investors and qualified mobile labour than other regions.

- 'Shrinking' Communities: Regions with poor demographic structure, negative population trends and low population mass and density are involved in a negative spiral of cumulative causation, with declining regional markets for the private sector and increasing per capita costs for public services.

- 'Rustic' Communities: Regions specializing in the primary sector, with low income levels and a slow rate of structural transformation in the recent past, but now moving towards secondary and tertiary sectors are more likely to experience poor economic growth rate in the near future than other agriculture-dominated regions. We assume that the slow rate of transformation from the agrarian economy in the past reflects the fact that the manufacturing and service sectors did not find these regions attractive as economic locations in the pre-accession situation, when international competitions was less fierce than after enlargement.

- 'Rustbelt' Communities: We assume that current low income and technology levels in the manufacturing industry will not attract new industrial investments as much as in other manufacturing regions.

For specifying the needs for policy intervention, more qualified typologies are required. We suggest that such typologies are developed in multi level interaction across Europe, to ensure quality and data comparability and for interpreting the character and volume of the needs.

Again, this is another big challenge to the spatial science community across Europe, in looking both for harmonized historical data and for common understanding of the spatial problems and processes behind growth and lack of growth.

TOWARDS GROUNDED POLICY COMBINATIONS

In consequence, there is a need for designing and prioritizing policy measures to cope with these needs and for developing the potential in all parts of Europe in the ongoing enlargement process. Structural Fund Policy measures for competitiveness and cohesion suggested in the Third Cohesion Report are primarily aiming at:

- Promotion of Innovations and the Knowledge economy
- Improved Accessibility
- Sustainable natural environment
- Administrative capacity

- And we would add: Education, employment and social support systems

There is a demand for agreeable basis for policy recommendations or policy combinations, along all these five items at EU level. We distinguish between the principle-based rationale and the capacity-based rationale for making policy recommendations. The principle rationale is basically a coordinated sector approach with a *top-down* perspective, while the capacity rationale is territorially based and largely following a *bottom-up* logic (Van Well and Persson 2004). This leads us to a range of general policy recommendations, or combinations of policies that, with regard to the key findings of this paper, bear on the case of the effects of enlargement of the polycentric spatial tissue of Europe.

PRINCIPLE-BASED POLICY COMBINATIONS

As for concrete and combined policy actions, we recommend:

- a long term perspective, transport infrastructure investments in the new Member States and particularly between new and old Member States are of primary importance to increase competitiveness and cohesion in the EU as a whole. Large EU transport network investment will contribute to strengthen the capital regions of new Member States and thus establish a more polycentric development at the European level.

- Infrastructure developments should also strengthen the potential Transnational Region formed by the three small Baltic countries. Deepened cooperation with the Russian enclave Kaliningrad is important for environmental concerns. Intensified networking with St. Petersburg and Kiev is of high priority.

- Polycentricity at the European level should increase by promotion of the network of major cities in the ‘Triangle of Central Europe’, with its potentially high level of integration and encompassing the area from Warsaw in the east; Poznan in the west and Budapest in the south.

- GDP growth in major city regions in the new Member States does not necessarily reduce unemployment or prevent social exclusion. This calls for intensified and focused urban policy programmes for more and better jobs in both capital and second tier cities.

- Promote the multiplier effects of R&D centres. In many of the enlargement countries universities and research centers operate in isolation from their immediate surrounding, although their findings, innovations and ideas have the potential to be implemented locally.

New Member State should be invited to draft national programmes for regional development with emphasis on the functional growth of second tier cities. EU funding should be provided to partnerships formed at the regional level—both to draft the plan and to secure its implementation. Small Member States should profit from drafting plans in cooperation with neighbouring states. Plans should be based on analysis of the potential function and contribution to positive spatial association of the second tier cities.

Such plans should include policies aiming directly to generate employment in second and lower order cities and towns and include:

- Decentralize government employment. Create new public institutions in second-tier cities.
- Intensively develop regional highway networks focusing on major regional centres.
- Route new high speed rail lines to serve selected regions.

- Intensively develop local transport accessibility, including sustainable transport options such as bicycle paths linking communities and regions.
- Deliberately develop a cultural or tourist role based on existing natural and cultural resources in regional centers or second-tier cities. Development of tourist networking possibilities (natural, cultural, historical) for cities and regions with similar experiences.

CAPACITY-BASED POLICY COMBINATIONS

Capacity-based recommendations are addressed to a wider scope of governance actors as well as the cooperation, partnerships and networks developed among them for strategic problem solving. As Kohler-Koch states 'The EU is... a system of 'network governance' which thrives on co-ordinating a multitude of actors and approximating diverse interests' (Kohler-Koch 2002: 4). These combinations should also address the problem coordinating policy intervention vertically across sectors and horizontally in a multi-level system of governance.

Policy combinations for stimulating capacity regional levels in the accession countries include:

- Evaluating institutional frameworks.
- Boosting human resources.
- Creating more efficient communication mechanisms and facilitating networking.

This paper highlights the improvement of transnational cooperation/networking as important means of counterbalancing concentration in the core of the EU, especially in the case of the enlargement countries where the ability to implement spatial development goals is may be low. The INTERREG programmes and other EU external funding sources are currently addressing these issues. In light of this, policy combinations for capacity-building could include:

MACRO-LEVEL POLICY COMBINATIONS:

- Fortified Rural Development Policy focusing on the enormous needs in EU's Rustic communities. To meet the needs in these and other agricultural regions, EU's RDP should be broadened to focus more on sustainable rural development and suggest possibilities to support funding the often risk-filled attempts to switch to more environmentally-friendly methods of agricultural production. The RDR budget in old and new Member States should be adjusted to the particular needs for rural development and environmental management.

- Extended Neighbourhood policy should be directed towards the border areas that are handicapped for integration, ie those with an already low intensity of transnational activities and low economic disparities, or those that have difficult or inaccessible borders. As the European Neighbourhood Policy and New Neighbourhood Instrument are planned to take into consideration the 'new' neighbours of the European space, efforts should be focused in conjunction with the Tacis and MEDA programmes.

MESO-LEVEL POLICY COMBINATIONS

- The national and regional level could benefit from capacity-building for identifying developing and monitoring EU-funded cross-border, transnational and interregional

projects in the enlargement regions. Capacity building of regional and local administrations may be necessary to empower these regions with the skills needed to recognize opportunities and suggest plans for EU-funded projects, manage programmes and evaluate results. Development of communication mechanisms and methods to promote transparency and greater stakeholder participation are also key aspects of this capacity building.

- By means of national policies, extended social policy should be developed to secure key service provision in Europe's Shrinking regions to make them more attractive. The EU should provide guidelines for which services should be considered as minimum standard for service accessibility in small town Europe. 'Shrinking' communities have poor demographic structure, negative population trends and low population mass and density, will be less attractive for private investors and qualified mobile labour than other regions. Many such regions are involved in a negative spiral of cumulative causation, with declining regional markets for private the sector and increasing per capita costs for public services.

- At the national level encourage programmes to increase cooperation with in regions of the Enlargement countries, dependent or independent from EU-funding. In many of the Enlargement regions, efforts go into transnational or transregional cooperative schemes, but the intra-regional cooperative forums need to be highlighted as opportunities for local exchange, benchmarking and mutual learning.

MICRO-LEVEL POLICY COMBINATIONS

- Encouraging cross-sectoral capacity implementation at, regional and local levels. While agendas and strategies for sustainable regional development in most of the EU address the importance of cross-sectoral issues (such as climate change) there are few tools to implement these. In this respect regional/local institutional or administrative capacity may benefit by the introduction of horizontally placed 'Development Councils' entrusted with the job of coordinating the expected effects of policy and planning on the normative objectives of competitiveness, cohesion and conservation (or the economic, social and environmental aspects of sustainability).

- Encourage Local Agenda 21 plans to adopt a spatial dimension to sustainable development, for instance the importance of accessible green corridors with in and close to major urban areas, bicycle paths linking major transport hubs. Local Agenda 21 plans could also emphasize the importance of seeing the natural and cultural heritage as an economic asset, in terms of developing alternative energy sources, environmental innovations or cultural tourism.

- In regions/subregions facing severe problems ('fringe', 'rustic' and 'shrinking' communities) there is a need for an integrated development approach, in which the main axis/focus should be a settlement/urban-oriented policy, applying the principle of polycentrism at local scale. This would include cooperating and networking in complementarities, generating some thresholds and synergies at the very local level.

We should be aware of that there is a strong demand for innovative policy and policy innovations at all levels. This leads to our final recommendations for policy intervention:

- Allow for much more *experimental or ad hoc* approaches to policy design and implementation

- Build in *feed-back processes and process evaluation* at all levels achieve a continuously adaptive and learning system for reaching a more polycentric, sustainable and cohesive Europe.

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ARTICLES

TEAMWORK: WHY METROPOLITAN ECONOMIC STRATEGY IS THE KEY TO GENERATING SUSTAINABLE PROSPERITY AND QUALITY OF LIFE FOR THE WORLD

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METROPOLITAN ECONOMIC STRATEGY IS NOW ESSENTIAL FOR EVERY NATION AND URBAN REGION

The most important geographic units of economic activity in the world today, other than the nation-state itself, are urban regions. All across the world, in every country, more than half of the national income is generated by urban areas. Indeed, these percentages range from an average of 55 percent in low-income developing countries, all the way up to an average of 85 percent in high-income developed countries. What is all the more striking about these statistics is that in every case the percentage of national income generated by urban areas exceeds the percentage share of the national population that is urbanized. In the case of the low-income developing countries where urban areas account for an average of 55 percent of the national income, the urban share of the population averages 32 percent. In middle-income countries, the urban share of national income averages 73 percent, whereas the urban share of the population averages 50 percent. For high-income countries, the average urban contribution to national income is 85 percent, yet the urban proportion of the national population is 79 percent. This shows that the greater the level of urbanization in a nation the higher is its level of prosperity, and conversely, the more prosperous a county is, the more urbanized it is at the same time.

Take almost any city in the world, and its contribution to national prosperity substantially exceeds its percentage of the nation's population. Prague, the capital city of the Czech Republic, is a good example. It has 10 percent of the national population, 15 percent of the nation's workforce, over 20 percent of the national Gross Domestic Product

(GDP), and more than 50 percent of the national tourist revenue. Cities all over the world, rich and poor, in developed and developing countries, on every continent, follow a similar pattern, whether it be Belgrade with 41 percent of the national GDP and 14 percent of the national population, or Bangkok, with 41 percent of the national GDP and 9 percent of the national population.

The reason for this disparity is because urban regions are the only places that can combine the two most important elements for generating productivity and innovation, which is the main way that economies create value and compete in the global marketplace. These two elements are specialization and diversity. Only an urban region can gather together a critical mass of people with highly specialized and advanced skills in knowing how to engage in particular productive activities, and only an urban region can combine within one broad location a large number of different people with a wide range of highly diverse specialized skills, mixing together this wide range of skills to become both very productive and particularly innovative in developing and marketing new products and new production processes. Such a combination of specialization and diversity becomes even more vital than ever in today's new economy, which is characterized by three key features: 1) it is knowledge- and information-based; 2) it is technology- and communications-intensive; and 3) it is globally oriented.

Urban regions are vital competitive geographic units of the global economy, major contributors to generating and sustaining prosperity and quality of life for every community and nation. These expansive city-suburban-exurban areas are now the main battleground where competition is won or lost in developing new inventions, generating investment, jobs, trade, high value-added production, and enhanced incomes. Indeed, urban regions represent the most vital sources of prosperity for every nation. Promoting productivity and innovation is essential for competitive success in the world economy, and urban regions have become the leading generators of technological and organizational advances in the production and distribution of goods and services for the global marketplace. The main prescription for victory in global economic competition is to establish metropolitan centers of innovative activity, combining creative human talent with state-of-the-art equipment to incubate and foster technical advances in a wide range of inter-related products and production processes.

The principal reason for the growing importance of metropolitan economies in generating state and national prosperity is their essential character as the only geographic entities that contain, in relatively compact form: the critical mass of skills and resources; the necessary population density and concentration of market incomes; the range of specialized knowledge and institutions; the wide diversity of vitally needed facilities and services; and the fully developed physical and human infrastructure that are prerequisites for new ideas, products and production methods, technological and organizational innovations, and dynamic economic growth and investment. While rural areas can and do contribute substantially to overall economic well-being through agriculture, mining, natural resources utilization, and recreation, they cannot generate the extensive and competitive prosperity and quality of life for millions of people that emanate primarily from urban regions. Only the metropolis has the fundamental assets that together can offer the unique combination of specialization and diversity that stimulates self-sustaining economic development and

job creation, with the clustering and networking dynamic among many different firms, entrepreneurs, and institutions interacting in ways that spawn and accelerate growth of production and exports, and expansion and spreading of incomes and wealth.

The evidence is mounting on the essential national and international economic role of urban regions, and it comes from a wide array of expert analysts. One such source is research performed by a highly respected economic analysis and management consulting firm, the Standard & Poor's DRI division of the McGraw-Hill Companies. These two studies, entitled *U.S. Metro Economies: The Engines of America's Growth*, and *U.S. Metro Economies: Leading America's New Economy*, document in statistical detail the overwhelming presence of economic activity in urban regions and its impact on overall growth in high-technology fields and throughout the national economy: 'The geographic concentration of business and people in metro areas creates unique economic conditions that generate new industries, speed the diffusion of knowledge, spur technological innovation, and increase productivity. Metro areas have larger markets for goods and services, more specialized labor pools, and more extensive and sophisticated transportation and telecommunications networks than non-metro areas. These competitive advantages make metro areas the engines of U.S. economic growth and the source of new high-technology industries. Today, metro areas generate more than 80% of the nation's employment, income, production of goods and services, and 94% of high-tech jobs and output... and are the gateway for 83% of U.S. merchandise exports.'

In addition, a steadily expanding group of scholars and experts in related fields such as economics, business, management, geography, planning, and public policy argue that as globalization advances and the speed and convenience of international transportation and telecommunications bring people and goods closer together, the strategic value of specific places becomes more, rather than less, important. This is because of the ability of highly skilled and educated entrepreneurs and professionals to locate where they want to be instead of where they must be, with a much wider range of choices available to them. For example, Professor Michael Porter of Harvard Business School, in his book, *On Competition*, emphasizes the growing tendency of corporations to concentrate their major activities in a specific 'home base' located in urban regions throughout the world: 'When considering the globalization of competition, however, one must confront an apparent paradox: Although companies do indeed compete globally and inputs such as raw materials, capital, and scientific knowledge now move freely around the world, strong evidence shows that location continues to play a crucial role in competitive advantage... This geographic concentration of competitive advantage appears not only in established industries such as automobiles and machine tools but also in new industries such as software, biotechnology, and advanced materials... [G]lobal companies have indeed dispersed activities to many countries, but they continue to concentrate in one location a critical mass of their most important activities for each of their major product lines or businesses.'

New York Times business columnist Joel Kotkin, in his book *The New Geography*, makes a closely related point: 'Decisions about where to locate businesses, for example—once dependent on questions of access to ports, roads, rails, or raw materials—are increasingly dependent instead on the ability to link often scarce human resources... These changes profoundly alter the very nature of place and its importance by de-emphasizing

physical factors... and placing greater emphasis on the concentration of human skills in dense concentrations of population... The more technology frees us from the tyranny of place and past affiliation, the greater the need for individual places to make themselves more attractive. Surveys of high-technology firms find that among factors that drove their decision of where to locate, a 'quality of life' that would make the area attractive to skilled workers was far more important than any traditional factor such as taxes, regulation, or land costs.'

Views emphasizing the increasing role of economic geography and the competitive advantages of urban regions are strongly reinforced not only by numerous other academics, writers, and consultants such as Kenichi Ohmae, Rosabeth Moss Kanter, Paul Krugman, Peter Hall, and Neal Peirce, but much more importantly, by many business executives, corporate real estate professionals, site selection advisers, and economic development location experts, all of whom primarily target urban regions when they conduct and publish surveys of the 'best places for business.' Indeed, a detailed analysis of the business media and related publications clearly demonstrates that urban regions are the most often analyzed geographic unit represented in national and international location ratings. Even when the title of the article or report is 'the best cities for business,' what the magazine or rating agency really is evaluating are entire urban regions, not just central cities.

The vital economic contribution of urban regions is anchored by the major cities they encompass, which provide the constant stream of creative activity, interaction, specialization, and diversity that is essential for innovative ideas, methods, and products to develop and thrive. In the global economy of the 21st century, cities function primarily in seven distinct and essential ways to generate national prosperity. They are:

- * *centres of innovation and services, including advanced and highly specialized services*
- * *centres of culture, sports, entertainment, conventions, and tourism*
- * *centres of education, research, and health care*
- * *centres of transportation and trade*
- * *centres of manufacturing and technology development*
- * *market centres*
- * *workforce centres*

METROPOLITAN ECONOMIC STRATEGY: A NEW GLOBAL POLICY INITIATIVE

Every urban region experiences economic growth or decline, regardless of whether there are comprehensive plans or coordinated initiatives. Urban regions function as fully integrated economies in terms of the production and distribution of goods and services, and they will function as such with or without a coherent economic strategy. A critical determinant of their success is the decision-making process of private sector executives, investors, entrepreneurs, and consultants making facility location commitments in the global marketplace, especially their evaluation of the synergy and attractiveness of urban regions as centers of innovation that can provide businesses with a competitive advantage.

Unfortunately, metropolitan regional economic growth often occurs in an uncoordinated and haphazard fashion, and consequently may be missing opportunities to produce

greater investment, higher incomes, and more equitable distribution of the benefits of prosperity among people and places. Most urban regions do not have viable mechanisms for promoting metropolitan-wide economic development by creating a common vision, formulating a collective strategy, or jointly cooperating to implement major initiatives. Much of the contemporary debate centers on the impacts of metropolitan economic growth, including whether growth is too fast or too slow, problems of fiscal disparities and geographic or social inequities, and harmful effects on environmental quality. This discourse is primarily about analyzing trends and reforming policies.

Metropolitan Economic Strategy, on the other hand, is a proactive organizing principle that directly depends on regional teamwork and citizenship. Such strategies are explicitly designed to bring together the public and private sectors across the entire urban region to formulate and carry out a coordinated set of targeted investments in people and places, consciously designed to enable businesses to grow, jobs to expand, and quality of life to improve. Each of the major constituencies—business, government, and community leadership—must closely collaborate for the metropolis to thrive economically, socially, and physically. In just the same way that local, provincial or state, and national or federal governments use economic development plans to guide their actions, so also must the many different communities and constituencies that comprise an urban region farsightedly engage in such comprehensive planning and united action if they are to compete effectively and succeed in the global economy.

TEAMWORK: CREATING METROPOLITAN IDENTITY TO COMPETE AND WIN IN THE GLOBAL MARKETPLACE

The real 'city' of today is the 'metropolis.' Urban regions are the most economically organic components of urban geography and demography affecting people's daily lives at the local level, and the main access points for individuals trying to thrive in the global economy. Yet the greatest barrier to regional coordination, cooperation, and collaboration is the lack of a common metropolitan consciousness and citizenship. Therefore, promoting teamwork by encouraging households and families to begin reaching beyond local political boundaries in pursuit of their common interests and goals of increasing prosperity and enhancing quality of life is essential both for individual and for collective success.

By emphasizing the interwoven economic destinies that bridge across families and communities within urban regions, people can begin to see themselves as members of a cohesive economic team that is actively competing against other economic teams all over the world. Metropolitan Economic Strategy is thus vital for encouraging a unified vision of regional purpose. It promotes 'identity regionalism'—a common interest and a sense of mutual benefit that is much more powerful and effective than the typical 'functional regionalism' organized around managing regional public facilities such as airports, transit systems, parks, water and sewer systems, and other types of single-purpose governmental responsibilities.

The lack of political and cultural traditions that tie people together within a common metropolitan framework poses a major challenge for urban regions competing economi-

cally in the global marketplace. Governmental jurisdictions in which citizens exercise their right to vote are organized along local, state or provincial, and national or federal lines. Urban regions transcend the boundaries of cities, towns, townships, villages, boroughs, counties, special districts, and other public entities run by elected officials. Many of the world's urban regions cut across provincial or state lines, and some even cross national borders. Therefore, the average person does not see himself or herself as an integral part of a metropolitan economy. Most senior corporate executives do clearly understand regional economic connections, because product markets and labor markets operate across the whole metropolis, as do most major institutions such as hospitals and newspapers. Companies make decisions regarding investment, production, distribution, and site selection based on the assets and qualities of the entire urban region, even though their facilities are located within the administrative jurisdiction of smaller units of local government.

One important exception to the general lack of common metropolitan identity is college and professional sports, and, to a lesser extent, certain forms of arts and entertainment such as museums, orchestras, theaters, and parks. If one draws an invisible circle around an urban region, one typically finds that everyone living and working within that circle is expected to 'cheer for the home team.' Competitive team sports is one of relatively few spheres of interest uniting cities, suburbs, exurbs, and rural areas, even transcending national boundaries. The challenge for 21st century global competitiveness in every country is for diverse urban populations to relate economically in the same way they identify as sports fans, and to collectively support their 'home team' by working together as citizens of a metropolitan economy to promote local and regional prosperity and quality of life. Given that the dynamic of metropolitan interrelationships represents how the global economy actually functions and regional vitality is truly maintained, it is only a matter of time before everyone recognizes this modern reality. A vital challenge is for residents of urban regions to begin engaging in this new form of economic teamwork, clearly understanding that doing so will best enhance their opportunities to prosper in the international marketplace.

GOOD LEADERSHIP AND GOVERNANCE ARE VITAL FOR METROPOLITAN ECONOMIC STRATEGY TO SUCCEED

Good leadership from the public, private, and civic sectors is essential to bring together disparate groups, interests, and places into a coherent body with a shared vision and commitment to coordinated action. Such leadership can emerge from an economic crisis, as in Barcelona where job losses in the late 1970s served as the impetus for the successful bid to host the 1992 Summer Olympic Games and use it as the catalyst for developing a new, forward-looking economic strategy, or in Washington, DC, when a municipal budget deficit and reduction in federal government employment served as the impetus for an aggressive new strategy for diversification, growth, and community improvement. Leadership can also come from concern about the challenge of economic competition and vision of expanded opportunity—in the absence of a perceived crisis—such as in Shanghai. with

the Chinese government promoting investment in the city and surrounding region as the leading edge of national economic competitiveness in global markets, or in Austin, Texas, where dynamic business and government leaders turned a state capital and university town into a worldwide center of technological production. In either case, people must have a genuine desire and willingness to work together for improvement, and a belief and faith that working together in creating and carrying out a strategic vision will generate meaningful results and widespread benefits.

When most of the major stakeholders finally have agreed to work together across an urban region, then the issue becomes how to do so most effectively to generate broad-based economic growth and increased quality of life. In order to formulate a good strategy, clear agreement on goals is needed, though the most important goal should always be enhancing prosperity for everyone and everyplace. Also needed is a very clear understanding of the market forces and institutions, because a strategy is a theory of cause-and-effect relationships that must be based on a realistic comprehension and thorough knowledge of what is actually occurring and how things truly operate. A strategy is not just stringing together a collection of specific projects or programs. There must first be a broader clarity about how to accomplish the planned results, and only then will doing major projects and programs become a necessary and vital aspect of the implementation process.

Another important challenge for Metropolitan Economic Strategy to succeed is that of governance. Even though urban regions are the main engines of growth, productivity, and innovation in the global economy, governments are not organized along such geographic lines. In most cases, with China as a notable exception, there are no general purpose governments with substantial authority and resources whose jurisdiction corresponds directly to the boundaries of urban regions. South Africa recently created metropolitan governments to end the legacy of apartheid and bring together under one jurisdiction the formerly 'white' cities and 'non-white' suburban townships, but even in those situations it is necessary to bring together a wide variety of local government jurisdictions, along with provincial and national government, in order to prepare and implement a Metropolitan Economic Strategy. In many places around the world, the population and workforce of urban regions cut across provincial or state boundaries, and in some cases, even national borders, thus compounding the governance challenge. Developing leadership that can build consensus and collaboration is a vital task. No strategy can succeed without good leadership. Also, coordination among numerous governmental units is only part of the challenge of governance. Public-private partnerships that include business and civil society along with government are equally essential.

In Washington, DC during 1997–8, we engaged in a massive effort to create a strategic economic development plan that has been very successful over the past seven years in expanding jobs and capital investment, raising incomes, promoting development and renovation, increasing homeownership, and improving neighborhoods. This was a city-level plan, but one that took an explicitly pro-metropolitan approach. We studied the city's prospects in the context of its role in and contribution to the metropolitan economy, focusing on how to grow the overall regional pie and capture a larger slice of that expanding pie for the city and its residents. Many of the projects, such as the NoMa (North of Massachusetts Avenue) initiative that financed and built a new Metrorail transit station

and bicycle/pedestrian path at New York Avenue and redeveloped a deteriorated and abandoned area of the city as a thriving technology, media, arts, and housing district, won support from regional business and government leaders outside the city because it improved metropolitan economic competitiveness. The NoMa story was a good example of ‘win-win’ inclusiveness, as it brought together and benefited various levels of government, private businesses and property developers, low-and moderate income community residents, and environmental activists, which is why it was designated in 2002 by the United Nations as one of the 40 worldwide Best Practices to Improve the Living Environment, and also why in 2002 the Ford Foundation and Harvard University designated it as one of the 99 best Innovations in American Government. Other city initiatives also had a metropolitan dimension, such as extending Metrorail service in the suburbs to make it easier for low-income city residents to obtain and travel to suburban jobs, and also including the offer of new financial incentives for suburban residents to purchase homes and move back into the city in order to enjoy the attractions of a more urban-oriented lifestyle.

TWO ESSENTIAL ELEMENTS OF METROPOLITAN ECONOMIC STRATEGY: INVESTING IN FUNDAMENTAL ASSETS, AND BUILDING DYNAMIC INDUSTRY NETWORKS

A good economic strategy consists of two key elements: 1) building from strength—investing in the fundamental assets and activities that make people more productive and places more valuable; 2) generating dynamism—promoting modern, globally competitive industry networks that accelerate the pace of innovation and growth. Investing in the fundamental assets shifts the focus away from narrowly defined economic development initiatives that rely on tax subsidies and other incentives. The biggest asset is people, and what makes them productive are investments in transportation and infrastructure that move people, goods, and information most efficiently and cost-effectively, investments in education and workforce development that make people more skilled and innovative, investments in research and technology to generate new ideas and products and processes that are highly valued in the world, investments in health and safety that make places worthwhile for living, working and visiting, and investments in the physical environment and cultural milieu that make places more attractive, life more rewarding, and people more motivated to work and study hard. Thus economic strategy, as opposed to the conventional view of local economic development, involves all of the important aspects of public and private resources and institutions, and is necessarily comprehensive and broad-based.

In Akron, Ohio, the leaders of the urban region came together in an economic crisis and created a Metropolitan Economic Strategy that maximized their fundamental assets of people and place. Faced with the loss of thousands of jobs in rubber tire manufacturing by the four major companies—Goodyear, Goodrich, Firestone, and General Tire—metropolitan leaders did not try to become another Silicon Valley and create an information technology and telecommunications industry. Instead, they recognized that ‘high technology’ in today’s world involves every type of product and production process, and that they could compete more effectively by focusing on their own areas of expertise rather than simply trying to imitate what other places were already doing successfully.

Since synthetic rubber was developed in Akron during the 1940s and 50s, Akron's metropolitan leaders recognized that the people and institutions within their region had a depth of knowledge in the field of polymers, the science and engineering of plastics and related synthetic materials. Therefore they decided to invest more heavily in this unique specialization, and reinvented their urban region as the world center of polymer science and engineering, creating a whole new college and research laboratories at the University of Akron. They put together all the elements of such a Metropolitan Economic Strategy—education, job training, research, financing, business assistance, facility construction, physical infrastructure, trade promotion, marketing, product development, industry network linkages, personnel recruitment, and much more—and they successfully implemented this strategy by generating hundreds of new private firms and thousands of new jobs in polymer-related activities. Akron's public and private leadership also diversified their economy through conventions, entertainment, recreation, and tourism, and thus improved the quality of life vitally necessary for retaining and attracting skilled workers and creative entrepreneurs. Akron's success is a good example of a major theme of Metropolitan Economic Strategy: 'Be Yourself.' The assets of an urban region or any other geographic entity will differ from most others, and each economic strategy must be specifically tailored to maximize the value of the existing assets of people and place that are special to a particular culture and location.

The second major element of Metropolitan Economic Strategy is to promote the growth of dynamic and innovative industry networks, also called clusters. Industry networks, as the name implies, draw upon a wide range of closely interacting private and public sector organizations and institutions that supply each other with goods and services to produce specialized and competitive products and skills. These business and agency linkages are key to the success of an industry network, and they cut across the traditional industrial or sectoral classifications, because in this case an economic activity such as machinery production will include a much wider range of scientists, engineers, lawyers, accountants, bankers, insurers, architects, designers, and a whole host of related fields that enable machines to be manufactured and distributed with cost-effectiveness, technological efficiency, and market appeal, and to be sold or leased at a sufficient profit that will provide safe jobs and decent livelihoods for a large and growing population of workers and consumers. Industry networks that are the engines of prosperity in the new global economy can be in manufacturing or services, involving old or new technologies and products, from food and medicine to computers and mobile phones. Each place will have to determine which industry networks will be most productive, innovative, competitive, and dynamic based on the fundamental assets of their particular population and location, such that polymer development will work for Akron and commercial shipping for Barcelona, but not the other way around.

To effectively grow industry networks or clusters, they must be tailor-made for the asset-base and business mix of each urban region—one size definitely does not fit all. In this sense, the first key element—investing in the fundamental assets—and the second element—growing the dynamic industry networks—are deeply interconnected, and developing a comprehensive Metropolitan Economic Strategy involves the specific interaction between these two. Major assets such as international airports, universities, scenic water-

ways, or historic neighborhoods can promote the growth of a variety of industry networks if planned and developed as part of an effective strategic framework. In turn, each industry network will draw on a wide range of different assets, with no two networks necessarily having the same needs and priorities even in the same location. Every urban region must build on its existing strengths, and create precisely targeted policies and incentives to generate investment and growth that makes the best possible use of its fundamental assets. It is important to emphasize that industry networks or clusters only give urban regions a competitive advantage *if* they are dynamic and growing. Competitive success in the new global economy comes through fostering innovation and productivity. Industry networks are key elements of Metropolitan Economic Strategy only to the extent that they can help generate rising incomes and employment through combining creative specialization with resourceful diversity. Simply identifying an urban region's 'clusters' will do no good for strategic economic development if these clusters are unproductive, outmoded, or stagnating.

WHY QUALITY OF LIFE—SUSTAINABILITY, EQUITY, AND INCLUSIVENESS— IS NOW NECESSARY FOR GLOBAL AND URBAN PROSPERITY

In formulating and implementing Metropolitan Economic Strategy, improving the physical environment and addressing social equity are integral to the overall prospects for success. This represents a change in paradigm from the traditional concept that economic growth and competitiveness does not involve environmental protection or poverty reduction, with some people and policymakers still viewing these three concerns as at least separate and perhaps even incompatible. The progressive idea of the sustainable development movement is that the three concerns must be balanced against each other such that each one is taken seriously as an important societal and public policy goal. *In today's global economy, where quality of life is the key to attracting and retaining skilled workers, and skilled workers are the basic building blocks of economic prosperity and competitiveness, improving the environment and addressing social equity are no longer luxuries to be traded off against economic growth. Indeed, they are now absolute prerequisites for achieving and sustaining growth of jobs and incomes, trade and technology.* If a place has polluted air and water and terrible automobile traffic congestion and unmanageable sprawl, it may become an undesirable place for people to live, work, and visit, and for companies to invest in and locate production facilities and personnel.

Quality of life is an increasingly important fundamental economic asset because global competitiveness now requires placing a premium on making it possible for talented entrepreneurs, professionals, and skilled workers to choose where they want to live and work. These potentially highly mobile individuals and families are attracted to and retained by urban regions with good housing and transportation, significant cultural and recreational amenities, vibrant community life, and an appealing natural environment. For example, in the U.S., the State of Maryland's Smart Growth and Neighbourhood Conservation initiative, winner of a prestigious Innovations in American Government award from the Ford Foundation and Harvard University during the year 2000, combined environmental and open space protection with urban regeneration and promotion of liv-

able suburban communities by reducing traffic congestion and other harmful effects of excessive sprawl. Former Maryland Governor Parris Glendening, who championed this initiative, clearly viewed Smart Growth and Neighborhood Conservation as a strategy for promoting high-value economic development through improved quality of life, noting that Maryland's economy made substantial gains in employment and income growth after the initiative was launched in 1997. Former Governor Glendening cited the example of a young technology entrepreneur who located his fast-growing company in Annapolis—Maryland's state capital and home of the U.S. Naval Academy—because he enjoyed the combination of an urban environment with culture, night life, and historic architecture, together with abundant opportunities for boating and recreation on the Chesapeake Bay. This chief executive decided to provide two company-owned sailboats for his workers to use on their free time, as an innovative incentive that his firm successfully uses to attract and retain skilled employees. Many other places around the world are increasingly taking comparable approaches to combining environmental and open space preservation with metropolitan land-use planning, growth management, and urban reinvestment as strategies for enhancing sustainable quality of life that will also generate economic prosperity.

Indeed, preserving and enhancing a good physical environment is now essential to the long-run economic success for any nation, region, or community. Public and private sector leaders are increasingly recognizing that urban regions in the 21st century can only compete globally and become sustainable centers of innovation if they succeed in attracting and retaining an excellent and highly motivated workforce. Places that offer a good environment and lifestyle—not only for working, playing, and raising a family, but for visits by tourists, business executives, and conventioners—will benefit substantially from their competitive economic advantage. This is why investing in and enhancing physical and cultural heritage—what the Prague Institute calls 'Celebrating Our Urban Heritage'—is vital for improving the overall economic climate by substantially improving quality of life not just for heritage tourists, but more importantly, for the people who live and work in the urban region. Today's environmentalism and related movements for sustainable development, smart growth, and new urbanism are more than just compatible with economic growth. Environmental protection and restoration have become fundamentally necessary for generating and sustaining prosperity. Today there is a strong case to be made for why a good environment and improved quality of life is critically important for economic productivity, and a growing number of mainstream economists, including Lester Thurow, Joseph Stiglitz, and Jeffrey Sachs, support this point of view.

Protecting and sustaining the physical and natural environment of urban regions involves many different yet equally important actions. They include: cleaning up and redeveloping toxic and polluted 'brownfield' land; renovating historic structures; improving clean air and water; maintaining the beauty of natural landscapes; increasing the accessibility of pathways and open spaces; preserving the availability of agricultural land; curbing sprawl and traffic congestion, reinvesting in older towns, cities, and inner-ring suburbs; expanding transit and other pedestrian and transportation alternatives; promoting ecological and heritage tourism; developing 'green' infrastructure; increasing recycling and the use of renewable energy sources; encouraging energy conservation; and generally strengthening community planning and design. As the movement for environmental justice rightly argues, these

needs are especially pressing for low-income communities, which are generally harmed the most by air and water pollution and exposure to a wide variety of harmful substances and unhealthy conditions. Urban regions such as Curitiba in Brazil and Portland, Oregon in the U.S. have made environmental improvement and protection a centerpiece of their Metropolitan Economic Strategy to compete more effectively in the global marketplace by attracting and growing cleaner industry networks in both manufacturing and services.

Similarly, if a place has high crime, social unrest, disease, and deterioration, it may become equally unattractive and undesirable for a quality workforce and thriving employers. The recent economic development plan for Johannesburg, *Joburg 2030*, acknowledged the vital economic importance of social equity and investing in disadvantaged people and communities when it listed as its four major barriers to achieving economic success: high crime, physical dilapidation of the inner city and outer townships, the HIV/AIDS pandemic, and lack of sufficient education and skills by a large proportion of the workforce. In both Cape Town and Durban, South Africa, recently adopted economic development strategies include a significant focus on policies to raise incomes, increase jobs and business opportunities, and improve the quality of life for low-income families and neighborhoods. Cape Town calls it 'Our Golden Thread': 'It is not a question of choosing global competitiveness *or* the reduction of poverty—Cape Town will achieve both *or* neither. Reducing poverty will strengthen global competitiveness, and global competitiveness will permit reduction of poverty through economic growth and job creation.' Singapore, for example, has done an exemplary job of recognizing that its greatest asset is its people, and that in order to have a well motivated and highly productive workforce, everyone must share in the fruits of prosperity. With the goal of economic and social equity in mind, Singapore moved from being a relatively poor British colony and international seaport during the 1950s to virtually eliminating poverty in the four decades since becoming an independent nation (truly a 'city-state'). The national homeownership rate in Singapore is currently more than 90 percent, and housing, education, health care, and per capita incomes have all improved dramatically within two generations.

CONCLUSION

It should now be clear that Metropolitan Economic Strategy is a new global paradigm and policy initiative that is increasingly essential for generating and maintaining a vibrant and prosperous economy for everyone and every place in the world. Issues that generally were considered to be separate and distinct from economic growth and development, including a sustainable living environment, social equity, cultural diversity, spiritual values, honoring historical traditions, governance, citizenship, inclusiveness, and other similar 'non-economic' concerns are now completely tied to the future performance and competitiveness of the economy in the global marketplace. 'Urban policy' must now become the centerpiece of international and national macroeconomic policy, because urban regions are the dynamic engines of innovation and productivity for the world, and they can produce and distribute the resources that provide better livelihoods for urban and rural residents alike.

In order to have a good economy today and in the future, urban regions must have a good quality of life. Good quality of life requires a good physical, social, political, and cultural environment. The rising importance of quality of life for economic prosperity—specifically the vital need for sustainability, equity, and inclusiveness—is an entirely new paradigm for the 21st century. The best way to address these new realities is for every nation, region, and community to adopt the framework of Metropolitan Economic Strategy. Then they can all work together cooperatively to design and implement successful economic strategies that invest in their fundamental assets and grow dynamic industry networks simply by being themselves. This can only be achieved, however, with good leadership, cooperative governance, and a common sense of purpose and mutual identity called ‘Teamwork.’

**CITIES IN EAST-CENTRAL EUROPE IN THE AFTERMATH
OF POST-SOCIALIST TRANSITION.
SOME CONCEPTUAL CONSIDERATIONS ABOUT FUTURE CHALLENGES**

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INTRODUCTION

Cities in East-Central Europe¹ underwent profound political, functional, economic, and socio-spatial changes in the past period of post-socialist transition (Andrusz et al. 1996; Kovács and Wiessner 1997; Enyedi 1998; Hannemann et al. 2002). While from the very beginning the main hypothesis concerning the future development of these cities maintained a gradual western-style modernization, the reality of ‘fifteen years after’ turns out to be much more differentiated. Persistent legacies of real socialism are to be found alongside both planned and unintended outcomes of rapid transformation, and so far the cities represent a hybrid type of urban development which has been characterised as ‘post-socialist’ or ‘post-communist city’ (Sykora 2000; Burdack and Rudolph 2001; Sagań 2000: 156–84).

Probably due to these ongoing differences—but certainly also because of the long-term neglect of ‘Eastern’ cities by ‘Western’ urban studies—the recently intensified debate on the European city is as a rule still excluding East-Central Europe (Le Galès 2002; Siebel 2004). The following paper argues that such exclusion is short-sighted because the cities in this region are already facing or will face similar structural challenges like their

¹ There is no common or precise demarcation of East Central Europe. In the following, the term is understood in a narrow sense comprising mainly Poland, the Czech Republic, Slovakia and Hungary. The literature used and the empirical examples presented mostly refer to Poland, the Czech Republic and partly to Hungary.

Western pendants—among them, most importantly, growing regional polarisation and demographic changes. Thus, they need to be set into the context of the general European trends and their social and spatial consequences.

Before going into detail, it needs to be pointed out, that the paper is first of all meant as a *conceptual approach* in order to work out new questions for future urban research on East-Central Europe. It is based upon a broad literature review and empirical evidence will be provided only exceptionally. Instead, while discussing imaginable future trends, one of the key questions to be followed will be, to what extent experiences from Western Europe and Eastern Germany can be transferred to East-Central European cities and which limits of such a transfer need to be taken into account—without always being able to answer these questions in a satisfactory way.

In a first part, the paper reconsiders main outcomes of post-socialist transition in the urban context. In a second part regional polarisation and demographic change are introduced as future issues to focus on. A further section discusses links between different transition processes, demographic change and housing, especially for inner-city areas as one example for further research activities, before the paper finishes with some conclusive remarks.

POST-SOCIALIST URBAN TRANSITION (RESEARCH) RECONSIDERED

After the boom of transition research in the 1990s, the interest of the social sciences in structural changes in Central and Eastern Europe (CEE) remarkably decreased in recent years and the concept of post-socialist transition as fundamental explanatory framework was gradually substituted by more unspecific terms like restructuring or change (Enyedi 1998; Lowe, Tsenkova 2003; Kovács, Wiessner 2004). The question if the Western European model really marks the final stage of transition, or whether CEE cities will be characterised by independent patterns of urban development also in the medium and long term remains, however, unanswered.

What systematic body of evidence did urban transition research? In the beginning of the political process and mainly based upon theoretical models of a stepwise western-style modernization, social scientists came up with a range of forecasts concerning the future socio-spatial structures of post-socialist cities, with the main processes of a functional specialisation of the city centres, an increasing residential segregation or even polarisation, waves of suburbanisation as well as down-grading processes in the large post-war housing estates (e.g. Friedrichs, Kahl 1991; Marcuse 1991; Musil 1992). After 15 years of transition it can be confirmed that most of these prognoses have become true: city centres have indeed become much more commercialised, they have lost their importance as residential locations, the urban hinterland has undergone processes of retail and residential suburbanisation, and the socio-spatial differentiation between core city districts (including up- and down-grading) has remarkably increased (Kovács and Wiessner 1999 and 2004; Sykora 2000; Sykora et al. 2000; Węclawowicz 1998 and 2001; Steinführer 2004: 74–93).

However, when comparing these short-term consequences with the original prognoses, it becomes also obvious that too much importance has been ascribed to the dynamics of

the process. For quite a long time, transition research only focused on change—of structures, space, demographics, social groups etc. With growing recognition of unpredicted consequences, path dependencies and different transition paces of single societal spheres, the maintenance of certain patterns was no longer regarded as a deviation from something given, but instead as inherently belonging to the process of societal transformation. In practice, rapid change proved to be not the one and only expression of post-socialist transition. Moreover, also the assumption that change will proceed in more or less only one direction, i.e. as an adaptation to Western structures, has led to biased assumptions and perceptions.

Instead of exclusively fundamental change, urban transition comprised a simultaneousness of different tendencies: (a) a *return of pre-socialist patterns* under changed circumstances with strong links to the historical heritage of the city and its neighbourhoods; (b) the existence of *persistent patterns* which remained almost untouched during real socialism; (c) a *continuity of socialist structures* of social behaviour, (quasi-)property rights and individual decisions; and (d) a *consolidation of new, transition-related patterns* with both national and local specifics. Concerning the latter, it is important to point out that beside expected outcomes, also structures either unintended or not foreseen came into being.²

This conglomerate of (transformed) legacies and new patterns forms the basis for the hybrid type of urban development, which is typical for East-Central Europe and CEE as a whole and for which a satisfactory and positive term beyond 'post-socialist' has not yet been coined. However, the mix of these different outcomes will also lead to *mid- and long-term specifics* of the development of the cities in the region.

A further problem concerns the different *scales of urban transition*. As for East-Central Europe, a large body of research deals with the capital cities (Prague: Sykora 1994 and 1999; Musil 1997; Warsaw: Węclawowicz 1993 and 2002; Mync 1995; Budapest: Kovács 1994; Douglas 1997; Kovács, Wiessner 1999 and 2004). This is due to the reason, that here the changes have been most obvious and most extreme, e.g. concerning the internationalisation of the real estate markets or social polarisation (Sykora 1994; Gawryszewski et al. 1998; Węclawowicz 1998). However, causal relations with respect to post-socialist transition are not always clarified, since in all CEE capitals, this process has been overlapped by globalisation pressures and in the candidate countries also by adaptations due to the requirements of EU enlargement. Knowledge about the paths and pace of urban transition in other big cities beyond the capitals or in small towns is much more limited. Only a few studies can be mentioned for Hungary (Sailer 2001; Kiss 2004), Poland (Smith 1995; Riley et al. 1999; Węclawowicz 2001 and 2002; Hasse, Kunze 2002) and, restricted to Brno, the Czech Republic (Mikulík, Vaishar 1996; Sykora et al. 2000; Vaishar, Zapletalova 2003; Steinführer 2003 and 2004). Both the 'Western' and 'Eastern' perception of post-socialist urban transition is based almost exclusively on the processes

² This is true e.g. for the continuous differences of urban tenure structures (Lowe, Tsenkova, eds. 2003; Billert 2004; Steinführer forthcoming). So far, in the Czech Republic public housing continues to be an important market segment although recent mass privatisation efforts will significantly change this situation in the near future. In Poland, co-operatives offering housing with characteristics similar to owner-occupation became more important. Again another situation is to be found in those societies which transformed their housing sectors via give-away privatisations, such as Slovenia, Hungary or Lithuania where the majority of former tenants became owner-occupiers 'over night' and where public housing is marginalised (Priemus, Mandic 2000).

and their consequences in the capitals, starting from the—rarely tested—hypothesis that in the other, smaller, cities generally identical changes are going on, although ‘slower and delayed’ (Sykora et al. 2000: 62).

However, such conclusions based on analogies can lead to inadequate interpretations of local development trends. Due to the principal differences in the circumstances of the transition of the capital cities, depending upon their function and size, it can be presumed that they follow their own specific paths differing considerably from those of smaller towns. Already now it is evident that the ‘one and only type of post-socialist urban development’ is a myth rather than something appropriate for the complex and complicated reality. There are plenty of national, regional and functional differences. Listing the several types of cities beyond the capitals—for example the mining towns of Upper Silesia, Northern Bohemia and Northern Moravia (Katowice, Ústí n. L., Ostrava), mono-functional industrial towns (Łódź), cities located close to Western borders (Plzeň, Szczecin) or international fair and trading locations (Poznań, Brno)—it becomes obvious how difficult it is to rely solely on analogies. Hence, the question of which evidence regarding urban transition from the capital cities can be transferred to smaller cities and which cannot must be left open so far.

NEW CHALLENGES: REGIONAL POLARISATION AND DEMOGRAPHIC CHANGES

The main point of reference concerning urban change in CEE in the past decade has been post-socialist transition. But due to a lot of reasons, one can argue that this framework condition is gradually losing its significance for explaining urban development trends in Eastern European cities. Instead, more general European patterns are already becoming and will become even more decisive in the future. Two main trends will be discussed in this chapter: first of all, the role of *regional polarisation* and secondly the mid- and long-term impact of *demographic and household changes* on urban structures.

Regional polarisation used to be a common feature of Western European societies in the past decades. While urban development is traditionally described with growth figures, the development of many old industrial cities and regions in Western Europe in the period after World War II was characterised by a long-term change of economic structures, with the key process being deindustrialisation (Haußermann 1992; Schulze 1993). This brought about consequences like rapidly declining population numbers and deficient municipal budgets, polarised urban areas, vacant flats, brownfields, and oversized infrastructures. At the same time, land consumption went on at the periphery, thus contributing to a simultaneousness of structural decline and spatial growth, e.g. in Northern England, the Scottish Clydeside, the Ruhr Basin or Lorraine. The problems of these city regions differ remarkably from those of urban growth poles like Paris and London, the Dutch Randstad, or the metropolitan areas of Southern Germany and Northern Italy.

At present, the pattern of decline of urban development is probably most obvious in eastern Germany, accompanied by a vibrant debate both among politicians and researchers under catchwords like ‘shrinkage’ and ‘urban restructuring’ (*Schrumpfung*, *Stadtumbau*; Hannemann et al. 2002; Hannemann 2003; Gatzweiler et al. 2003; Kabisch

et al. 2004). Rapid and excessive deindustrialisation and mass out-migration in the 1990s on the one hand, but modernisation of infrastructures, large-scale rehabilitation of the housing stock and new developments on the other hand brought about distinct urban structures (e.g. mass housing vacancies), which are neither in line with pure western-style modernization nor were they intended.

When looking even more eastwards, it needs to be stressed that the specific structures and resulting problems of old industrial regions are by no means restricted to Western Europe. Similar regions are to be found in East-Central Europe, too—one may only think of the Upper Silesian industrial region, Northern Bohemia or Northern Moravia. Old industrial cities (like Łódź, Katowice, Ostrava or Opava) are also faced with problems like deindustrialisation, rising unemployment, ecological degradation and a lack of renovation activities (Liszewski, Young 1997; Billert 2004). But also in this respect, urban (transition) research so far used to be one-sided with its focus on the capital cities, hence the growth regions of the respective countries.

Another framework condition impacting on both prospering and declining cities is the so-called *Second demographic transition* (van de Kaa 1987 and 1994; Lesthaeghe 1995; Ogden, Hall 2004) the main features of which are decreasing fertility in absolute and relative terms, ageing, shrinking numbers of inhabitants, and change of traditional household structures. The concept was developed in the 1980s and meanwhile presents an established framework for explaining the manifold changes of the relations between societal processes, individual biographical decisions in the life course and household structures. Demographic change includes trends towards smaller households, the higher number of household transitions by individuals during their lifetime, the rising importance of 'non-traditional' and non-family units such as childless couples, older and younger one-person households and unrelated persons sharing a flat as well as patterns like decreasing birth rates and ageing. The general societal trend of individualisation is reflected in a double sense: by the rising numbers of one-person households and by a bigger variety of household types corresponding to the concrete situation of a person and mirroring a changed, more subjectively-based understanding of family and household (Silva, Smart, 1999).

Signs for these far-reaching demographic changes are to be found everywhere in Europe, also in its central and eastern parts (Kučera et al. 2000). In the East German context, experts even speak of a 'new demography' (Kohler 2000), which arose as a consequence of both natural and migratory demographic behaviour, such as out-migration (of the most fertile age groups) to western Germany, rapidly changed fertility patterns in the beginning of the 1990s and much more diverse household structures.

Moreover, one has to stress the manifold interrelationships between regional polarisation and demographic changes. As for eastern Germany, the first short-term consequences of the Second demographic transition are most apparent in those regions at the decline pole of economic restructuring leading to large-scale vacancies and oversized infrastructures. But also in prospering regions, the change of household structures is an increasingly important factor for housing markets and therefore urban developments. Subsequently, phenomena like the growing importance of elderly-oriented housing (including persons very advanced in years), the decreasing role of classical nuclear and extended-family households, the rising importance of patchwork households, a further differentiation of

migrants' households will increasingly determine housing demands, mobility behaviour and hence urban housing markets.

As for East-Central Europe, in some regions first demographic changes—at least with respect to total population figures—are observable, most obviously in old industrial cities like Ostrava, Plzeň and in the Czech Republic or Łódź, Wrocław, Kraków, Poznań, Gdańsk, Szczecin and Lublin in Poland.³ Main reasons for the shrinking population are declining birth rates and out-migration (Jakóbczyk-Gryszkiewicz 1997; Andrlé 2001). But since the consequences for the use of urban infrastructures, municipal budgets and housing markets are so far negligible, these population trends are not attracting much scientific attention at present (as exceptions: Musil 2002: 318–26; Markowski and Stasz 2003: 46; Andrlé 2004: 49). Instead, the public discussion on demographic change focuses on its mid- and long-term consequences for the general population development and socio-political implications (Rychtaríková 1999; Kotowska 2001). Also references to parallel developments in eastern Germany are almost completely lacking.⁴

But also less apparent demographic changes—mainly at the level of the households—are to be expected in East-Central Europe. However, empirical evidence is missing so far on this particularly crucial aspect, which directly affects both urban housing markets and socio-spatial differentiation processes, as experience from the Western scientific debate on housing demography and the so-called 'new' or 'non-traditional' households suggests (Droth, Dangschat 1985; Myers 1990; Ogden, Hall 2004). In this regard, research refers especially to young professional, single households, childless couples and flat-sharers. Due to the variety of biographical changes in the younger years of the life course, like qualification measures, start of the professional carrier, formation of partnership, birth of a child etc., younger persons are changing the household structure more often. Hence, both their latent and real residential mobility is higher than among elderly or more 'consolidated' households. Moreover, their housing demands are shifting according to the current stage of their professional and private life. Therefore, preferences, internal and external restrictions as well as consequences of residential mobility of these households for urban structures have been copiously investigated in Western societies (Rossi 1955/1980; Myers 1990; Schneider, Spellerberg 1999).

So far, the current debates on demographic changes in CEE countries are not yet related to a consciousness of being faced with a fundamental change of urban development tendencies in the future. The rich body of experiences concerning the path dependency of Western European industrial regions and the specific development in eastern Germany in a considerably shorter time period in the 1990s mentioned above, however, allow for far-reaching prognoses concerning similar processes in CEE (non-capital) cities with respect to functional, socio-spatial and housing market structures. Hence, regional polarisation

³ Billert (2004: 1) refers to the fact that the number of urban dwellers in Poland in comparison to the 1980s decreased remarkably (-12%). From 1998 to 2000, the loss of population in all Polish cities and towns was about 30,500 persons. Similar developments are described by Musil (2002: 305–06) for the Czech Republic.

⁴ As for the Polish debate, it must be underlined that phenomena like the decrease of inhabitants and 'non-growth' since 1999 are already partly discussed or, at least, perceived as social realities (Droth et al., 2000: 30). In the Czech Republic, the results of the last population census (2001) stated a surprisingly high number of 'uninhabited' flats (including those flats which are not permanently used by the main tenant/owner). As a consequence, a vibrant debate arose concerning artificial housing shortages, regional disparities and 'real' housing vacancies (Andrlé 2004; Steinführer forthcoming).

and demographic changes will certainly belong to the most striking challenges cities in East-Central Europe will be faced with in the future. On the one hand, this is true for both prospering ('growing') and declining ('shrinking') cities and their regions alike. On the other hand, the picture differs considerably when one looks at several local contexts and on an intra-urban scale. Therefore, in the following section the focus will be laid upon inner-city residential areas in order to demonstrate the manifold inter-relations between the few processes mentioned so far and to develop respective research questions.

LINKING TRANSITION, HOUSING AND DEMOGRAPHIC CHANGE: THE EXAMPLE OF INNER-CITY AREAS

An especially meaningful example of the processes and inter-relations mentioned above are inner-city residential areas with a predominance of pre-war housing stock, functionally the 'zones of transition', as the Chicago School used to call them. Astonishingly, this type of neighbourhood was only rarely in the focus of urban transition research, at least in cities of East-Central Europe (with the exception of Budapest; Kovács, Wiessner 1999: 45–66). What is the special significance of these areas?

Once more, a transfer of 'Western' knowledge can help to widen the perspective from simply post-socialist transition to broader questions of urban research. Evidence from Western Europe and Northern America amply indicates that inner-city residential areas, in particular, correspond with the spatial and housing demands of the 'new' household types mentioned above. This is enabled by the traditional urban fabric (i.e. rarely hierarchic and sometimes even generous floor plans, the external appearance of built-up heritage, appreciated especially by better-off and younger middle-class households), the central location and the closeness to manifold urban amenities. After a period of severe decline in the post-war decades, these areas were in many Western cities faced with re-population and revitalisation processes, often accompanied by a displacement of their traditional long-term dwellers. Usually, younger, better-off households entered these neighbourhoods and fundamentally changed their demographic and social structures. Since then, a large body of research has been dealing with this new phenomenon and even coined a new term for it—gentrification (e.g. Clay 1979; Gale 1986; Friedrichs and Kecskes 1996; Slater et al. 2004). In recent years, the term reurbanisation (as a concept for analysing the potential and suitability of inner-city areas as attractive residential locations for a variety of social groups and household types in a mid- and long-term perspective) came into being in order to analyse broader and socially less selective processes of inner-city development (Lever 1993; Ogden and Hall 2000; Haase et al. forthcoming).⁵

However, again one has to state that cities in East-Central Europe are usually excluded from this debate—mostly only 'spectacular' cases, such as former Jewish quarters,

⁵ Cf. for example the EU 5th FP project 'Re Urban Mobil—Reurbanisation on Condition of Demographic Change' (contract no. EVK4-2001-00171; homepage www.re-urban.com). It focuses on the prospects and constraints of reurbanisation processes in inner-city areas, especially taking into consideration demographic and household changes. It draws on the empirical investigation of inner-city developments in five European cities—Leipzig (Germany), Bologna (Italy), Ljubljana (Slovenia), Leon (Spain) and Brno (Czech Republic).

are taken notice of (like Kazimierz in Kraków: Węclaw 1997; Murzyn 2004). Instead, the focus of urban transition research was on large post-war housing estates (Rietdorf et al. 2001), city centres (Falk 1994; Górka 2001 and 2003) and suburban locations (Jakóbczyk-Gryszkiewicz 2002; Ouredníček 2003). In contrast with these places, the majority of inner cities sometimes even appeared as the stagnating poles of urban development in the respective countries (Sykora et al. 2000: 68).

But already the small body of studies on less 'spectacular' inner-city areas make sure that they are by no means stagnating. On the contrary, micro- and meso-scale analyses prove that household structures as well as age and tenure compositions have changed in recent years (Kipta 1995; Vaishar and Zapletalová 2003; Steinführer 2004: 292–303, Węclawowicz 2003: 91–117). Historically, these areas were founded as workers' or middle class residential places, and they are often situated close to industrial areas. Therefore, the state of the residential environment is usually bad (Mikulík and Vaishar 1996). The physical structure in these neighbourhoods is rather diverse, ranging from very simple to valuable housing stock, which was considerably neglected in the decades after 1945. Beside a social mixture, they are in some places also characterised by marginalised groups of residents—in East-Central and South Eastern Europe e.g. elderly people and ethnic minorities (mainly Romas; Ladányi 1993).

In the urban context of many East-Central European cities, inner-city residential areas were and are important for the urban viability and the local identity. Post-socialist transition meant for these areas, first of all, far-reaching changes of housing ownership and tenure structures, an issue that has been only rarely analysed in its social and spatial consequences up to the present (with some suggestions: Mandić and Clapham 1996). Moreover, it has brought about considerable and partly contradictory consequences for the social composition (social mixture vs. polarisation, ageing vs. gentrification) and physical structures (privatisation for sitting tenants vs. vacancies, decline of building stock vs. luxury renovation). At present, it is completely open-ended how these old built-up areas will develop in the future. It will depend, in any case, on the condition of (consolidating) post-socialist ownership structures, local and national circumstances, the constellation and interests of actors involved as well as on broader trends of demographic and household changes. Many open research questions could be formulated, such as: Are these changes showing similar patterns like in Western European countries or in eastern Germany? Are there alternatives to displacement and social polarisation? For which household types, socio-cultural groups and generations are these areas attractive and who can (and wants to) afford to live there? What role are historical legacies and path dependencies on the neighbourhood level playing—e.g. with respect to ownership structures or urban images? How do inner-city neighbourhoods in prospering cities differ from declining ones?

Hence, one concern of future urban research on the post-transition cities in East-Central Europe could be on quantitative and qualitative changes of household structures and their consequences for urban structures and housing markets. On a smaller scale, the impacts of these overall tendencies, especially on inner-city neighbourhoods, could be investigated. In this context, processes of new occupancy and displacement have to be analysed and explained. Key groups of actors (residents, owners etc.) have to be identified and their

interests, intentions and real behaviour to be explained. Moreover, the position of these areas in intra-urban hierarchies in contrast with other types of residential districts and their changes, respectively, need to be given more attention. Finally, single case studies have to be placed into broader contexts in order to work out which trends are, on the one hand, specific for a single area and which, on the other, represent more general patterns of urban development under the condition of transition and demographic change. This should also include explicit references to European patterns of urban development in order to apply the concept of the 'European city' in a true European sense—and not restricted to Western European agglomerations.

Last but not least, this leads to the necessity of comparative approaches, not only between cities in transition but also between 'Western' and 'Eastern' cities, including knowledge transfer from both parts. CEE cities, including regions in East-Central Europe, have to be seen—apart from all specifics—within the context of the further-polarising urban development of all of Europe. In the medium term, they have to get along with the consequences of demographic changes outlined above and their social, spatial, housing market and infrastructural consequences, just like it can be observed today in Western Europe and—in an especially dramatic way—in eastern Germany. Therefore, a critical reflection of experiences from those countries and regions is supposed to be of high relevance for coming to a better understanding of and reactions towards these processes. In particular the East German case—despite or even because of its specifics—could be a contrasting example worthy of analysis from the East-Central European perspective, not least because the starting position of the different societies in the region (including Germany's eastern part) in 1989/90 was far more similar than it is often supposed today (for the opposite perspective: Steinführer 2004). Therefore, it seems to be reasonable to relate current and future developments in East-Central Europe to processes that have occurred in eastern Germany within the last decade(s), just as Western European experiences were applied to explain the post-socialist development in East German cities after the beginning of transition.

CONCLUSIONS

The aim of this contribution was to reconsider the debate on the character and direction of urban changes in CEE cities (with the special focus on East-Central Europe) and to embed it into a broader and partly new framework. Hence, the main focus was not set anymore upon post-socialist transition, even if it will certainly represent an important explanatory background for on-going developments in the future as well. Instead, the main interest was on broader European challenges, such as the growing regional polarisation and demographic change. It was argued, that both trends will have significant impacts on urban and housing market developments in the mid- and long run. Then, CEE cities are not longer to be considered first of all as cities 'in transition', but as cities facing a development with many parallels to recent and current Western European trends. From the conceptual point of view, the new focus, hence, seeks to go a step further as it combines the post-socialist transition-related research perspective with a new one that refers to

both the specific impact of demographic and household changes on housing in and viability of inner-city neighbourhoods and a more general framework of urban, housing and demographic development in Europe.

'After' transition, therefore, is 'before' transition, although this is somewhat crudely summarised. On the one hand, the concept of post-socialist transition—although if considered as a broad and complex process including different and interspersing developments—does not suffice as an explanatory framework for current urban changes in CEE cities anymore. Therefore, the existing approach needs to be enlarged. At the same time, the main focus has to be changed to an analysis of consequences of polarisation and demographic and household changes without setting aside transition as a basis for explanation.

To meet the requirements of this approach, different concepts of urban development need to be scrutinised—first of all approaches like gentrification and reurbanisation that have their focus on the core city and a genuine relation to demographic and household changes. Moreover, they need to be placed within the specific contexts of prospering ('growing') agglomerations, on the one hand and declining ('shrinking') city regions, on the other. A comparative perspective is indispensable, then, taking into consideration not least Western European and—as a specific case—East German experiences. Due to the different starting position, national framework and local contexts, both analogies and differences between tendencies in Western European and CEE cities are to be expected. The concepts of urban development mentioned above have to be tested for their validity and applicability and not simply assumed.

After the eastern enlargement of the European Union, East-Central European cities will be—hopefully—much more in the focus of the international scientific debate in the near future. Inter-relations between economic performance, demographic trends, housing markets and socio-spatial developments are central topics in this context. In this vein, the authors would like the considerations presented here to be understood as a contribution to that emerging debate.

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THE SPATIAL ASPECTS OF LOGISTIC REVOLUTION IN EAST-CENTRAL EUROPE

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INTRODUCTION

The logistic sector went through a spectacular development in the last third of the 1990s in the post-socialist countries joining the agreement: several new enterprises, domesticating new services, entered the market. After the emergence of transnational logistic service providers, adaptation took place at an extremely rapid pace; this sector of the economy got modernised in about half a decade. The implements were renewed, modern warehouse capacities were established, and the effective methods and procedures of the period appeared in the everyday practice as well. The spectacular development and the employment capacity of the sector attracted attention and considerable state government sources contributed to the maintenance of investment willingness, meanwhile speculative real estate development also mobilized sources to adequately meet demands in the countries under survey.

The era of sudden development seems to be over, but as the Visegrad countries joined the European Union in May 2004, the enterprises of the logistic sector are to encounter new challenges and opportunities. With the virtualisation of the state borders it becomes possible to organise supply at regional (groups of countries) level, which is expected to bring about large-scale changes in the sector. At present, it seems that as a result of this process a logistic centre is going to come into being in East-Central Europe similarly to the Western-European tendencies (the Netherlands, Belgium, Northern-France). The Eastern pole of logistics has not yet been set, and it is an issue of debate with what chances the individual counties enter this competition and to what extent they are capable of making use of their logistic potential.

ANTECEDENTS

Fifteen years have passed since the social-economic changes and it is righteously claimed that after decade-long stagnation dynamic adaptation has commenced in the developed East-Central European states. In the socialist shortage economies, it was state owned enterprises that ensured the supply of economy and, to a lesser extent, of population, despite this, the majority of the transportation tasks were performed with the enterprises' own means. With the organisation of transportation of goods *within* a given company it became possible to moderate dependence on the capacity-lacking professional transporters, and in this way, supply, albeit expensively, could be safely guaranteed. However, the luxury inherent in the existence of the enterprise-related transports operated at a low-capacity level became clear and was highlighted by the economic transition and the change of costs. Under these new circumstances and mentality a lorry signified no longer prestige and security but rather, locked up capital, which contributed to the financial results of the company to a questionable extent. The change of mentality was hindered by the fact that in this case cognitive patterns having been interiorised through decades needed to be revised, and what had proved to be strength only some years ago was re-evaluated as disadvantage in several cases. Under new circumstances formerly successful models were no longer adaptable, therefore new ones had to be formed. In favour of survival the enterprises were forced to ensure their claim to current assets by selling part of their implements—and besides real estates it was the transports that proved to be the most mobilizable for this purpose.

In the 1990s a dramatic—although varying in its intensity—transformation wave swept over each of the countries concerned, as a result of which an extremely fragmented structure of companies compared to European conditions came into being. The basic constituents of this process, with more or less emphasis, can be observed in each country: the state owned transportation companies were relegated to the background (they were either liquidated or split up), consequently, their transports became readily available, with which later individual entrepreneurs and family enterprises have emerged in the transporting market considerably reducing prices. Besides the vast number of self-employed enterprises lacking resources considerable companies are represented to a lesser extent: in Hungary the number of enterprises employing more than 20 persons in transportation of goods by road is below 300 (288), meanwhile in this sector about 25.000 companies and partnerships and sole proprietors are registered; and the situation is similar both in Poland as well as in the Czech Republic. In the latter country 63 percent of the 27.500 companies engaged in this sector is operated without a single employee, while out of the approximately 90.000 Polish enterprises interested in transportation by road only 1500 have at least ten employees.

Besides the demolition of the former structure there have been further impacts of great importance on the East-Central European countries, since the transportation sector itself has been transformed. Long-lasting changes commenced from the 1970s in the centres of the developed world. The production system gradually got transformed, and inflexible mass production was substituted by flexible production ready for swift adaptation, in which case the product life-cycle got reduced just as well as the size of the series, while

the number of product variants increased. As a consequence, the expectations related to distribution have changed, whereas formerly the major task was to forward mass products from the premises of production to that of consumption, owing to the above-mentioned changes and new requirements the incredibly increased number of product variants are to be forwarded in time (and with the minimal possible storing) to the consumers. In order to speed up currents, the functions of distribution approach consumers spatially: the logistic centres are related to the destinations of consumption (and not to those of production) and they manage more and more classical productive tasks (wrapping, labelling). The current view of the processes together with the information technological and depository technological achievements have lifted up the logistic services to a qualitatively new level: the management theory and practice of the supply chain have also been elaborated upon.

The 1990s brought about explosion-like development in the sector; innovative enterprises were to trespass the boundaries of technical and methodological possibilities, and established the methods of the practical application of the latest IT-devices. In this reborn sphere, just as well as in any newly-born sector, incredible dynamism determined overall tendencies; the application of an effective solution could result in growth at an enormous rate: a transnational company could be developed from a family enterprise. However, the period of the 'limitless' expansion of the market is over nowadays—the source of growth lies in the acquisition of the competitors. In the last five years news related to logistics have provided information mainly about the large-scale buying up and the formation of strategic alliances.

Table 1. Large-scale procurements in the European market in the last years

Deutsche Post World Net	Securicor ASG Danzas Nedlloyd AEI
TNT Post Group (TPG)	Tecnologica CTI Logistx
Thiel Logistik	Quehenberger/Delacher KVB/SKS Birkart Globistics
Wincanton	P&O Transeuropean
Norbert Dentressangle Group	Thier CNSD Seroul Transczech
ABX Logistics	SAIMA Avandero Dubois

Source: Bjelic (2002) and my own data collection.

The East-Central European states joining the European Union are in a peculiar position—in this extremely fragmented sector dominated by family and small enterprises with no considerable capital, the major logistic service providers of the world market with solid capital have also appeared together with the in-coming working capital. In the evaluation of the transnational logistic service providers markedly contradictory views have been formed: according to the opponents, the participants of the world market with solid capital supersede native enterprises from the dynamically expanding market of logistic services, therefore these are forced to function in the traditional freight segment offering and allowing only low prices. According to the contrasting view, the transnational logistic service providers deserve credit for the establishment of the market of logistic services and they also offer a model to be followed by the native enterprises with regard to both demand and supply.

Not only in Hungary, but also in Poland and the Czech Republic some of the greatest companies of the 1980s (Hungarocamion, Volán Tefu, Mased, Pekaes, Spedpol, Pol-Miedz, JAS-FBG) have successfully adapted to the market conditions and have become real logistic service providers. In addition, some minor enterprises have also managed to perform the great jump upwards. Growth, at the same time, may imply danger as well—in order to ensure a pan-European market and services, the determinant enterprises of the continent have a great propensity to buy up services with nationwide scope in the countries joining the European Union. For instance, the Norbert Dentressangle Group of French origin bought up the Czech CNSD and Seroul Transzech as well as the Polish Clempol companies, moreover, in the last years, it was co-owner of the Hungarian Deltasped for a time. It was by procurement that the Hungarian Volán Tefu (Waberer's Group) managed to perform a dynamic growth, as it bought up several dozens of Hungarian companies as well as some operating in the neighbouring countries, and in this way it has become a European scale enterprise—it managed to seize the illustrious 18th place in the European chart of the logistic providers in 2003.

The sector has been in the state of continuous change, but the Eastern enlargement of the European Union provides a new impulse for the processes taking place in the logistic market. With the establishment of a unified market, the logistic providers have the opportunity to organise their operation not at a national, but at regional level (i. e. covering several countries). The extension of market, the virtualisation of state borders opens up new dimensions for the enterprises of this sector—but European integration implies not only opportunities but also certain dangers. Out of scale of economies considerations more and more enormous warehouses are erected, as a consequence of which the market becomes more and more concentrated.

Whereas in the middle of the 1990s warehouses of altogether 10.000 square metres were regarded as huge ones, nowadays not even warehouses of 100.000 square metres are unique—for example the Rynart's edifice in Biatorbágy (Hungary), or the logistic base of the French FM Logistic in Mszczonów (Poland).

The further and well-predictable extension of the market of logistic services creates a harsh competitive situation among the East-Central European countries. At present, the logistic market in East-Central Europe is rather fragmented, the national markets are typically restricted, in addition to which linguistic borders, discriminative regulations

and the existing state borders mean the most important obstacles for the cost-efficient organisation of services. With the eastern enlargement of the European Union, the significance of these obstacles is expected to reduce. Therefore it is fairly predictable that in this region similar processes of concentration are to take place just as well as formerly in Western Europe. It is going to be brought to an issue in the next three or five years, mostly by means of market competition, *whether* the logistic functions would be concentrated in the East-Central European part of the EU (as it happened in Holland and Belgium), and also, *where* this process will be effectuated.

In the competition to gain the title of *the logistic centre of Eastern Europe* there are several candidate countries, which is quite natural, since the winner can protect not only the already existing jobs in the sector, but generating extra income it would be capable of establishing new ones, while at the same time, the losers, although to a varying degree, will have to encounter loss of jobs.

The outcome of this competition cannot be foreseen yet, but the present evaluation of the market can be surveyed, by means of the market of industrial estates. In the second half of the 1990s important real estate enterprises of Western Europe, moreover, of the world market entered (AIG/Lincoln, Skanska, Crow Holding, Prologis, Europa Capital, Grontmij) the markets of the Visegrad countries. The activities of these companies are, geographically speaking, quite concentrated—practically, on the map of the industrial estates only the agglomeration zones of three capitals, i.e. Budapest, Prague and Warsaw, are marked (Figure 1).

Significant (even at European level) modern warehouse capacities came into being during only some years (1999–2003) in the area surrounding huge cities of East Central Europe. In the widely perceived Warsaw agglomeration zone the total acreage of warehouses approximates 700 thousand square metres, whose significance is indicated by the fact that in Moscow, a capital with a ten million population, there is only a 100 thousand square metres warehouse at disposal.

At this point a very important issue should be referred to, which is interpreted beyond the scope of logistic providers, and this is the *changing spatiality of economy*. During the

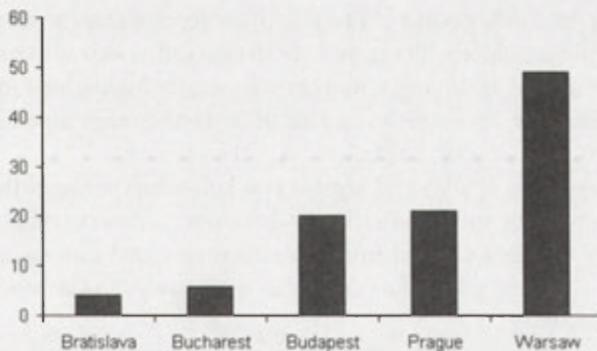


Figure 1. The distribution of modern warehouse capacities in the urban zones of East-Central Europe in 2003 (%)

Source: *Central & East Europe Industrial Market Report* (2003).

socialist decades, owing to the restricted decision-making authority of the companies and the artificially distorted price relations, neither interest nor a way of solution was attached to the liquidation of the premises that had become suboptimal due to the altered circumstances (e.g. costs), and establishing new, suitable premises of production also failed to be performed. All this was influenced by the political background as well, since the spatial re-location of the given economic activity and the obviously accompanying closing down of the production unit would have made the pillars of Socialist social order collapse, i.e. that of social security and the supremacy of planning over competition.

As a result, the structure of premises became outdated in the socialist countries by the beginning of the 1990s as it altogether displayed the spatial conditions of the 1950s, which, after the change of regime, meant a disadvantage in the competition that became manifested in the costs themselves. With the prevailing of market forces and rules, swift adaptation commenced in this field too. Due to the emergence of the transnational commercial companies and processing industry, a solvent demand for modern industrial estates appeared in this region. In this case modernity meant not only the formation and the quality of the public utilities of the estate, but its location also. The premises regarded as ideal are as follows: separated from the residence zone, having excellent transportation connection (in the very vicinity of speedways) and all public utilities (including broad band Internet access as well).

The upgrading of mobility brought about that the price of the estate became of secondary importance, and while formerly industrial plants had been established on the periphery of cities because of the attractive low price estates, recently the access to transportation channel (speedway, motorway) has gained primary emphasis and the price of the estate is no longer a determining and decisive factor in selection. Therefore the spatial industrial concentration that took place in the former decades began to be mitigated, and the sub-urbanisation of the economy has begun to spread. For the interpretation of the sub-urbanisation of economy I use Judit Tímár's (Tímár 1993) definition: '*Suburbanisation is the decentralisation of urban population and urban activities, which is an integral part of the comprehensive processes of suburbanisation. It is decentralisation in that sense that the urban population, a part of the productive and non productive human activities... capital and investments... are no longer concentrated in urban centres, but, rather, in the areas surrounding these urban centres.*' The role of the foreign enterprises in this process is undoubtedly prominent, since with regard to both demand as well as to supply it was these enterprises that emerged as pioneers, and their strategies highlighted for the rest of the related enterprises those advantages in terms of costs and other aspects of competition that are derived from an appropriate selection of the premises.

Having discussed the spatial and temporal relationship between the emergence of logistic providers and the suburbanisation of economy, the next issue is that of the industrial estates of the East Central European countries, and especially the warehouse capacities, which is a fairly good numerical (albeit probably not the most suitable) index of the logistic services.

The Polish market is in a special position from several aspects among which the most important is that the large-scale industrial estate developments have been practically carried out—by 2001 570,000 square metres of warehouses were erected; since then the expansion has continued at a more moderate pace. The other important feature

of the Polish market is that regional logistic centres have been established recently in the outskirts of large towns in the countryside (Poznań, Łódź, Silesia, Wrocław, Katowice, Szczecin, Gdańsk). The shift in emphasis is well indicated by the fact that in 2002 approximately 100,000 square metres of new warehouse were constructed in the Polish countryside, whereas the Warsaw developments did not reach the level of 20,000 square metres. The determining participants of the Polish market are the Millennium Logistic Park (Pruszków), ProLogis Park (Teresin), Żerań Distribution Center (Warsaw), Alliance Logistic (Blonie) and FM Logistic (Mszczonów).

The most attractive factor of the Czech market is that the low wages are coupled with excellent motorway network (Berlin-Dresden-Prague and Nürnberg-Pilsen-Prague), which makes it possible to attend on a part of the German market from Prague-seated logistic centres. The strategic position of the Czech Republic is improved by the fact that it has got a good quality transport infrastructure not only towards the European Union but also to the other newly 'joined' countries. Considerable logistic parks came into being in those areas of the Prague agglomeration where the transport conditions are favourable: D1 Logistic Park (by its new name: Prologis Park), Airport Logistic Park, Tulipan Logistics Park (Hostivice) and Westpoint Distribution Center. While the investment market of the Czech capital has declined in the last two years, the secondary areas have gained primary interest, like Brno, Humpolec and the areas by the D8 motorway (Zdiby).

Hungary became marked on the world map of industrial estates only three years ago, but it has attracted attention with its emphatically dynamic development: by 2003 the level of modern warehouse capacities approximated 340,000 square meters, which is only half of the Polish level, but the current huge logistic investments (Harbor Park, BILK) forecast fast the surmounting of this disadvantage. The development of national market is promoted by significant subsidies of the government (e.g. tenders of the Széchenyi Plan and of the Economic Competitiveness Operative Programme of the National Development Plan aiming at the establishment of logistic centres). The characteristic of the logistic market is that, in contrast to the Czech-Polish pattern, in Hungary no secondary market has yet been formed; the estate developments are performed in the agglomeration zone of the capital (M1–M5 motorways), which indicates that the Budapest market has not yet been overstocked.

THE FUTURE

Pondering over the future trends seems to be an agreeable issue; several related reports and market analyses have been published recently (e.g. Colliers, DBV, CAP Gemini). The authors and teams applying various methods have come to fairly different conclusions, the only shared view is that among the ten fresh EU countries only three are considered as strong candidates: the Czech Republic, Poland and Hungary. Each of these three countries has its own peculiar conditions and strengths; therefore different features will determine probably the further development. The main strength of the Czech Republic lies in its good transport infrastructure, its closeness to the European market (Germany), which, coupled by low wages, holds out promises for the logistic enterprises engaged in



Figure 2. The present and potential logistic centres of East Central Europe (my own edition)

the Czech market of real development, since the Czech Republic could be able to seize a part of the huge German market and, at the same time, to get involved in the Eastern European distribution (functions of regional supply) (Figure 2).

As far as the position of Hungary is concerned, its advantages are derived from its geographic location and from the presence of innovative, strongly development-oriented companies, which are capable of, or at least at present it seem so, making use of the opened up market opportunities. However, this advantage is toned down by the low living standards and the political instability of the surrounding Balkan states; therefore at present the size of the logistic market in the Balkan is inconsiderable.

In the case of Poland, it is the inner market (a population of 38 million people) and the good relations held with the former republics of the former Soviet Union (especially Ukraine, Estonia, Latvia, Lithuania) that fundamentally expands the size of the market.

To what extent the individual states and enterprises can make use of these advantages cannot be foreseen. What can be claimed is that the competition has already begun and that the outcome of this race cannot be forecast yet.

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**TRANSBORDER CO-OPERATION AS A FACTOR
OF REGIONAL DEVELOPMENT IN EUROPE**

TRANSBORDER CO-OPERATION AS A FACTOR
OF REGIONAL DEVELOPMENT IN EUROPE

CROSS-BORDER COOPERATION AS A NEW TOOL FOR URBAN DEVELOPMENT IN BORDER REGIONS?

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Key words: urban development, border regions, cross-border cooperation processes

THE DILEMMA: CHANCES AND THREATS OF CROSS-BORDER COOPERATION PROCESSES

Cross-border cooperation became a popular field of action during the last years. In particular in preparation and after the enlargement of the European Union (EU) in May 2004 the number of cross-border activities between cities and regions increased on Germany's borders towards the Czech Republic and Poland¹. The cross-border initiatives take place on different institutional and spatial levels. Apart from local cross-border initiatives along the immediate border line there are more and more projects coming up on the interregional level, and municipalities and regional administrations are getting involved more intensively. Cross-border cooperation at the different levels is massively funded—in particular by the EU. After INTERREG IIIA funds can now be spent in the EU member countries Poland and the Czech Republic likewise cross-border cooperation on the local level became easier. Besides INTERREG IIIB and IIIC there is more temporary funding coming up for transnational and interregional cooperation—e.g. by the European Commission².

Beyond this also national funds are more and more orientated towards cross-border activities and projects³. One can summarise that since the EU-enlargement the condi-

¹ Examples for city cooperation between cities in Saxony and Lower Silesia: ENLARGE-NET—Cross-border networks between cities and regions in Saxony, Lower Silesia and Northern Bohemia in preparation of EU-enlargement (Landeshauptstadt Dresden 2005), Stadt 2030—Gemeinsames Leitbild für die Europastadt Görlitz/Zgorzelec (Institute for Ecological and Regional Development, City of Görlitz 2004), Zittau, Bogatynia, Hrádek nad Nisou—Städteverbund Kleines Dreieck (Große Kreisstadt Zittau 2003).

² Examples were the cross-border initiatives between local and regional administrations in EU-regions bordering the accession countries.

³ One example is the initiative 'Stadt 2030' launched by the German Federal Ministry for Education and Research. The aim was to develop strategies and visions for a long-term urban development. Two of the 21 reference

tions for cross-border cooperation is better than ever before and that the municipalities and regions take this chance by realising numerous cross-border projects.

The initial enthusiasm of cross-border cooperation is unfortunately often gone before the processes are producing results. Aims and expected results are often overestimated or—even worse—stay unclear for whole process. The only common aim of cross-border cooperation sometimes is to benefit from absorbing EU subsidies (van der Velde and van Houtum 2003: 6). The reason for this can be either that expected results have never been formulated or the political representatives have formulated too high expectations to gain political acceptance for the cross-border cooperation in order to prevent resistance among the citizens. Often the responsible protagonists do not take into account that cross-border cooperation processes are—due to the difficult context—lengthy and that measurable results take a lot more time than in national cooperation processes. Unclear or too high aims and expected results make it difficult to evaluate a process being successful or not. This can lead to frustration among the participating actors and—at the end—can cause that the processes are not continuous. Therefore a lot of cooperation processes cannot fulfil the expectation to initiate a continuous cooperation that is often formulated by the protagonists and by the promoters. The cross border cooperation process ends after the funding runs off.

Contents of cross-border coordination are often the so called 'soft topics'. These can be topics like culture or education where a consensus can be easily achieved due to common interests in the cooperating regions and cities. Long-term strategic topics like development aims and contribution of infrastructure are relatively rarely dealt with in a cross-border context. Reasons for this can be varying interests or the high scale of abstraction that make a negotiation and the agreement on a consensus difficult. On the one hand the fear of conflicts makes the protagonists avoiding these topics in cross-border processes. On the other hand not every topic is suitable for being discussed in a cross-border context. In particular in big cooperation spaces there is a lack of topics where a cross-border solution is imaginable. As a result municipalities and regional administrations still perceive cross-border cooperation as an additional task and there are often not ready to discussing strategic topics with their neighbours across the borders—although the tasks the administrations have to tackle are becoming more complex and global. Therefore cross-border cooperation can be in danger to be neglected when taking into account the difficult financial situation in public administrations. When it comes e.g. to co-funding of a cross-border cooperation project other priorities may be estimated more important or more promising at the moment. In the future a gap may come up between an increasing amount of external funding for cross-border activities and a decreasing ability or willingness of co-funding. The reason therefore can be that the administrations do not see the chances of tackling strategic topics with their neighbours across the borders. But are there any?

projects were dealing with urban development in border cities along the German-Polish border (Guben/Gubin and Gorlitz/Zgorzelec).

THE FUTURE CHALLENGES OF THE CITIES: A CHANCE FOR CROSS-BORDER COOPERATION?

When discussing future challenges of cities one certainly has to specify which cities we are talking about. Although the challenges are differing and complex specific tasks can be clustered that concern cities in the periphery along borders e.g. between Germany, the Czech Republic and Poland. These are the demographic change, the structural and economic change, a stronger competition between the cities e.g. when attracting investors and the restricted resources within the public administrations. Beyond these there is the problem of incompatible spatial development plans that make a coordinated and strategic development of cross-border regions difficult.

Not only municipalities in East Germany are aware of the challenges of a demographic change but also in Poland and the Czech Republic the phenomena can be seen or forecasted clearly. The municipal infrastructure will be affected by the demographic change in particular. Social and technical amenities will have more vacant capacities when the population is shrinking. Therefore the costs will rise and the facilities may be in danger⁴. Here the cities in the immediate border regions have the chance to cooperate by using the infrastructure together to full capacity and finally saving the facilities or reducing costs⁵.

The ongoing structural and economic change and the globalization cause a stronger competition between cities e.g. when attracting investors. The municipalities will have to decide whether to cooperate with their neighbours and to share and specialize or to cut themselves off with the danger of losing in the harder becoming competition.

Beyond that the European Spatial Development Perspective (ESDP) is requiring cohesion in territory, complementary in spatial strategies and a common discussion about spatial policy (European Commission 1999).

The question to answer is if cross-border cooperation between cities and regions can be a chance to benefit of similar challenges and one completing profiles in the different regions to support the development of integrated cross-border regions with a specific profile. Before answering this main question a bunch of subordinated questions has to be answered:

What justifies the high transaction costs of cooperation in a cross-border context?

What can be achieved by cross-border cooperation? Which topics can be tackled—and when?

How cross-border cooperation processes have to be designed to prepare the cities and regions for the future—that means how to enhance competitiveness of regions and cities, how to safe technical and social infrastructure, how to aspire to spatial and regional cohesion and how to contribute to higher efficiency in administrative acting in the municipalities?

⁴ Examples of closing infrastructure can be found e.g. in the border cities Görlitz and Zgorzelec already. In the Polish Zgorzelec a bilingual kindergarden closed while on the German side in Görlitz the municipal concert hall is about to close.

⁵ A popular example along the German-Polish border is the common sewage plant in the Polish Gubin that provides also sewage treatment for the German Guben. The plant was partly financed by both municipalities.

THE HEART OF CROSS-BORDER COOPERATION: THE ACTORS AND THEIR CONTEXT

Border research in general shifted its focus. While earlier studies observed the border as line separating the territories of two countries and its effects contemporary studies rather focus on the processes of interacting, the actors involved, on identities etc. (Newman 2003: 13). To answer the questions described above one has likewise to focus on the relevant actors and group of actors and their contexts (Figure 1). This means their motivation to cooperate, their expectations and aims. The actors' resources and competences refer to their skills—in particular the 'soft skills' or intercultural competences that are necessary for intercultural communication e.g. language skills—and their institutional resources—like political and administrative legitimated contents of the cooperation. Finally it has to be clarified which task the specific actor can take over and which part he or she should play within the cooperation process.

How are the involved groups of actors? The promoter will be in most cooperation as well the fund holder because in a cross-border context there will always arise transaction costs for translation, travel etc. that have to be compensated. The municipality is the main actor and should participate further groups of the civil society if necessary for the aim and the contents of the cooperation—like e.g. NGOs. Finally there is always process designer—in most cases an external institution like research or consulting institutes. They often play the role of the initiator in cooperation processes as well. As a result from this analysing scheme one can deduct requirements for the process design. That means the proceeding and the methods used within the communication process.

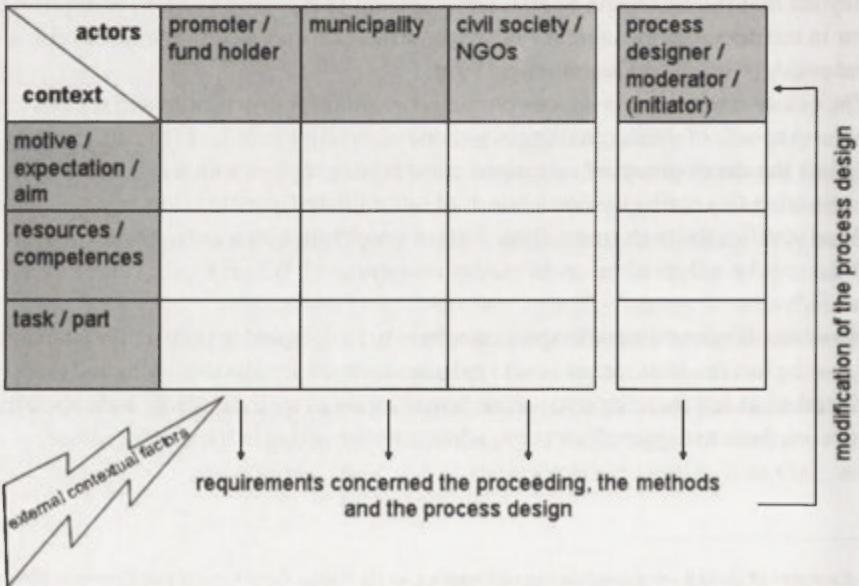


Figure 1. Groups of actors and their context as an analysing scheme for cross-border cooperation processes

FIRST FINDINGS: HOW TO DESIGN CROSS-BORDER COOPERATION PROCESSES

From the experiences of cooperation processes in the German-Czech-Polish border region the author will deduct in the following the most important requirements for successful cross-border cooperation: At the beginning a common sense about problems and challenges has to be built up. Beyond this trust between the participating actors plays an important role in order to overcome possible conflicts and win-lose-constellations that may come up during the cooperation process. In a long-term perspective the building-up of common institutions is important. At present informal cooperation processes have to overcome the lack of cross-border institutions. This is necessary to prepare the actors for cooperating in cross-border regions. These processes should be institutionalised later. Therefore continuity of cross-border communication is unalterable. How to fulfil these requirements?

To conduct a long-term communication process communication arenas have to be established. This means a platform where a continuous exchange about present and future problems, challenges, plans and visions between the actors can take place and where new actors can easily fit in. Translation has to be guaranteed and a neutral moderator can be helpful when tackling conflicts.

After mentioning that the actors are the heart of cooperation the step of encouraging, participating and engaging the relevant actors for the discussed topics is crucial. According to the tasks the relevant actors have to be found and convinced to participate. These can be experts from municipalities or other public administrations, from NGOs, from enterprises etc. Politicians should not be involved into thematic working groups—unless there are experts for the discussed topic. Equality in nation, profession and rank is important when participating actors. Otherwise dissensions can come up. If the public is concerned by the discussed problem they should be participated—also in cross-border communication processes—but not before consequences become sufficiently precise. Otherwise the citizens may be frustrated because of a misleading or too abstract discussion.

Although politicians should not attend the thematic working groups political support is crucial. Otherwise there is the danger of a blockade among the involved actors. The progress of the cooperation process should be periodically reported to the political representatives. Afterwards they should give their feedback and support the progressing issues. Finally political decisions have to be made in order to implement the decided issues.

The involved institutions have to be enabled for participating in cross-border cooperation by providing the necessary financial and personnel resources. This means that actors have to be released from other obligations⁶ and qualifying measures concerned intercultural competences have to be supported. External financial support will be further on necessary for compensating the arising transaction costs. This always requires internal financial support e.g. as co-funding.

⁶ In a survey within the project ENLARGE-NET 83% of the actors declared that they were not released from other obligations for participating in the cross-border cooperation process (Leibenath and Knippschild 2004: 10).

PRELIMINARY CONCLUSIONS

A continuous process of discussion and negotiation can overcome language and cultural barriers of cross-border cooperation—although this takes a long time. One has to consider that in a cross-border context actors with different patterns of perception are participating according to the culture they belong to. The Slavic mentality is supposed to be more implementation-orientated while the German mentality is rather long-term orientated. Common projects will be anyway realised relatively easily after a common perspective of challenges and chances is achieved and a topic has been found where a cross-border solution is imaginable and better than a national solution. Examples along the German-Polish and German-Czech border show that in particular when tackling every day's tasks that are unavoidable cross-border decisions and implementations can be achieved more easily. But the processes become more difficult the more abstract and orientated to the future or voluntary the topics are. Therefore a common reachable and measurable aim for the cooperation is unalterable.

Transaction costs will always arise in these processes for translation, travelling etc. and have to be compensated. External funding does not release municipalities or administrations from financial obligations (e.g. for co-funding). Therefore again the aim and the outcome of the cooperation have to be clearly formulated.

If the municipalities support cross-border cooperation in administration and politics and if they are willing to discuss strategic fields of action with their neighbours they will be better prepared for their future challenges.

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INTERNATIONAL ACTIVITY OF THE LOCAL SELF-GOVERNMENT

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INCREASE IN THE INTERNATIONAL ACTIVITY OF THE SELF-GOVERNMENT

One of the characteristic phenomena of the recent decades has been the increase in the intensity, scope and number of participants in international relations. The increase in the complexity of international relations is accompanied by their decentralization (Kuźniar 2001). The increasingly broad group of non-state participants in international relations includes regions, local communities and their organisations (Popiuk-Rysińska 2001). The activation process of the self-government in the international forum in Western Europe began after the Second World War and intensified in the last decade of the 20th century. After the transformation of the 1990s this process also involved self-governments in the countries of Central and Eastern Europe, and particularly the countries which became EU members in May 2004.

It must be stressed here that despite many differences, the activity of self-governments in international relations, their assumptions, objectives and the external conditions of such relations are similar. The process of European integration involving those countries is of particular importance, as it is one of the major stimulators of development, affecting the scope and direction of foreign contacts.

Two groups of phenomena can be identified among the sources of the increase in the international activity of self-governments. One of them is connected with the increasing regional integration, globalisation and the growing interdependence strongly related with these processes. Interdependence, which is the consequence of internationalisation of many fields of social life, occurs at the global, supraregional, regional and bilateral levels. On each level there are similar interdependence factors such as security, economy, technology or ecology (Malendowski and Ratajczak 2000). Interdependence contributes to the development of international cooperation of self-governments and to the establishment of organisations of individual units

of self-governments in various states. Such associations do not only serve the purpose of exchanging experiences, getting to know one another or implementing common initiatives; they also play the role of a representative of self-government authorities and local communities before international entities, and sometimes also before national ones.

The other group of events is connected with the increasing role of regional and local entities and their growing competitiveness. The competitiveness is also associated with the more and more important role of the EU regional policy. The increase in the importance of local self-government units is reflected, among others, in the establishment of representative bodies, as well as financial, formal, legal and organisational support of international associations and active participation, particularly of regions, in international forums.

When talking about the international activity of self-governments in various states one should emphasise potential differentiation on many levels. Among the differentiating factors one should mention at least differences from state to state in which a given self-government unit exists. The state system as well as the resulting position and scope of activities of particular self-government levels and their representatives play an important role. Self-government traditions as well as the traditions of international cooperation and the geographical location of the state are also important. The levels of the local self-government are another factor differentiating the international activity. The way in which a large region plans and performs activities is different from that of a small municipality. Differences will also appear according to the forms and objectives of international activity adopted.

FORMS OF COOPERATION

The activity of the self-government in international relations is reflected primarily in cooperation between self-government units of various states, cooperation of national or regional self-government unions, membership of self-government units in international associations, as well as direct or indirect influence of such units on the activities of supra-national organisations.

TWINNING

Cooperation between self-government units at the municipalities level often takes form of twinning relations. This kind of partnership relations is a particular type of cooperation of local self-governments. Twinning municipalities are understood as foreign contacts of local self-governments whose special feature is direct involvement of the residents of the municipalities and local organisations in cooperation with the communities of foreign municipalities. They enable close contacts between the communities of different states and create an opportunity for the local authorities of various states to exchange experiences and cooperate in various fields of social life (Website of the Council of European Municipalities and Regions).

EUROREGIONS

A popular form of bilateral and sometimes trilateral cooperation is cross-border cooperation which is understood as common action aimed at strengthening and further develop-

ment of neighbourly relations between communities and local authorities of two or more sides. Euroregions are the most institutionalised form of cross-border cooperation. The first Euroregions began to be created in Central and Eastern Europe at the beginning of the 1990s. The Neisse Euroregion, which was the first one, was established on the Polish-German-Czech borderland in 1991. At present, there are a dozen or so structures of this type on the Polish border. The situation looks similar on the other borders of the new EU Member States.

MEMBERSHIP IN ORGANISATIONS

In response to increased globalisation, and its anti-thesis localization, municipalities, and especially urban areas, respond by networking themselves, sharing and learning. The main objective of networking programmes between cities is to strengthen the cities' capacity to deliver urban services, develop effective urban governance and management structures (*The UEMRI...*). The organisations of self-government units and their local, regional or national agencies can be divided as follows:

- membership networks (for example: CityNet);
- Networks organised by the UN and other international agencies international agencies (UN Adversary Committee of Local authority);
- Networks based on specific projects and issues (The League of Historical Cities);
- Networks of twinning towns;
- Networks at the regional Level (Eurocites, Council of European Municipalities and Regions).

SUPPORT OF INTERNATIONAL ENTITIES

The Council of Europe plays an important role in supporting the international activity. In particular, this concerns creating institutional and legal conditions. The Congress of Local and Regional Authorities of Europe, an institution of the Council of Europe, has been operating since 1994. Among other things, the Congress aims to provide for the involvement of local and regional structures in shaping European unity and to stimulate interregional and cross-border cooperation¹. These objectives are achieved by submitting recommendations to the Parliamentary Assembly of the Council of Europe and direct resolutions to local and regional authorities of individual states (Website of the Council of Europe...).

In addition, documents prepared by the Council of Europe which are subsequently adopted in the form of conventions by the countries of the Council of Europe play an important role. The European Framework Convention on Transfrontier Cooperation between Territorial Communities and Authorities (the so-called Madrid Convention) signed in Madrid on May 21, 1980 is particularly important for the international activity

¹ In 1952 the Advisory Assembly of the Council of Europe established the Commission for Municipalities and Regions. Five years later the first representative assembly of local self-governments was established and it was called the European Conference of Local Authorities, which with time gained the status of an auxiliary body of the Council of Europe. In 1994 the Conference was replaced by the Congress.

of the self-government. The Convention obliges the members of the Council of Europe to facilitate and support cross-border cooperation between local communities and authorities. It also specifies legal and structural patterns of the frameworks of cooperation between border regions. It consists of the text itself and an appendix containing specimen contracts, agreements and statutes for various forms of cross-border cooperation (*Journal of...* 1993). The Convention was not signed by all the states considered in the analysis; in the case of other states it was adopted and came into force in various years. Estonia did not sign the Convention. In Poland the Convention came into force in 1993, in the Czech Republic and Slovakia—in 2000, and in Slovenia—in 2003.

Another important document passed in 1985 is the European Charter of Local Self-Government (ECLSG)². Paragraphs 2 and 3 of Article 10 provide for the right of local communities to cooperate with their counterparts of other states under conditions provided for by the law and to join an international association of local communities. All the states have adopted this document (*Journal of...* 1994). Furthermore, within the Council of Europe a separate charter for the regional self-government (the European Charter of Regional Self-Government) has been developed. It is noted in that document that 'inter-regional and cross-border cooperation constitutes a valuable and indispensable contribution to the construction of Europe' and regions are treated as entities which 'should be authorised to establish interregional or cross-border cooperation in accordance with the procedures imposed by the internal law'. The Charter, being still a draft, adopted at the Fourth Session of the Congress of Local and Regional Authorities of Europe in 1997 is not a source of law yet (Izdebski 2003).

Considering the importance of the international activity of the self-government, one should note that cross-border cooperation and other forms of international cooperation of the self-government have contributed to the establishment of new social ties, overcoming negative stereotypes and building new relations between European states after the Second World War. With time it was noticed that cooperation at the level of self-governments was becoming a factor strengthening European integration. It has become one of the areas in which the process of European integration takes place. Cooperation, and particularly cooperation in border areas, has become an element of the regional policy and Euroregions (Dobrowolski and Łata 2001), which are the most institutionalised form of cross-border cooperation, have gained the status of 'bridges in the process of European integration' (Malendowski and Ratajczak 2000). Cross-border regions have become a specific laboratory where new forms of cooperation in Europe can be tested (Dobrowolski and Łata 2001).

As already mentioned, the EU also plays an important role in the development of international contacts of self-governments. Its support is seen both in creating favourable institutional and legal conditions and in financial assistance.

Contacts of self-governments of various states strengthen the process of integration, but also the European integration within the EU itself is conducive to establishing cooperation. Particular forms of the activity of self-governments are supported by various programmes. Cross-border cooperation is financed primarily by the INTERREG

² Poland ratified the Charter in 1993. During the ratification process the title of the Charter was wrongly translated, which should read the European Charter of Local Self-Government. This name is used by many writers.

programme. According to the Commission's announcement in 2004 the objective of the programme is to strengthen economic and social cohesion by promoting cross-border, transnational and interregional cooperation, as well as sustainable development in the territory of the European Community. Border areas, internal and external borders are at the centre of attention. Three components.

Component A includes cross-border cooperation of public authorities of neighbouring areas with a view to developing cross-border economic and social centres by implementing both infrastructure and 'soft' projects. This is the part of the programme for which the EU allocates the largest funds. The object of the assistance under component B will be territorial integration in the territory of the European Union, and in the case of component C—regional development and the cohesion policy through transnational and interregional cooperation.

In 1989 the European Union launched a special programme financially supporting cooperation in partnership relations. The programme involves financing two groups of activities. One of them involves exchange of residents, and the other—organisation of conferences and seminars for persons dealing with the issues of twin towns (Website of the Office...). Furthermore, every year the European Commission awards ten outstanding self-government units whose partnership relations contribute to deepening the process of European integration (Golden Stars of Town-Twinning). In 2002 the European Commission allocated twelve million euro for financing approximately 1,400 unions of twin municipalities. According to the data of the Commission over 11,000 twin municipalities have already used the EU funds (Website of the European...).

According to the data of the European Commission, from 1990 to 2002 the number of towns of the then EU Member States taking part in the 'twinning' programme was 9,641, whereas the number of such towns among the EU candidate states was 1,545 (of which 477 in Poland, 292 in Hungary, 231 in Romania, 172 in the Czech Republic and 66 in Slovakia). Polish self-governments stand out even against the then EU Member States for their high degree of activity. There have been more twinning projects only in France, Germany, Italy, Great Britain and Spain.

The data for 2002 show that the number of towns from the then candidate states taking part in the 'twinning' programmes accounts for 18%. The number of Polish municipalities was even higher than the number of Spanish ones. The largest number of projects from our region came from Polish municipalities and, then in the descending order, from Hungarian, Romanian, Czech and Slovak municipalities. However, Poland clearly stands out: 144 projects from Poland and 81 from Hungary.

Municipalities most frequently look for partners in cooperation in their neighbouring states, but in the case of Poland and the Czech Republic the largest number of contacts are established with German municipalities. Next, in the case of the Czech Republic—with Polish, Swiss, Austrian and Dutch municipalities. In Poland, after German municipalities the largest number of partners come from France, Holland, and then from the Czech Republic and Denmark. Hungarian municipalities most frequently cooperate with Romanian municipalities, and then with German, Slovak, Austrian and Polish ones. In the case of Slovakia the order is as follows: municipalities from Hungary, Poland, the Czech Republic, Germany and Italy.

Apart from the support in the form of EU financial programmes, institutional conditions are also important. The Treaty of Maastricht adopted in 1992 created the basis for establishing the Committee of Regions, in which representatives of self-governments from the EU Member States have their representatives. The objective of establishing the Committee was to involve regions and local communities in the process of European integration and it was a consequence of the increasing role of regions and regional policy in the EU. The Committee is an advisory institution, but at the same time it performs the representative function; it plays the role of a bridge between EU institutions and regions, municipalities as well as local communities. Other EU bodies also ask the Committee of Regions for consultations in the fields such as functioning of structural funds and the Cohesion Fund, and as regards activities related to education, culture, health care and construction of trans-European networks. The Committee may also prepare and present opinions on various issues on its own initiative.

EU funds are also used by international non-governmental organisations supporting foreign contacts of self-governments. The Association of European Border Regions, whose activity is of great importance for border regions of Europe, can be an example of this. In 1990, thanks to the financial support of the EU, the project 'Observatory for Cross-Border Cooperation' (LACE) was launched. As part of this project several dozen meetings were held, and its final result was, among others, the preparation of a publication titled 'Practical Guide to Cross-Border Cooperation' (Dobrowolski, Łata 2001).

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THE AUSTRIAN-SLOVAKIAN-HUNGARIAN TRI-BORDER REGION: EMERGENCE OF A NEW TRANSBORDER UNIT

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Key words: Carpathian Basin (Austrian–Slovakian–Hungarian tri-border area), border area, transborder region

INTRODUCTION

In our essay we try to find out what conditions are necessary for the closed areas along the border (border areas) to transform into a transborder region. We would like to introduce a transborder region in the Austrian–Slovakian–Hungarian tri-border area. This region is situated in the north-western part of the Carpathian basin, in the heart of Europe, and in the past it belonged to a common state: to the Austrian–Hungarian Monarchy. After the collapse of the Monarchy this region disintegrated into three independent states, and the old connections, networks (fluvial catchment areas, networks, urban catchment areas, transport lines etc.) were cut by the new state borders. During the 20th century the nation-state building, the nationalism in these countries, the ideologies, the political will converted the borders into closed walls, and the traditional identities were changed. After the fall of the ‘Iron Curtain’ we can see the restructuring of the traditional contacts, and the emergence of a new transborder region. Each country has been an EU-member since 2004, and this new situation can help the reunification. This example can offer a possible solution for the spatial structural and social problems triggered by the designations of the borders in the Carpathian basin.

THE BORDER AREA AND THE TRANSBORDER REGION

The examination of the border areas is widespread in the literature of regional science and geography, as they are special areas because of their proximity to the border. Our

starting point is Hansen's definition, according to which a border area relates to that part of the natural space where economic and social life is directly and greatly influenced by the presence of an international border. In this sense we can differentiate between open or potentially open regions and closed regions (Hansen 1977). In his definition Hansen immediately defines the basic types of the border areas. On the basis of his designation we can say that the presence of the border has the biggest influence on the characteristics of these areas. Ratti (1993; 1994) in his study demonstrates that the border functionally separates different political and institutional systems and links different societies and communities. As a result of the presence of these functions, a border can be a separating barrier, a filter and a connecting, 'open' type border. In the case of the 'open' border, the contact function is dominant (Courlet 1988). The type of the border thus defines the characteristics of the border areas. In addition to its functional role, the border itself can be described in very many ways, the characteristics of the borders are influenced by the quality of the areas along them, so actually there is a close interrelation.

It is just this versatility and unique features, on the other hand, which make the designation of the border areas problematic. Starting from Hansen's definition, a border area spreads as far as the social and economic modifying effect of the border is palpable, and the borders or sections of borders of different type can have totally different influence on the economy of the border areas, thus the socio-economic indices significantly correlating with the border location cannot be demonstrated in general. The author made some attempts that examined the correlation of the difference from the border and other indices (incomes, export rate etc.), but in general no correlation can be demonstrated among them. According to Guichonnet and Raffestin (1974), the border itself is originally a system of connections, which can be loaded with or free from conflicts, depending on space and time. As regards the effects of the borders, we can differentiate among short, medium and long-term effects, which can also be different in their intensity and direction; in addition, they can be direct and indirect (induced) effects.

The only fact that can be stated is that the border areas are always different in a sense from the non-border areas, but they cannot be designated theoretically, using one index or a few indices, like a catchment area or an agglomeration. The location along a border is such a unique phenomenon that it can only be examined by each border section determined by the different border types.

At the examination of a transborder region the border can be seen as a socio-economic component, and both sides can be taken into consideration simultaneously. As opposed to the administrative function, the designation of a functional region occurs this way. This functional region can coincide with historical or ethnic regions, but not necessarily. The functional cohesion should be sought at the urban hierarchy level or at the economic necessities. In the literature, this approach has the spectacular attribute of 'transborder region'. The essence of this notion is summarised by Noralv Veggeland (1997), in whose view the essence of this idea is that the administrative borders are not necessarily followed by the regions, it is the functional relations that have a much bigger emphasis.

The opening of the borders does not mean in itself an automatic economic growth. Rechnitzer (1999) emphasises that the exploration and utilisation of the endogenous resources and opportunities is necessary to make use of the changes listed by Clement

(1994). This work can be promoted by the co-operation of the neighbouring border areas, which can result in direct economic advantages, because the border areas can obtain competitive advantages in their countries, based on their location (Rechnitzer 1999). The border location is thus not an advantage in itself and not a disadvantage, either; the positive and negative effects and their proportion are determined by the given geographical, socio-economic and historical situation.

THE MAIN FACTORS INFLUENCING THE FORMATION OF A TRANSBORDER REGION

A border drawn in an area that was previously homogeneous from geographical, social, maybe political-power aspects, will divide the formerly single space. The further development of the divided parts will necessarily be divergent, the number of factors differentiating the areas will increase.

The separated areas along the state borders, having their own way of development (Figure 1 A+B), and the integrated transborder region (Figure 1 C) which is an entity in itself with unique specific features are the two destinations of a transformation process. This transformation can happen in either direction. The direction, dynamism and extent of the transformation are influenced by three main factors, which make a coherent system, as they all influence and shape each other:

a) among the socio-economic features of the areas separated by the state border, the mutually utilisable comparative advantages are the most important, together with the existing competitions, especially the dynamism of their development; the co-operative skills are influenced by the development dynamism of the regions in the first place. Declining areas are more likely to be introverted, whereas the dynamically developing ones rely on extra resources from the other side. An important feature of the border areas is whether their development axes and communication directions are oriented toward each other or not and whether there are cross-border catchment areas in their settlement structure;

b) the development of the main characteristics of the political border, especially its separating function; in addition, the geographical location and historical past of the political border is important. The volume of the cross-border communication is affected by whether the political border coincides with ethnic and cultural borders and, not least, whether it coincides with the mental border existing in the mind of the inhabitants living along the borders;

c) the political efforts of the state power, especially the extent of its centralisation; the ideas, nationalist measures and isolation of the political leadership of the two separated countries. An important issue of the contact and co-operation of the border areas is whether the territorial levels involved have the political and power competencies necessary for the building of the relations. The debates between the states over the borders naturally strengthen the separating role of the borders. The central element of these interrelations is the strengthening or weakening of the separating function of the state border, i.e. the opening or closing of the border. This is regulated by the state power from its own political will or because of some pressure (e.g. the needs of the border areas).

The connection of the border areas and the recognition and expression of the common interests can take place in several fields, which are called dimensions from now on in our essay. These can be political, economic, civil, institutional and spatial structural dimensions. The more dimensions a common space is created in, the more organic and single transborder region is born.

Our figure (Figure 1) features the cross-border co-operations. We attribute a great importance to them in the development process into transborder regions as they serve as catalysts in this process.

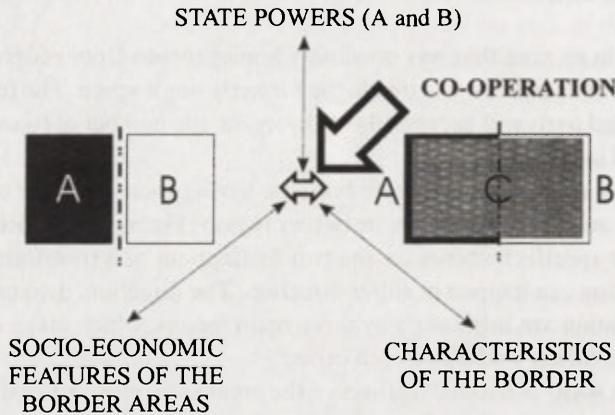


Figure 1. Factors influencing the formation of a transborder region

Source: Author's own work.

THE FORMATION OF A NEW TRANSBORDER REGION IN THE CARPATHIAN BASIN

The single physical geographical space of the Carpathian Basin is divided by socio-economic spatial structural lines (e.g. ethnic borders, economic development axes, urban catchment areas) that run within the Basin and do not fit political borders. These phenomena strengthen in some places, and weaken elsewhere the separating role of the present borders, because the state borders are sometimes also the borders of these areas (e.g. majority ethnic areas), while they cut them in other places. As a consequence, border sections with different characteristics were born (Szorényiné et al. 2000).

The political borders of the region, with a few exceptions, do not have preliminaries, their designation was defined by the peace treaties closing the two world wars and the disintegration of the federal states in the 1990s. The political borders nevertheless built walls in the Carpathian Basin which tore naturally co-operating areas apart. The peace treaties closing both world wars forced the peoples of the region to build nation states by the Western European example. The emerging nation states created strong borders around themselves in a region, where there are no clear regional-national structures. Another big challenge for the political borders of the nation states in our region is the EU accession. It will bear an internal EU border for the acceding countries, different from any previous

practice, on the one hand, and external borders which will further strengthen the separating walls drawn around the nation states created by the peace treaties, on the other hand. It will result in further problems in the Carpathian Basin.

The most developed possibility to create a transborder region can be found on the north-western part of the Carpathian basin, gravitating to Vienna. This region extends to the eastern part of Austria, western part of Slovakia, and north-western Hungary. This region is located in the heart of Europe, it is one of the continent's most dynamic regions. The centre, Vienna is a highly developed metropolitan region, and the eastern part of the region offers enormous growth opportunities. The economic expansion rate is anticipated up to 5–7% for the next few years. What kind of common dimensions can we find in this region?

SPATIAL STRUCTURAL DIMENSION

From a spatial structural point we find spatial structural lines and development axes along the borders, whose formation goes back to the times before the drawing of the borders in 1920. The functional and spatial structural relation, interdependence of the formerly connected areas is thus natural. The cross-border connection of such areas may result in the decrease of the isolation of the areas that were made peripheral by the borders. It is now visible that the real functional transborder regions are organised around junctions where spatial structural lines perpendicular to and parallel with the border meet. Typical examples for this are the Komárom/Komárno double town, the Vienna–Bratislava–Győr area.

The region can be located at the intersection of two axes of European significance: the Danube axes and the Pontebanna axes that leads from the Baltic sea to the Adriatic sea.

Vienna's role is very important. The capital of Austria was the centre of the Austri-an–Hungarian Monarchy. This tri-border region was a supplier area for the metropolitan city, and Bratislava (with a multiethnic population) was a twin-city of Vienna. In the past this region had a strong functional unity. Within the new borders Vienna lost a large part of its catchment area.

For the further development Vienna needs these areas: the transport capacity (alternative roads, airports etc.), industrial territory, labour force etc.

POLITICAL DIMENSION

In general it can be said of our region that the 1990s brought about the birth of completely new states along our borders, and during the 1990s the strengthening of the nation states was of utmost importance for these new states, and not the devolution of their power. Between Austria and Hungary, as well as Austria and Slovakia, good co-operations existed, while the contacts between Slovakia and Hungary could not assist the transborder development. After the political change in Slovakia (1989) the relations between the two countries became better. This two countries have a dispute in this border region: the problem of the Gabčíkovo water-power plant, which was a common investment of the

two countries (to be more exact: between Hungary and Czechoslovakia), but Hungary cancelled this treaty, and Slovakia finished the power plant, however, with the diversion of the Danube river. This is a long-term political dispute, but nowadays it does not disturb the day by day transborder relations.

The EU accession of these countries makes a very good political climate for the transborder development. All state borders in this region are internal EU borders, which makes transborder activities easier.

CIVIL DIMENSION

The most frequent and intensive aim of the cross-border relations of the population is shopping tourism. In the early 1990s it was widespread on the part of the Hungarian citizens to organise shopping tours abroad, motivated by the better prices or wider supply and the increase in the purchasing power of the (quasi convertible) Hungarian forint. Shopping as a motivation appears more often nowadays on the part of the citizens of the neighbouring countries, with Hungary as the destination. This provides the areas close to border crossing stations with considerable incomes.

The basis of the phenomenon is mostly the *lower price* (from Austria to Hungary and Slovakia; from Hungary to Slovakia). At the same time, the attraction based on the price difference is a rather fragile phenomenon. *Wider supply* (from Hungary and Slovakia to Austria; from rural territories of Slovakia to Hungary) provides a longer-lasting relation. A special case is when the difference in the supply appears because in the neighbouring border area there is no big town that could compete with the supply of the town on the Hungarian side. In this case, the re-birth of the natural market catchment areas of several bigger Hungarian towns can be seen. In this case it is partly the shopping intention that motivates those arriving from the other side of the border, but the demand of the youth for urban entertainment (cinema, theatre, shopping centres) is also present. This phenomenon might be the most durable opportunity to maintain the presence of extra consumers generated by shopping tourism in the longer run (typical examples are Sopron for a part of Burgenland, and Győr for a part of South-Slovakia).

The state borders do not create ethnic and language separating lines. Hungarian and German ethnic minorities live in each border region. On the Slovakian side there are districts in which the Hungarian population makes the majority. This situation makes the transborder activities easier for the Hungarians and Germans, above all it helps the commuting, the learning and study on the other side etc.

Due to the common history a lot of families have relatives and/or property on the other side(s) of the border(s). That is why personal contacts are very close. Much more families move to the other side of the border nowadays too, because they find a cheaper estate or life, or better work or school on the neighbour country.

Nationalism built walls between the national groups. The 'mental border' is strong first of all in the thinking of the Hungarians and the Slovaks. The nationalism and the power situation in the Austrian-Hungarian Monarchy have an effect still palpable today, too. There are prejudices among each nation. In the past the assimilation (in the first

place to the Hungarian nation) and the mixing of nations and cultures was strong, nevertheless the language of the neighbour nation is not accepted and learned. The contacts are radial: German can be a common language in the region.

ECONOMIC DIMENSION

Multinational companies, such as Philips, Siemens, IBM, Nokia etc. are already seizing on the opportunities of the transborder region, and are expanding in this region. There is a growing automotive cluster in Hungary (Audi, Suzuki), in Slovakia (VW, Peugeot, Citroen).

Commuting between the border areas is always stronger. In Hungary, in Győr-Moson-Sopron and Komárom-Esztergom counties, the nearby Hungarian-inhabited areas in Slovakia are important sources of labour force for the industrial branches serving economic boom, also, subcontractors are often found there (e.g. cleaning businesses etc.).

In the direction of Austria a lot of Hungarians and Slovaks commute. In the border region of Hungary this commuting causes a shortage in a few professions, e.g. in the public health.

INSTITUTIONAL DIMENSION

The institutional background of the cross-border structures is given at practically all border sections of Hungary; since the ratification of the Madrid agreement, a co-operation making fever has swept across the country (Figure 2).

On the Hungarian–Austrian border there is a long history of the institutional co-operation. The first co-operations began to work in the 1980s. The West-Pannon Euroregion is the best one of the institutional co-operations of Hungary. This border region received the first financial supports from the EU, after the attachment of Austria (in 1995). On the Hungarian–Slovakian border the institutional co-operation began in 2000, only. The Triple Danube Area Euroregion was established in this year. Its work is weaker than that of the others. (On the eastern part of the Hungarian-Slovakian border region the co-operation is stronger).

In 2003 began a new Interreg project—the Centrope Region—which prepares a much more functional territorial co-operation in this region than the previous ones. This project covers four countries (Czech Republic, Austria, Slovakia and Hungary) (Figure 3) and this territory includes the whole historical catchment area of Vienna. The main tasks of this project is to organise common developments in infrastructure, R&D etc. This project will give a very useful institutional background for the common socio-economic development, and for a transborder region formation.

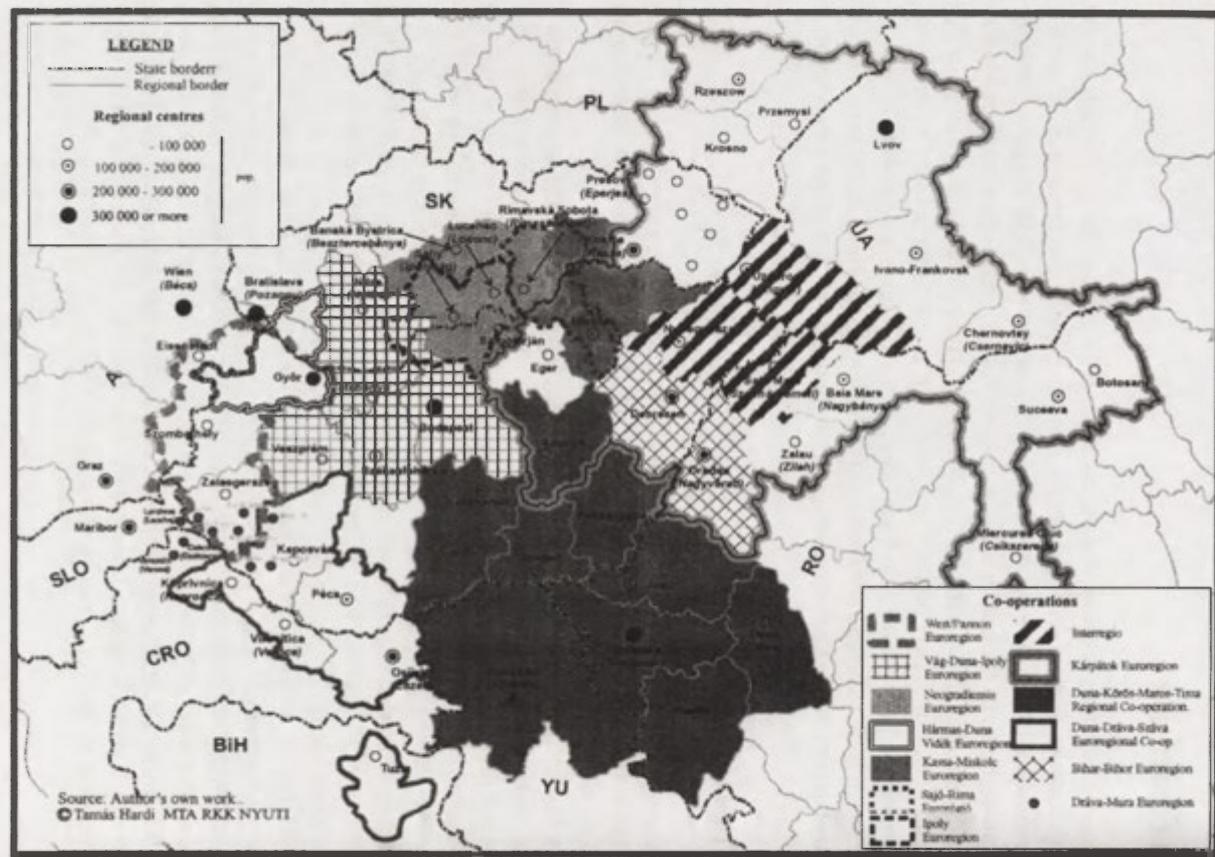


Figure 2. Regional co-operations with participation of Hungary

<http://rcin.org.pl>



Figure 4. The Centroe region

Source: <www.centroe.com>

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THE VIENNA–BRATISLAVA AREA—FACING THE TRENDS AND CHALLENGES

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Key words: Vienna–Bratislava region, demography, transport network

The Vienna–Bratislava region is located in Central Europe and encompasses parts of Slovakia and Austria. The area stretches over parts of the border formerly known as the ‘Iron Curtain’. The ‘Iron Curtain’ divided Europe for almost half a century not only in economic and military terms but also separated two political and social systems. The Vienna–Bratislava region is an area which faced dramatic changes over the last 100 years, especially with fundamental changes in the political, administrative and economic structure over the last 15 years. At the time when Vienna and Bratislava were part of one country, the Austro-Hungarian Empire (with a common monetary and costumes union¹), especially the two agglomerations Vienna and Bratislava (which was part of Hungary) interacted intensively due to the absence of significant trade barriers and fundamental linguistic differences. Transportation infrastructure was adequate and concentrated on railroads and waterways. In 1914 a direct tram connection was launched between Vienna and Bratislava city centres with great success. This changed radically after the First and especially the Second World War when the 40 years separation began and the cities co-existed—despite their close historical relations before 1945—without any form of (institutionalized) co-operation. Furthermore a fundamental change of geographical position was a consequence, from being at the core of Europe, they found themselves located at the periphery, each of them oriented to their respective country.

It was only after the 1989 historical changes in Central and Eastern Europe, with the fall of the ‘Iron Curtain’, that Vienna–Bratislava began to become reacquainted. The gradual dismantlement of the ‘Iron Curtain’ (since 1989) once again changed the geographical position of the cities (being again at a core position) which has influenced and will continue to influence the area’s economic development. The enlargement of

¹ The Crown (German Krone) was introduced in the Austria-Hungarian monarchy on 11th of August 1892, as the first modern gold-based currency in the area (Kleindl 1995; Portisch 1989).

the European Union (EU) and the ensuing integration of the Central and Eastern European markets in Western Europe also affect the regional level. A particular characteristic of the area is that Vienna and Bratislava are one of the closest capitals in the world (60 km from centre to centre), resulting in potentially easy commuting and functional integration.

The development of the area always was significantly influenced by its position in Europe. Several important geo-morphological formations of Europe lie within the area (the Alps, Carpathians, Pannonian Basin and the Danube). These circumstances always defined the most important transport network (North-South and East-West). Considering the political and economic changes in Central and Eastern European countries in the last 15 years, the Vienna–Bratislava region can be regarded as one important platform to revitalize the East-West relationship. Furthermore the Vienna–Bratislava region is at the crossroads of major European transport corridors which are the backbone for the international and regional transport infrastructure (the Danube is defined as Corridor VII of the Trans-European transport networks; another one is Corridor IV which runs from Dresden-Prague, Vienna/Bratislava-Gyor-Budapest until Istanbul). The intersection of these corridors in the Vienna–Bratislava region gives it a role of an international transport hub (OIR 2003a; OECD 2003).

When talking about the Vienna–Bratislava region, it must be emphasised that there exists no common definition or responsible administrative institution for it. Normally the city regions are dealt within their national context. Talking about Vienna–Bratislava and looking at the transnational area should help to overcome the national points of view. The term Vienna–Bratislava region is defined and used in different ways and following map shows one way of distinguishing the different areas, which refer primarily to administrative demarcations resulting from data availability and not on functional relations (Figure 1).

Vienna and Bratislava are the administrative, economic and political centres in their countries. The border region is an area with great disparities as regards the levels of economic development (wage and income levels), technical standards, environmental standards, price levels and the systems of social and unemployment benefits. One main characteristic is the distinctive urban-rural disparity—all two cities experience dynamic development but have also economically weak areas in their environments (OIR 2003).

The specific situation of Vienna among Austria's regions can be shown by the fact, for example, that about 30% of the entire Austrian GDP is achieved in Vienna and about 26% of all employees in Austria work in Vienna. Vienna and the immediately adjacent area to the South enjoy the highest economic status in the Austrian and cross-border context. Vienna and the area South of Vienna have a GDP per capita with 60% resp. 35% above the comparative EU average. Conversely, the other regions surrounding Vienna are below-average. In the hinterland of Vienna, agriculture plays a major role. Another feature of the Vienna Region's economic structure is the large share of small and medium enterprises. Vienna holds a special place, because it is home to the headquarters of many international organisations (UN, OSCE, etc.). In 2001 Vienna had an unemployment rate of 4.9% which was above the Austrian average (with 3.4%) but far below the EU-15 rate of 7.6%. Likewise, in the Slovakian part economic activities are concentrated in the

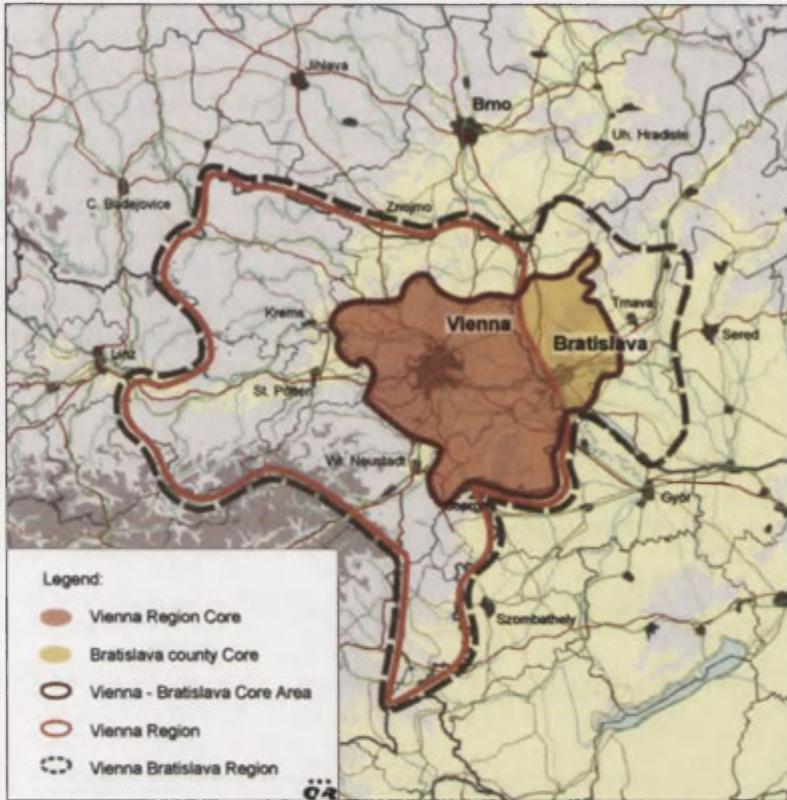


Figure 1. Vienna–Bratislava region

urban region of Bratislava. At the turn of the millennium, Bratislava already held a GDP per capita that was approximately at the same level as the EU average (measured in purchasing power). The disparities within Slovakia are huge: Bratislava has a value of 200% compared to the average national index level (ÖIR 2003).

DEMOGRAPHY

In 2001 the Vienna–Bratislava region had around 4.5 million inhabitants and appr. 2 million employees whereby around 2.9 million inhabitants lived in the Vienna–Bratislava Core Area. Compared with the overall distribution within each country it means for Austria that one-third of the Austrian population lives on only about 10% of the respective state territory, in Slovakia more than one-fourth (29%) of the Slovak population lives in this area (which encompasses around 13% of the state territory). For Austria and the Slovak Republic these numbers show the high concentration of population within each country (ÖIR 2003; ÖIR 2003c) (Table 1).

In the past decades, the demographic development of the cities Vienna and Bratislava have shown a clear divergence. Vienna's population stagnated or decreased in the decades after World War II, while Bratislava and its surroundings experienced a very dynamic development. But during 1991–2001 the city of **Bratislava** was losing population to its surrounding districts as a result of sub-urbanisation and decreasing immigration from other Slovak counties, resulting amongst others from a general decrease of birth-rates and overall reduced migration to towns. With the high investments in Bratislava and the surrounding area a stronger immigration could have been expected which did not occur because of the lack of housing in Bratislava. By contrast, in the 1990 the population in **Vienna** grew again due to immigration from traditional countries of origin of migrant workers and additionally refugees from former Yugoslavia and Turkey, so there was a slightly positive dynamic. The largest population gains can be registered in the immediate surroundings (Wiener Umland Nord and Süd) (OIR; 2003c).

Table 1: Population and employees in Vienna–Bratislava area (year 2001)

Vienna–Bratislava in 2001	Population	Employee
Burgenland	277 569	80 971
Niederösterreich	1 545 804	520 963
Vienna	1 550 123	767 491
Bratislavský	599 015	355 466
Trnavský kraj	551 003	190 659
Sum	4 523 514	1 834 579

In general, population development is marked by slow growth rates and an aging population over the last decades. Since birth rates are below replacement level, it follows that the region's population growth is caused by migration from other parts of the country and abroad. The city of Vienna is the most important magnet for foreign migrants. Another main source is intra-national migration. Furthermore suburbanisation (migration to the outskirts of metropolitan areas) is a trend over the last years. Mainly peripheral regions of the Vienna–Bratislava region fight against the constant loss of their younger population and are faced with problems of ageing population (OIR 2003) (Table 2).

ECONOMIC SITUATION

Even though Slovakia and Austria have posted a largely positive economic development over the past few years, the economic structures and trends are characterised by enormous national and inner-regional disparities as regards prosperity, wages and income. These differences appear in the prosperity gaps between the bordering countries and by the distinct gaps between the urban centres and the countryside. Austria belongs to the wealthiest countries in the EU with 113 GDP/capita (index EU15=100) in 2001, the figure for Slovakia was 45. So Slovakia attained almost half of the comparative value, being

Table 2: Demographic structure and development 1991–2001 per county in the Vienna–Bratislava region

Region	Demographic development 1991/2001 in %	Population < 15 years in % 2001	Population 15–59 years in % 2001	Population > 60 years in % 2001
Vienna	+ 0.7	15	64	21
Wiener Umland/Nord	+ 11.2	17	62	21
Wiener Umland/Süd	+ 8.0	16	62	22
Nordburgenland	+ 6.6	16	61	23
Niederösterreich	+ 4.9	17	61	22
Burgenland	+ 2.5	15	61	24
Austria	+ 3.0	17	62	21
Bratislava-city	- 3.1	15	69	16
Bratislavský kraj (Bratislava region)	- 1.2	16	68	16
Trnavský kraj (Trnava region)	+ 1.7	18	67	15
Slovak Republic	+ 2.0	19	65	16
Vienna–Bratislava Core Area	+ 2.6	15	64	21
Vienna–Bratislava Region	+ 2.0	16	64	20

in the midfield among the new member states after Cyprus (77.8), Malta (69.5), Slovenia (67.8), the Czech Republic (60.6) and Hungary with 51.5 (CEC, 2004a). The modernisation of the infrastructure, large-scale privatisation and a rise in consumption have triggered a dynamic growth process. In the past years both countries have achieved annual



Figure 2. Differences in GDP/inhabitant in 2001 (Index EU15=100)

growth rates that were far above the EU average, so the area is one of the most dynamic regions in Europe (OIR 2003b).

Figure 2, covering the Vienna–Bratislava area but also parts of Czech Republic and Hungary, shows the quite good performance of the urban agglomerations Vienna and Bratislava and the more difficult situation of the more rural and peripheral areas in the region. Since 1995 the Slovakian GDP has been constantly rising—so overall the Slovak Republic economy's positive performance permitted the country to catch up. In the most disadvantaged regions of Eastern Austria (Northern areas along the Czech Republic and Western areas to Hungary) a stronger growth can be noticed and the most disadvantaged regions could stop their fifty-year long decline due to the border opening.

The economic structure of the area is dominated very strongly by the secondary sector whereby it is more important in Slovakia than in Austria (in 2001 Slovakia had 37.1 and Austria had 29.4% employment in the industry and construction sector). This high level of industrialisation of Slovakia is a legacy of the past because before 1989 the economic policy concentrated strongly on the expansion of industrial production (OIR 2003b). Especially the Western part of Slovakia is developing as an important centre for the Automotive sector. In 1991 Volkswagen established a factory with 7 000 employees (production of 280 000 cars per year) North of Bratislava. In 2003 Peugeot Citroen started to build a factory near Trnava which will employ 3 600 people and produce 300 000 cars per year. In 2004 also Hyundai decided to invest in this area and is planning to construct a factory with 4 000 employees and 300 000 vehicles pre year (Die Zeit 2004; Die Presse 2004). These developments indicate that Slovakia soon will produce most vehicles per head not only compared to Central Europe but also world-wide (Neue Züricher Zeitung, 2004).

The trend of gradual integration within the Vienna–Bratislava region in recent years has been supported by more favourable endogenous market conditions on the Slovak side (Table 3), in particular:

- diversified multi-industry economic base with a progressive structural change

Table 3. Level of economic development and trend

	GDP at PPP/Inh. 1998 Index national=100	GDP at PPP/Inh. 1998 Index EU=100
Vienna	146	163
Wiener Umland Nord	73	81
Wiener Umland Süd	121	135
Nord-Burgenland	71	80
Lower Austria	82	91
Burgenland	62	69
Austria	100	112
Bratislavský kraj (Bratislava Region)	204	99
Trnavský kraj (Trnava Region)	103	50
Slovakia	100	49

towards the tertiary sector, particularly of production-oriented services, but also huge knowledge in industries

- the high share of qualified, motivated human capital supplied by the network of educational facilities and with low wages,
- the developed of higher education and scientific research basis,
- the advantageous location potential, with the urban region as intersection of the transport corridors TINA and TEN
- investment-friendly fiscal regulations

For several years now a comprehensive restructuring process has been going on in Vienna especially in manufacturing which led to a concentration in technology-oriented industries (electronics, vehicles, mechanical engineering, chemicals) and in food production. A large share of the growth industries of the past few years is part of the service sector. As regards competitiveness, Vienna has been confirmed to have an excellent position for further development due to its modernised economic structure. Vienna has a very high share in industries that are expected to attain high employment gains from the accession of the Central and Eastern European countries (CEEC). By contrast, industries that are jeopardised through EU enlargement are represented at only average levels (OIR 2003). In Bratislava county a decrease of employees in industry and construction can be recorded compared with 1993 and an increase in business services (like trade, tourism, banking, insurance). The Bratislava and Trnava region have a long tradition in chemical, food and pharmaceutical industry and economic growth and export performance was especially good—as already mentioned—in the machinery sector (esp. car production). There are several strong enterprises with supra-regional importance and in the towns a high growth of the service sector was experienced (Aurex 2002).

For restructuring and improving the competitiveness of industry and manufacturing foreign direct investment (FDI) plays an important role because it helps to raise productivity and to expand exports. It provides resources such as additional capital, technology and managerial know-how as well as access to global, regional and especially home-country markets. The positive impact of FDI rises with the technological intensity of exports, and the more so, the lower the economic development. FDI has been one of the driving forces behind industrial restructuring in Slovakia. In the past, very high shares of FDI were achieved in the food industry in Slovakia. A look at the structure of the industries receiving FDI in Austria shows that the service sector is clearly ahead of the others (OIR 2003b). The interchanges increased between the Slovak Republic and Austria—the annually traded goods have multiplied by five from 1993 to 2002, with annual growth rates of 15–20% since 1993. Austria is, after Germany, the second largest source of FDI in the Slovak Republic with an accumulated total investment of EUR 1.1 billion in 2002. The large share of total FDI in the Slovak Republic is concentrated in the Bratislava area (OECD 2003; OIR 2003).

With the fall of the 'Iron Curtain' and especially now with the EU accession of the Slovak Republic a huge new market with enormous pent-up demand has opened up. The future largely depends on the success of processes of restructuring and privatisation in the former socialist countries. This restructuring process was characterized by high levels of uncertainty, decline in production, unemployment, and social degradation. Most

countries turned towards the West because they had to substitute for CMEA² trade which collapsed. The labour market plays a central role in such processes because the low level of wages of the post-socialist countries is one factor which attracts investment from labour intensive industries. In times with increasing unemployment rates the integration of CEEC adds to friction in the labour market and social system which is intensified by workers from CEEC looking for better paid jobs in Western countries. This and the corresponding fears in the population have led to restrictive migration and labour market access policies in some countries, which is regarded as a short-sighted policy by the OECD because it does not take into account the relationship between employment, trade, and foreign direct investment (Altzinger et al. 1998). Labour migration—an important force to enhance economic integration of a region—remains underdeveloped and fragmented mostly due to restrictions on the Austrian labour market for foreign workers. These restrictions will be gradually dismantled with the EU accession of the Slovak Republic (OECD 2003). Nevertheless there are serious fears existing which could lead to economic and social problems on both sides of the borders with the realisation of freedom of movement for services and people. Additional labour force can cause displacements on the labour market (especially for low qualified persons), the tendency for segmentation could increase (increase of flexible and uncertain contracts of employment), the 'brain-drainage' from the Slovak Republic to Austria and an increase in commuting traffic which causes additional transport problems in the agglomeration areas. On the other hand new opportunities emerge which should be used, for instance to use the qualifications and networks of immigrants and to develop co-operation networks but also to be able to play together a role in a higher league in the world economy.

The original perception of the (Austrian) considerations to settle more labour-intensive functions in the neighbouring states and to concentrate more highly qualified functions in Austria is no longer valid. Over the last years the settlements and production experiences of the Western European automobile industry in Slovakia has shown that production at the highest technological level can be successful too—the research and development capacities belonging to it will follow immediately. Consequently over the next years a pattern of integration will develop, which will depend much more on existing know-how and functions within international research and production networks than on production factors like wage level, rents and the price of land. Therefore, an integrated regional economic structure will emerge covering both sides of the border, where the Austrian part will no longer dominate.

TRANSPORT NETWORK

The Vienna–Bratislava area lies at the crossroads of two transeuropean corridors, the river Danube (defined as Corridor VII connecting Eastern and Western Europe) and Corridor IV that runs from the North Sea and Berlin to Istanbul. The Trans-European transport network wants to ensure mobility of persons and goods and high-quality infrastructure.

² The Council for Mutual Economic Assistance (COMECON/CMEA), 1949–1991, was an economic organisation of communist states and a kind of Eastern European equivalent to the European Economic Community.

In 2003 a new list of 30 priority projects was compiled by the Commission which should be launched before 2010. These 30 projects are defined as being in the interests of the Community as to speed up the completion of the border crossing sections. Besides the two already mentioned corridors VII and IV, the rail axis Paris–Stuttgart–Vienna–Bratislava, the rail axis Gdansk–Warsaw–Brno–Bratislava–Vienna and the motorway axis Gdansk–Brno–Bratislava–Vienna are of direct relevance for the Vienna–Bratislava area (CEC 2004b).

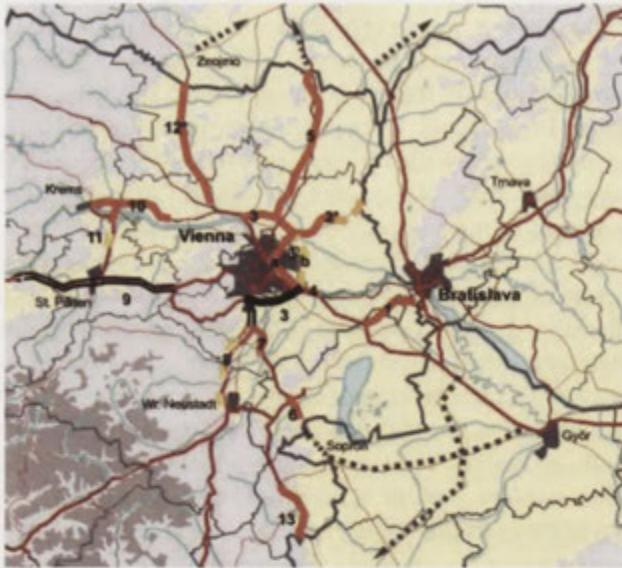
This also shows—as a legacy of the political divide of Europe—that the cross-border transport infrastructure in the Vienna–Bratislava area is still relatively disjointed and poorly connected to international networks. Furthermore crossing a border requires a considerable amount of time and imposes costs on regional trade. So far, commuting problems through traffic jams are only existing in specific centres—commuting between the centres hardly exists. But especially with integration an increase of congestion problems can be expected. The traffic forecasts announce an increase in international and cross-border transport, but unfortunately policies for all types of transport are still weakly co-ordinated (OECD 2003). The transport network of the area is strongly affected by the national borders and former political divide and oriented towards the internal needs and circumstances of the individual countries. The issue of cross-border transport routes is only being addressed over the last years. The transport network is, despite increasing integration between Slovakia and Austria, still oriented very much to the centres within each country and the dominance of strong national thinking in transport planning can be observed (OIR 2003c). The inadequate rail and road infrastructure between both countries is also due to long lasting delays on the Austrian side. Some years after the motorway on Slovak side was already completed, the construction of the counterpart on the Austrian side (A6 North-East motorway) started not before 2004.

The Vienna–Bratislava region is internally linked both by roads and railways, though with some qualitative shortcomings in infrastructure and transport organization. These links are inadequately developed in large parts to the North, which is mainly due to the peripheral location of this area and the barrier formed by the river Morava (OIR 2003b). Vienna–Bratislava can be done by rail in between 50 and 70 minutes and by road in 60 minutes (excluding the waiting time at the Schengen border). Now, fifteen years after the fall of the ‘Iron Curtain’, there are a number of projects planned on the Austrian side to improve the road infrastructure to the neighboring country, the completion of which is planned within the next ten years:

- construction of A6 North-East-motorway (to close the gap in motorway routes between Vienna and Bratislava)—project no. 1 in the Figure 3
- new route for B8 Angerer Bundesstraße between Vienna and Angern / Zahorska Ves (project no. 2 in the Figure 3)
- the link between Hungary and Austria will be improved with the completion of the A3 (project no. 6 in the Figure 3)

The expansion of rail infrastructure in Austria is limited to some projects, the realization of which is expected to be very slow:

- medium to long-term expansion of the Nordbahn (project no. 1 of Figure 4)
- long-term expansion of the connection Vienna–Airport–Eisenstadt–Sopron (project no. 2 of Figure 4)



Legend:

existing infrastructure	road infrastructure projects
— motorway, expressway	(source: GVP-Ö 2002/
— road	* NÖ-Landesverkehrs-konzept)
improvement in road infrastructure	— under construction
in the neighbouring countries	— 2002-2011 (* short-mid term)
— until 2015	— after 2011(* long-term)
	type of measure
	— increase of capacity
	— new link, significant improvement

Figure 3. Enlargement measures in road infrastructure

A direct, fast rail link between Vienna and Bratislava was opened in 1999, but is poorly linked to both city centres. The further improvement of the rail link between Austria and Slovakia is under discussion, focusing at the moment on the electrification of line Devínska Nová Ves–Marchegg–Gaenserndorf and a double-track connection on the line Kittsee–Petrzalka. Beyond that a development of the rail link between the airports Vienna Schwechat and Bratislava is considered in Slovakia (ÖIR 2003a).

The two international airports, Vienna–Schwechat and Bratislava-Ivanka, are lying at a distance of 40 kilometers from each other. In the past years, Vienna–Schwechat Airport developed into a major transport hub between Western and Eastern Europe and the Middle East. Bratislava Airport with much lower passenger numbers experienced an important decrease in air traffic after 1990 and currently works below capacity. Vienna–Schwechat Airport is planning to expand its capacity—however, realization will take some time. In contrast Bratislava-Ivanka Airport has free capacity and land reserves, therefore co-operation between the two airports offers advantages for the whole region. The idea of

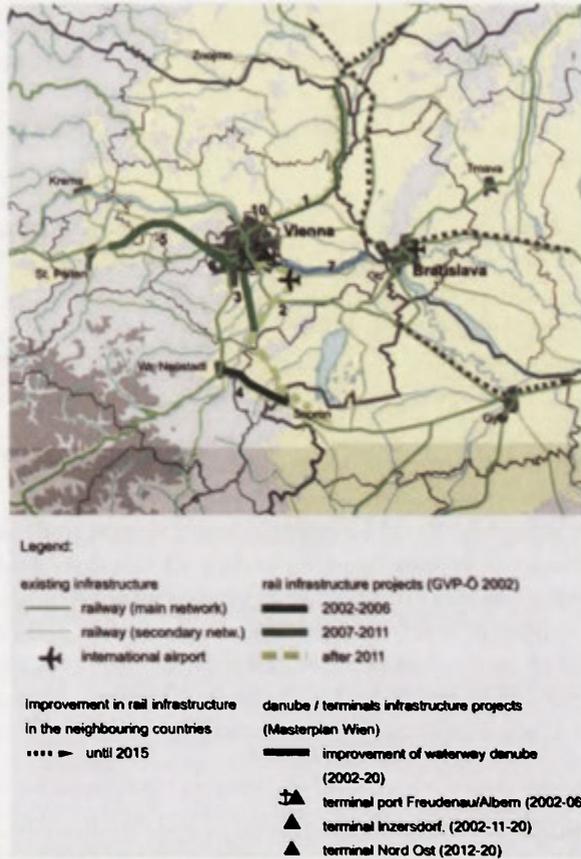


Figure 4. Infrastructure expansion—rail, Danube, freight terminals

Source: Austrian Transportation Policy Scheme, Masterplan Vienna

co-operation between the two airports has been around for several years and started with the General Agreement on Air Traffic signed between Austria and Slovakia in 1993. These efforts had relatively little impact on actual operations of the airports and on air traffic (OECD 2003). While there are concrete plans to connect the two airports with a motorway, there are hardly any connections by direct public transport (only two buses per day which link the two airports directly, there is no direct rail link). The reduction of waiting times at the border crossing points will probably considerably improve accessibility (OIR 2003). Other hindrances for co-operation are the double customs controls but also the different forms of organization (Vienna–Schwechat is private, Bratislava-Ivanka is managed by the Ministry). Co-ordination of activities of both airports could create network synergies strengthening the region.

The Danube waterway is also expected to play a crucial role for transport in future. The improvement of the Danube water way for tourist traffic, but also for transport of cargo is

under discussion. Over the next twenty years funds amounting to almost 280 million EUR are foreseen for the improvement of the Danube route east of Vienna (OIR 2003).

At the moment, the following border-crossing points for road traffic exist between Austria and the Slovak Republic.

- Moravsky Svätý Jan–Hohenau (a pontoon bridge, which cannot be crossed any time due to the water level)

- Zahorska Ves–Angern (a barge for cars up to max. 3.5 t)

These crossing points are lying away from the transport routes and were so far only of local importance. In order to improve the traffic situation the completion of the motorway border crossing point

- Jarovce–Kittsee is necessary.

At the moment most border crossings are concentrating at the border-crossing point

- Petrzalka–Berg (also for trains), because the motorway border crossing Jarovce Kittsee is not yet constructed.

In general transport infrastructure is highly developed and the region is highly accessible along the central axes but needs to be improved in the cross-border linkages. Great potentials are seen at the Danube as an international transport route and the two international airports which can develop into hubs to the CEEC and the Middle East. On the other hand high traffic volumes can be noticed (increase in cross-border passengers and goods transport, insufficient supply of services and information and capacity of border crossings) and so far intensity of cooperation and coordination of the means of transport is low. In general one has to conclude that the transport infrastructure is insufficiently oriented towards the future challenges of the border (OIR 2003b).

NATURAL RESOURCES

Also the Vienna–Bratislava area has high quality nature areas like national parks and numerous nature conservation zones of national and international importance. The national park Danube meadows established in 1996 can be regarded as the ‘Green Heart’ between the Vienna and Bratislava agglomerations (OIR 2003). The flood plains of the river March are situated in the East of Austria and on the border to the Slovak Republic and constitute one of nine Austrian RAMSAR sites, wetlands of great importance for the waterfowl fauna.

CO-OPERATION INITIATIVES

Although there are considerable efforts towards cooperation there still lingers (especially on the Austrian side) an awareness of the formerly impermeable border in people’s minds. The former border along the ‘Iron Curtain’ experiences a change in meaning and function whereby a largely impermeable border (separating two different political and economic systems) has become a semi-permeable border. Actors on both sides of the border develop feelings of either superiority or inferiority and a social hierarchy which reproduce the separating effect of the national border. Differences in language, fundamentally different

legal and administrative system as well as populist statements and activities of individual Austrian and Slovak politicians which support and strengthen delimitation through recourse to threatening pictures. The border opening was experienced apart from rejoicing and hopes also as a disillusionment. The Austrian point of view of border opening was connected with the loss of familiar feelings with regard to security and peace, the missing of the economic impulses and an increase of subjective insecurity (illegal border crossers). From the Slovak point of view the border opening meant—apart from many positive experiences—the experience of being excluded from the western consumer world and disappointment over the refusal of contacts by the Austrians. In general, Austrian behaviour after the border opening can be characterised as defensive-preserving, while the attitude on the Slovak side can be characterized as offensive-dynamic (Fridrich 2003).

These findings show the very high necessity to invest further in cross-border and transnational initiatives in order to improve the relationship and co-operations. Following three co-operation initiatives are described which were launched within the area in order to analyse co-operation potentials and to overcome administrative, cultural and political obstacles. The three initiatives are dealing with different topics on different geographical scales—JORDES+ covering parts of Austria, Hungary and Slovakia; CENTROPE additionally covers the Czech Republic and PlaNet CenSE is having a look from transnational scale dealing with the CADSES³.

JORDES+

The JORDES+ (Joint Regional Development Strategies for the Vienna / Bratislava / Győr Region) project is co-financed by Interreg IIIA and started in April 2002 and will be completed in 2005. It is an instrument for the territorial administrations of the cross-border region assisting them to prepare and implement projects of common interest. The main results of JORDES are:

- to define strategic goals for development
- to elaborate a basis for common planning and understanding
- to initiate co-operative development of projects
- to provide the organisational structures for implementation

The common regional development strategy is a jointly developed program of activities and provides recommendations for political decisions and private investments.⁴

CENTROPE

CENTROPE—Building a European Region' is the project which works on the establishment of a joint Central European Region, supporting a dynamic development in all important fields like science, politics, administration, culture or regional development. CENTROPE is called the area covering Austria (the Austrian provinces of Burgenland, Lower Austria, Vienna), in the Czech Republic the regions of South Bohemia and South Moravia, in the Slovak Republic the regions of Bratislava and Trnava and in Hungary the counties of Győr-Moson-Sopron and Vas. In September 2003 a political declaration of intent was signed by all regional governors of the area and the mayors of Brno, Bratislava, Trnava,

³ Central Adriatic Danubian South-Eastern European Space

⁴ <www.jordes.org>

Győr, Eisenstadt, St. Pölten and Vienna with the aim to build a 'European region' for using the chances and possibilities for higher prosperity and sustainable growth in the area.

The CENTROPE activities comprises joint location marketing activities and the establishment of adequate cross-border organisational structures. CENTROPE aims to foster international attractiveness of the region, sustainable integration, location with high quality of life and professional co-operation. Potentials of co-operation should be identified and private and public stakeholders, institutions and enterprises mobilised to use these potentials. Pilot projects in different thematic fields (labour market; economy and tourism; education, science and research; regional development and transport) will help to elaborate common strategies and to identify potentials of co-operation.⁵

PlaNet CenSE⁶

The Interreg IIIb project PlaNet CenSE (Planners Network of Central and South East Europe) is dealing with information and knowledge exchange concerning European spatial planning issues from the Central and South-Eastern European point of view. One main element of the project are two pilot actions:

- Metropolitan Networks in CenSE (Central and South-East Europe): analysis of existing and emerging urban networks, their territorial effects, their needs for investment beyond infrastructure and their potential for Global Economic Integration Zones (GEIZ) in CenSE—endorsed by the 'backbone' of improved transnational

- North-South transnational transport corridors between Baltic and the Adriatic Sea focusing on rail links.

Already one ESPON project took up this idea by identifying a

- 'Triangle for Central Europe'... 'in the central transnational macro-region of the candidate countries enclosing the transnational territory of Warsaw (in the East), Poznan (eventually Berlin in the West), Krakow, Saxony (Dresden), Prague, Bratislava, Vienna, Budapest (in the South). This macro-region constitutes a specific transnational entity... It includes most of the central European growth poles and innovation potentials (capitals and surrounding areas)...' (IRS et al. 2003)

Concerning the pilot study Metropolitan Networks it is the main objective of the project to further develop and use its experts' network to grasp data/information about existing spontaneous or institutionalised co-operations between cities and metropolitan areas as a launch pad for developing these networks towards the idea of polycentricity. Discussing possible Global Economic Integration Zones in Central and South-Eastern Europe also the Vienna–Bratislava area is of main importance.

CONCLUSION

Besides the fact that the fall of the 'Iron Curtain' already happened fifteen years ago we have to have in mind that differences and inequalities in the Vienna–Bratislava area are large and that co-operation is still at an early stage. Furthermore its argued that the

⁵ <www.centrope.com>

⁶ <www.planet-cense.net>

chances given since 1990 are not used in an appropriate way—especially also from the Austrian side (Seiß 2003). Several co-operation initiatives were launched but concrete results (e.g. in transport infrastructure network) only start to develop in 2004. More efforts and many different and coherent activities on different scales are needed to become an integrated area. One crucial question is how the—historically absolutely unique—economic situation of competition in the very narrow area can be used as benefit on both sides of the borders in order to achieve win-win situations. The use of synergy effects needs optimal co-ordination of sub-areas based on the hypothesis that co-ordinated development of all sub-regions results in a more positive outcome for all. The situation of Vienna–Bratislava is a prototype for ‘co-opetition’, a situation where by a given strong competition a co-operation in different fields is of advantage for both sides of the borders. One open question still remains from the Austrian point of view. It is, whether the integration-connected advantages moderate and outweigh the expected disadvantages during the transition phase (especially the pressure on wages and output; the part-displacement on the labour market and the increase of traffic to an extent which was not known so far) (Schremmer, forthcoming). Policy makers at both national and regional level will be challenged to elaborate regional development strategies and aspire to greater efficiency, equity and coherence of policy making across borders. The area could become a role model for other emerging cross-border areas if it succeeds to manage this complex interaction of international integration, regional convergence and sub-urbanisation.

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GEOGRAPHY OF THE POLISH-CZECH BORDERLAND: THE CASE OF EUROREGION BESKYDY*

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Key words: Euroregion Beskydy, structure of the Euroregion, cross-border cooperation

EUROREGIONS AS A FORM OF CROSS-BORDER COOPERATION

The issue of euroregions became very topical in Europe after introduction of the unified EU market and after fall of the 'Iron Curtain' at the end of the 1980s. Its significance further increased during the preparation and then admission of candidate countries of the former 'Eastern block' in the European Union.

Europe as a whole is characteristic not only by the common culture and history but also by the number of state borders. Presently existing state borders in Europe result from hundreds of years of geo-political, economic and social development. Some borderland regions have gradually developed into marginal areas of weak structure with limited traffic links, often due to their physico-geographical conditions. Other borderland districts which were more densely populated and had an important industrial potential near the border were on the other hand often a reason to political disputes and wars. Different politics on two sides of the border, especially in the field of state administration, economy, culture and social affairs stirred the situation, changing the state borders into actual barriers between the countries. People living in the borderland

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¹ The last pronounced changes of state borders in Europe occurred after World War II. As far as the Czech Republic is concerned, its western borders are considered more or less stable already for several centuries (with an exception of World War II). The course of some sections of northern and southern state borders with Austria and Poland was newly aligned at the end of the 1920s after disintegration of the Austrian-Hungarian monarchy and after coming into existence of self-contained independent states (Austria, Czechoslovakia, Hungary, Poland, Slovenia). In some sections the border was demarcated after complex international negotiations. The latest state border in central Europe is the one between the Czech Republic and Slovakia after the split of Czechoslovakia in 1993. Nevertheless, the course of this state border has its historical justification and the borderline demarcation was free of problems with an exception of two disputable sections.

districts, who were most affected by the historical conflicts, developed in them mutual fears and animosity. The situation could lead neither to contacts nor to the willingness to cooperate.¹

The generally used definition of the state border is as follows: State border is a line dividing the continental and water territory of the country from the territory of another country, possibly from the territory unsubjected to sovereign power of any country (sea). A similar definition is used also by geographers. There is for example a definition in the textbook of political geography by Czech authors J. Baar, V. Rumpel and P. Sindler that reads as follows: 'State border is a conventionally (contractually) demarcated line on maps and in the open terrain, which separates the territory of one sovereign country from the territory of another sovereign country or from a region not falling under control of sovereign power of any country (open sea)'. There is a range of state border definitions but it is not the purpose of this paper to deal with them.

The need of cooperation between borderland regions on the both sides of the state border showed first in Europe at the beginning of the 1950s when a coordination was needed in terms of investments into borderland areas damaged by war. At that time, the borderland regions concerned were those in France, Netherlands and Switzerland neighbouring with the Federal Republic of Germany. At that time, borderland villages started founding associations of communes with common interests. Thus, the first—the then so called supraborder regions—existing in western Europe were developing primarily due to economic reasons. Their further objectives consisted in the creation of trustful neighbourly environment, in the removal of disadvantages following out from the borderland position of the region, and in becoming mediators to do away with unequal economic development of the borderland regions.

A significant instigation to establish euroregions was however only the introduction of the common market in EU countries and the fall of 'Iron Curtain' in central Europe. At that time, most of national country borders were opened and a requirement appeared of a deeper cooperation between the borderland regions of individual EU member countries. The EU member countries began to advocate the policy of economic and social coherence which consists in the requirement of a balanced development of the European Union as a whole, based on the principles of social equity and solidarity on the one hand, and on the principle of economic performance on the other hand. The goal of this policy is a compensation of negative regional impacts of EU sector strategies (Jerábek et al., 2004). One of tools of the policy became the programmes of subsidies such as INTER-REG programme for EU member countries or PHARE CBC for the then candidate countries.

The constitution of the first euroregions in the block of post-Communist countries where Poland, Czech Republic and Slovakia belong dates back to the year of 1991. In this year, the first Euroregion Nisa came into existence at the German-Czecho-Polish border².

² Euroregions in the borderland areas of neighbouring post-socialist countries were established only in the second half of the 1990s.

EUROREGION BESKYDY

OBJECTIVES OF THE EUROREGION BESKYDY

The objective of the Czecho-Polish-Slovak association in the Euroregion Beskydy consists in joint activities focused on a uniform and well-balanced development in the Euroregion, on friendly relations and cooperation of their inhabitants and institutions. It is based on the geographic conditions of the territory.

The cooperation is being implemented in the following fields:

- Exchange of experience and information concerning region's development, labour market, area development planning and construction works
- Solution of common problems in the field of transport, traffic networks, communications and telecommunications, ecology and environment, trade, industry, small- and medium-sized businesses, agriculture, forestry, food industry, development of tourism and travelling with respect to the improvement of conditions for tourist industry in borderland regions, schools, sports and exchange of youth, education, cultural exchange and care of common cultural heritage, prevention of natural disasters and removal of their consequences, population safety and collaboration of emergency and rescue services
- Euroregion's authorities also wish to support conclusion of international agreements on cross-border cooperations.

It follows from the above list of cooperation issues, that it is a range of activities coordinated by Euroregion's executive bodies (Presidium, Secretariat, Working sections and Revision committee). The activities are coordinated by the following six Working Sections:

- Working Section for economy, trade, industry, small- and medium-sized businesses and traffic infrastructure
- Working Section for post-offices, telecommunications and information exchange
- Working Section for agriculture, forestry and food industries
- Working Section for schools, education system, universities and health care
- Working Section for tourism, cultural activities and sports
- Working Section for environment protection, area development planning and construction.

Present strategic goals of the Euroregion are as follows:

1. Development of processes integrating the Euroregion and development of local democracies
2. Development of Euroregion's economy through cross-border economic cooperations
3. Nature and landscape conservation
4. Optimum development of human potential and improvement of living standard for inhabitants of the Euroregion.

ORGANIZATIONAL STRUCTURE OF THE EUROREGION

It should be emphasized that the Beskydy Euroregion does not have juridical subjectivity and activities executed by respective members of the community are governed by legislations of the respective three countries. The Euroregion exists on the basis of an agree-

ment about the community of Czech, Polish and Slovak associations of municipalities regularly registered in the Czech Republic, Polish Republic and Slovak Republic.

Supreme body of the Euroregion Beskydy is the Presidium of the Euroregion. It consists of 15 members with each of the contractual parties being represented by 5 members. Current Chairman of the Presidium is Zbigniew Michniowski (Poland), Vice-Chairmen are Miroslav Rejda (Slovak Republic) and Petr Rafaj (Czech Republic). Chairman of the Presidium has a mandate of one year after expiration of which the post is passed over to the representative of another contractual party. A similar scheme holds for vice-chairmen. Chairman of the Presidium for 2005 will be a representative from the Czech part of the Euroregion.

Tasks of the Presidium are as follows:

1. Representation of the Euroregion in its external relations;
2. Specification of main streams of activities in the Euroregion;
3. Approval of financial plans concerning joint projects of the Euroregion;
4. Approval of Euroregion's statutes;
5. Elaboration of reports to inform about activities of the Presidium;
6. Dissemination of information about planned activities of the Presidium;
7. Convening of joint meetings of the community members;
8. Establishment of working groups;
9. Establishment of membership fees.

Presidium of the Euroregion regularly meets three times a year with the meetings held by turns in all three member countries. Irregular meetings are summoned if so required by two of the contractual parties. Meetings of the Presidium are prepared by the presiding region and official language is the language of the Chairman. Interpreting for the other two parties is assured by themselves. Minutes from the meeting are provided in the language of the host country.

Resolutions are adopted in the case that there are at least 9 members of the Presidium present at the meeting, with a minimum representation of each party being 3 members of the Presidium.

All parties operate their own Secretariats of the Euroregion. The Secretariats reside in Žilina (Slovakia), Bielsko-Biala (Poland) and Frydek-Místek (Czech Republic). Functions fulfilled by the Secretariats are as follows:

- Paperwork and administrative service for the Euroregion
- Representation of the Euroregion in external affairs
- Convening of the Presidium meetings
- Preparation and submission of draft resolutions of the Presidium
- Execution of resolutions adopted by the Presidium of the Euroregion.

Other Euroregion's bodies are the Commission of Auditors and Working Groups.

BASIC GEOGRAPHICAL CHARACTERISTICS OF THE EUROREGION

Originally Euroregion Beskydy came to existence as a Polish-Slovak euroregion against a signature of the foundation letters in February 2000. In April 2000, a regional association Region Beskydy was established in the Czech Republic (in Frydek-Místek), which was admitted in the already existing Euroregion of the Beskids in June of the same year. This

is how the historically first region in the borderland of three post-Communist countries came into existence. Euroregion has a total area of 3 704 km² and a population of nearly nine hundred thousand inhabitants. Shares of the three countries in the total area of the Euroregion are as follows: 33% Poland, 42% Slovakia and 25% the Czech Republic.

Euroregion 'Beskydy' is situated in the borderland area of north-eastern Czech Republic, north-western Slovakia and southern part of Poland. The Euroregion's heart is represented by the towns of Frýdek-Místek (Czech part), Bielsko-Biala (Polish part) and Žilina (Slovak part of the border). The Euroregion is cut through by a traffic vein connecting northern, southern and eastern corners of Europe. In terms of state administration, the Euroregion comprises the district of Frýdek-Místek and the borderland part of the Karvina district in the Czech Republic, the voivodeship of Bielsko-Biala in Poland, and the towns and villages of the Žilina region in Slovakia (Figure 1).

The Common denominator of the Euroregion is the mountain range of the Beskids Mts. (Beskydy) consisting of several parts: the Moravian-Silesian Beskids Mts. and the Javorníky Mts. on the Czecho-Slovak borderline, the Oravské Beskids Mts. and the Kysucké Beskids Mts. on the Slovak-Polish borderline, and the Silesian Beskids Mts. on the Czecho-Polish border. Marginal parts of the Euroregion are reached by lowlands of the Ostrava Basin and by the lowland of southern Poland. The topography is very diverse with a considerable relief energy. The highest mean annual temperatures of about 8 °C are recorded in the river valleys of Olše, Vah and Wisla. The temperature decreases with

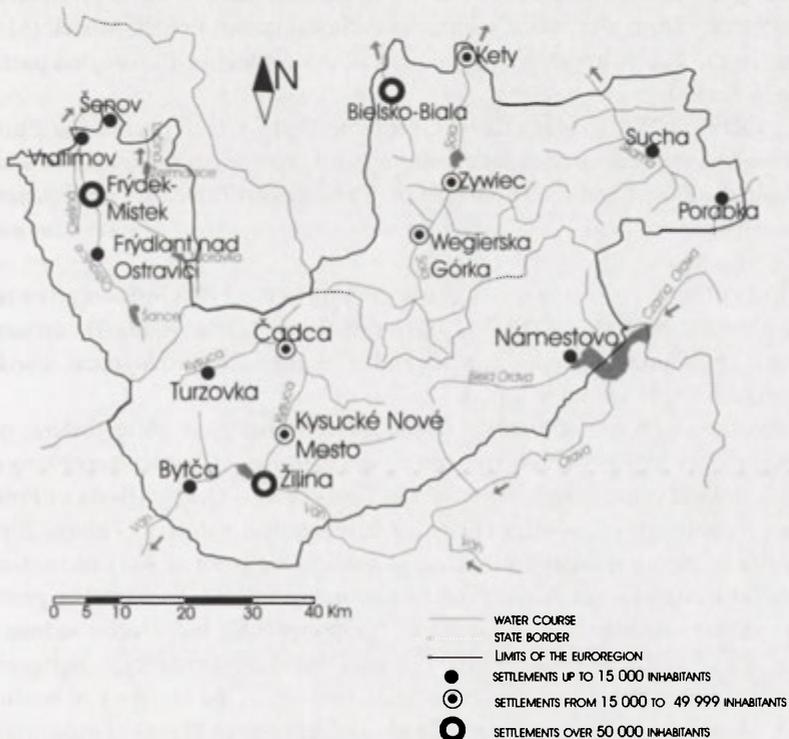


Figure 1. Euroregion Beskydy—Basic spatial scheme

the increasing altitude and mean annual temperatures measured on mountain peaks are usually below 4 °C (e.g. 2.5 °C on the Lysá hora Mt.). The Euroregion ranks with the coldest areas in Czechia, Poland and Slovakia. Mean annual total precipitation ranges about 1000 mm, reaching over 1400 mm in peak elevations. The Euroregion is cut through by the main European watershed. A major part of the Czech and Polish territory of the Euroregion (drained by the Odra and Wisła rivers and their tributaries) falls in the drainage area of the Baltic Sea. The Slovak part of the Euroregion is drained by the river of Váh (with the affluents of Orava and Kysuca rivers) into the Black Sea. There are several water reservoirs built in the Czech and Slovak parts of the Euroregion with the functions of recreation, flood control and water supply.

Forest coverage in the Euroregion is relatively high with extensive forest complexes. A considerable part of the Euroregion is represented by Protected Landscape Areas (CHKO), parky krajobrazowe (PK) in Poland. The Protected Landscape Areas in the Euroregion of the Beskids are CHKO Beskydy in the Czech territory, CHKO Kysuce and CHKO Horná Orava in Slovakia, and PK Żywiecki, PK Beskid Śląski, PK Beskid Mały and Babiogórski Park Narodowy (National Park).

The Euroregion's environment is apart from local economic activities to a certain extent affected also by the transfer of noxious substances from other regions (e.g. from the near industrial areas of Ostrava and Upper Silesia with a high representation of heavy industries and power engineering).

The largest residential centres of the Euroregion are Bielsko-Biala (179 000 inhabitants) in Poland, Žilina (85 900 inhabitants) in Slovakia and Frydek-Místek (61 000 inhabitants) in the Czech Republic. Populations of the respective Euroregion parts are illustrated in Table 1.

The structure of settlement is least favourable in the Czech part of the Euroregion with the highest number of communes whose size is very small as compared with those occurring in the Slovak and Polish parts of the Euroregion (Table 2). The high number of low-populated communes in the Czech part shows in higher costs of state administration and self-government.

Economy of the Euroregion was at the beginning of the 1990s influenced by transformation which occurred after 1989. The transition from planned to market economy was accompanied by a number of bankruptcies and by increased unemployment. The Euroregion was entered by foreign developers.

Industrial production is diversified in the whole Euroregion. Nevertheless, not even this colourful mosaic of manufacturing companies could avoid financial problems in some of them. The largest industrial centre of the Euroregion—Bielsko-Biala in Poland—is known for its automotive industry (Fiat), electrotechnical industry (Philips, Elektrim), manufacture of piping systems and textile industries, the town of Kety has a number of metallurgical factories, manufacture of aluminium products, engineering production, clothing industry, manufacture of knitwear, components for automotive industries, the town of Żywiec has a high representation of food industries (brewery), engineering, paper and wood industries. Industrial companies ranking in the category of medium size can also be found in the town of Porabka and in other centres. The most industrial centre occurring in the Slovak part of the Euroregion is the town of Žilina with textile indus-

Table 1. Inhabitants, area and population density in the Czech, Slovak and Polish parts of the Beskydy Euroregion

	Inhabitants	Share %	Area [km ²]	Share %	Population Density
Czech part	158 893	17.98	929	25.08	171.04
Slovak part	263 320	29.80	1 559	42.09	168.90
Polish part	461 469	52.22	1 216	32.83	379.50
Euroregion Beskydy	883 682	100.00	3 704	100.00	238.58

Source: Statistic data Czech, Polish and Slovak Statistic Offices.

try, engineering, paper and wood industries, food production and a number of construction corporations. Jobs can be found also in industrial operations situated in Kysucké Nové Mesto (roller bearings), Cadca (engineering, textiles, timber industry, Christmas decorations), Bytča (engineering, textiles, wood-processing industries, food products) and Námestovo (electrotechnical industries, clothing, textiles, wood, food products). The largest industrial centre in the Czech part of the Euroregion is the town of Frydek-Místek with dominating metallurgy and textile industries. Coal mines of Starč and Paskov are still playing the role of important employers in the region. Another industrial centre is Frydlant nad Ostravicí with metallurgy, engineering operations (enamel works).

Agriculture is rather a complementary sector of manufacture in the Euroregion whose geographical conditions predetermine it rather for extensive agriculture. As a larger part of the territory is situated in protected areas or in areas with intensive recreation, it is necessary to emphasize the non-producing functions of agriculture in the region. It is expected that a significant role for the maintenance of agricultural production in the region will be played by the future agricultural policy of the European Union (subsidies into agricultural production).

In terms of *traffic pattern* some parts of the Euroregion show a marginal location. The Czech part of the Euroregion is crossed in the Frydek-Místek district by international motorway E 462 (Brno-Olomouc-Frydek-Místek-Česky Tešín-Bielsko-Biala-Kety).

Table 2. Categories of communes in the Czech, Slovak and Polish parts of the Beskydy Euroregion

Categories of communes by inhabitants	Euroregion Beskydy		
	Czech Part	Slovak Part	Polish Part
above 5000 inhabitants	4	9	22
2000-4999 inhabitants	12	18	4
1000-1999 inhabitants	18	15	0
below 1000 inhabitants	24	11	0
total number of communes	58	53	26

The south of the Slovak part is passed through by international speedway E50 (the track in which a motorway from Bratislava through Žilina, Liptovský Mikuláš and Prešov to Košice is being gradually built) and international motorway E75 (Žilina–Cesky Tešín–Bielsko-Biala). None of the above mentioned communications in the Czech and Slovak parts of the Euroregion meets requirements of the speed and high-capacity traffic (none of them having four lanes and flyover crossings). The situation is much better in the Polish part of the Euroregion where E75 from Tešín do Bielsko-Biala is of the speedway type. The only four-lane motorway section existing in the Czech and Slovak parts of the Euroregion is between Frydlant nad Ostravicí through Frydek-Místek to Ostrava.

The Czech part of the Euroregion is neither passed through by any two-rail (and electrified) railway of international significance. Such a railway runs through the neighbouring Euroregion of Tesínske Sliezsko (the former so called kosicko-bohumínska railway), continuing further on through Žilina and Pováží to Košice, being a part of the railway backbone in Slovakia.

Recreational function is one of important functions in the Euroregion in which favourable conditions for both short- and long-term recreation exist almost everywhere (skiing, hiking, tourism), some parts of the Euroregion can boast with some well-preserved ethnographic specificities.

Big variances exist in accommodation facilities built for recreation and tourist industry. The Czech part of the Euroregion is dominated by private holiday houses meant for individual (mainly family) recreation (approx. 11 thousand objects of individual recreation). In the Slovak and Polish parts of the Euroregion there are some 500 and 2500 individual holiday houses, respectively. The largest accommodation facilities meant for commercial tourism can be found in the Polish part of the Euroregion (Wisla, Ustroń, Szczyrk, Valley near Żywiec) (Havrlant 2001). The recreational areas of the Czech and Slovak parts of the Euroregion are generally missing the tertiary infrastructure, which hampers a possibility of their commercial use.

FINANCIAL SUBSIDY FOR THE PROJECTS OF BESKYDY EUROREGION

Requests for financial support for projects in the scope of euroregional cooperation can be applied by individual entities associated in the euroregion every year. Projects are obviously oriented at the people-to-people projects, mutual propagation of the territory or improvement of technical infrastructure of the area etc. Nevertheless, these activities are not obviously well-known among people living in the euroregion. Therefore, some supported projects are mentioned below.

The majority of jointly submitted projects were Polish-Slovak ones. In 2002, for example, 16 projects were approved for co-financing from the EU Fund of small projects (total subsidy was 127 000 EUR). Contribution for the implementation of the projects was about 75% of their costs. The projects were focused on the development of tourism, joint sport and cultural events, environmental education, cooperation between Technical University of Žilina and Technical Sciences and Arts in Bielsko-Biala, etc. In 2003, a total financial support of 25 200 EUR was obtained from the same source for 3 projects focused on transboundary development of tourism, conservation of cultural traditions in the region, and elaboration and publication of a tourist guide by Beskids Mts.

In 2003, projects funded from the Slovak state budget (Ministry of Construction of the Slovak Republic and Ministry of Regional Development of the Slovak Republic) were as follows: economic forum of towns and villages in the Euroregion Beskids on transboundary cooperation, regional development and tourism; publication of a map discovering the tourist potential of the Euroregion Beskydy. (The map was published in two language mutations: Slovak-English and Polish-Czech; joint planning as a basis of the successful development of the Horní Kysuce micro-region as a part of the Beskids Euroregion. The objective was to trigger processes focused on sustainable development (public inquiry included). Organization of sports games of the Euroregion Beskids in football, tennis, table tennis and netball played with ball kicked across (Strečno, July 2003) were supported too.

In 2004 the following projects were co-funded from the state budget of Slovak Ministry of Construction and Ministry of Regional Development: Preparation of technical documentation for the issuance of building permit for a Tabernacle of Goral Culture at Babia Góra; elaboration of the Project for Separate Waste Collection in Terchovská dolina valley as a part of the Beskydy Euroregion; elaboration of the Plan for Economic and Social Development of the Terchovská dolina valley as a primary medium-term planning document for economic and social development in the micro-region of Terchovská Valley.

In the Czech part of euroregion three grant projects were supported from the fund of the Moravian-Silesian Region in 2003. This year (2004) one project is supported from the fund of the Moravian-Silesian Region, 4 grants are supported from the fund of the Ministry for Regional Development, and 4 grants from CBC Phare 2002/2003. All these projects were focused on the promotion of the Euroregion for tourism and on grants from the programme 'People-to-People' (cultural and sports events, etc.). The reconstruction of communication in the town Frýdek-Místek was co-financed from the Fund programme CZ 0010.03.02. In 2005 the creation of informative portal of the town Frýdek-Místek and its surrounding and a competition 'Cup of euroregion Beskids and Cieszyn Silesia in judo 2005' will be co-financed from the fund CBC Phare.

SUMMARY

Current operation of Euroregion Beskydy and other euroregions in the post-socialist countries are not still optimal. Obstacles for better transfrontier co-operation could be summarized as follows:

- differences in administrative competences of territorial communities or authorities
- differences in administrative cultures in every level of government
- discrepancy in national legislation between neighbouring countries;
- inadequate financial resources: the projects concerning transfrontier co-operation are financially supported by the Phare programme, which represents substantial motivation for municipalities near the border;
- differences in experience of developing transfrontier co-operation, depending on the given conditions in the area and personal and other resources;
- language barrier;
- low level of priority given to transfrontier co-operation;

- inadequate transfrontier infrastructure (especially with comparison with EU countries)

Despite obstacles mentioned above it is possible to say, that the approach of central and regional authorities to the issue of euroregions is gradually changing.

Representatives of euroregional associations are more oriented in the bureaucracy connected with the euroregion's operation as well. They acquire experience in the project processing even though the regulations are still changing.

Projects, that euroregions ask support for, had to be perfectly prepared both from the point of view of realisation and financing. Candidates have to own finance for co-financing. Sometimes it could be a trouble—especially in the cases of large projects connected with technical infrastructure. Individual communes or small communal associations are not usually able to pursue all these changes flexibly and respond for it. Therefore it is advantageous to cooperate with regional planning agencies (e.g. in the Czech Republic Regional development agency) eligible to help.

In spite of all above mentioned troubles euroregions conduce to the mutual people's approach in the both parts of their boundary and to the realization of mutual project dealing with these territories.

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ORLICKO: A RURAL MICROREGION ON THE CZECH-POLISH STATE BORDER

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INTRODUCTION

The end of the 20th century brought a number of important changes not only in the field of political and economic development but also in the field of science and research. Regional policy and development started to be gradually given more importance similarly as the geography of small areas in regional geography. And it is in this context where the presented paper came into existence as a part of the project named 'The influence of climatic and anthropogenic factors on live and lifeless environment' and its subproject on the 'Regional assessment of environment in the conditions of economic and social system transformation'. With respect to the character of settlement in the watersheds of Divoká Orlice and Tichá Orlice upper reaches, the territory was also subjected to a partial research within the grant project of the 'Geography of Small Towns' the activities being implemented as a part of the long-term partnership between the Academy of Sciences of the Czech Republic (AS CR), the Orlicko Association of Towns and Villages and the Orlicko Towns Association.

DEMARCATIION OF THE REGION AND ITS GEOGRAPHICAL POSITION

The region under study is situated on the Czech-Polish border and its geographical position within the Czech Republic is on the borderline of the historical lands of Bohemia, Moravia and Silesia. As to the current statistical EU classification it is a part of the North-Eastern Region (NUTS 2) and within its framework a part of the Pardubice Region (NUTS 3).

Region's boundaries are the Ústí nad Orlicí district boundaries in the East and West, the state border with Poland in the North, and the southern boundary runs along the

cadastres of Mlýnský Dvůr, Cenkovice, Bystec, Verměřovice, Kuncice, Cervená, Jankovice, Písečná, Krizánky, Česká Rybná and Litice nad Orlicí.

The microregion in question was not delineated on the basis of a certain objective or scientifically established criterion but rather on a potential possibility of using the results in practice. The microregion consists of 32 communities occurring in the district of Ústí nad Orlicí, which are members of the Orlicko Association of Towns and Villages. Larger Czech centres in the vicinity are Hradec Králové and Pardubice (50–60 km), Klodzko in Poland is about 45 km from the road border-crossing in Dolní Lipka/Boboszów (Figure 1).

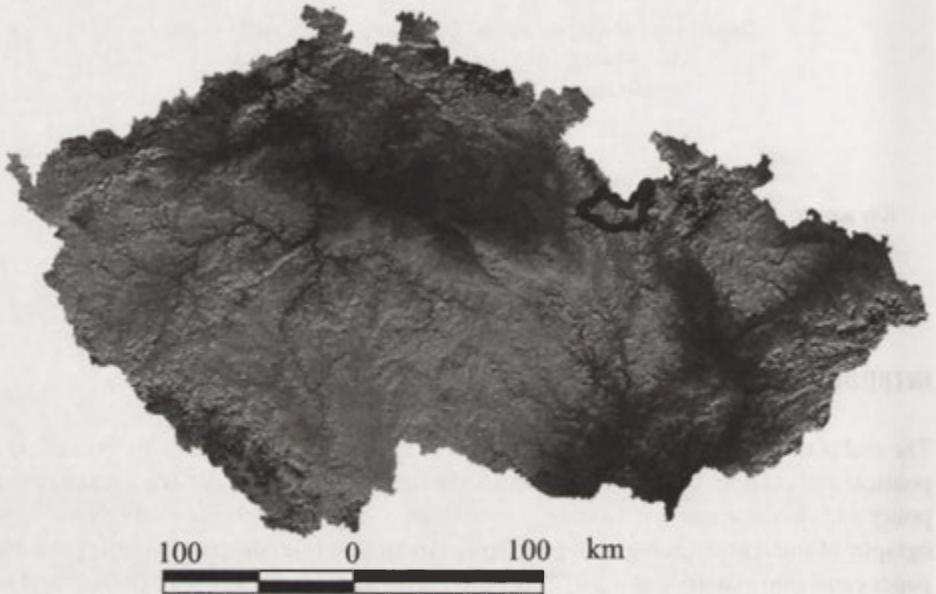


Figure 1. Geographical position of the Orlicko microregion in the Czech Republic (E. Kallabová)

LAND USE

Total area of the microregion is 44 thousand hectares and a slightly more than a half of it is farm land. Relatively best conditions for farming can be found in twelve municipalities in which farm land takes up more than two thirds of their cadastre area. The municipalities are to be found in rings around the towns of Letohrad, Jablonné nad Orlicí and Zamberk, and within the integrated settlements of Králíky (3/4 municipal area). More than a third of the microregion is covered by forests. The most extensive forest complexes can be found in the Bukovohorská hornatina Hilly Land and in the Králíky Sněžník Mts.

Water surfaces take up only 0.8% of the microregion's area. A third of them is constituted by the Pastviny water reservoir and its compensatory reservoir of Nekor situated on the Divoká Orlice River. Built-up areas reach the highest absolute and relative values

in small towns. Their total area amounts only to 1.2% of the territory under study. Other surfaces take up the remaining 2 790 hectares (6% of the total area investigated).

As mentioned above, the largest area share of the microregion is farm land. However, in contrast to the country's average of 72% only 54% is in the category of arable land due to landscape topography, geological, climatic and soil conditions.

Over a quarter of the farm land are meadows, 13% are pastures. These two types of surfaces with permanent grassland cover about a quarter of the Czech territory; in the Orlicko microregion it is nearly a half of the farm land. This is why the area is used mainly for animal production, cattle breeding in particular. There are also gardens to be found in each rural village and small town, whose area ranges from several up to tens of hectares. This functional type of land has a significant representation mainly in towns.

COLONIZATION DEVELOPMENT AND SIZE STRUCTURE OF SEATS

Colonization of the inaccessible forest borderland is likely to have started in the second half of the 12th century but the first written records originate from 1227 when a foundation of the southernmost village (Bystrec) in the area under study is documented. The colonization proceeded in the western and north-western direction and in the most of the western part of the territory in question consisting of villages whose intravillan can be found at altitudes of up to about 500 m was peopled during the third quarter of the 14th century. Communes of the eastern part of the territory, situated in the Bukovohorská hornatina Hilly Land and Králícká kotlina Basin were being founded until the end of the 16th century. Barrier to the process of colonization here was first of all a broken topography. The intravillan of local villages is usually situated at altitudes between 500–650 m a.s.l.

The today's microregion of Orlicko consists of 28 rural villages and 4 small towns. Based on an analysis of the size structure of the seats we can say that villages dominating in the territory under study in 2001 were those with the population of 500–999 persons (11 villages) and 200–499 persons (10 villages). Municipalities falling in the categories of 'up to 199 inhabitants' and '1000–1999 inhabitants' are three in each of them, which also holds for the category of '2000–4999 inhabitants' (Cervená Voda, towns of Jablonné nad Orlicí and Králíky). Zamberk and Letohrad are towns in the category of 5000–9999 inhabitants. Two thirds of the population live in towns and Č. Voda. As compared with figures for the whole Czech Republic, an important role in the Orlicko microregion population is also played by the category of 500–999 inhabitants with a fifth of the total microregion's population.

SOME ASPECTS OF THE POPULATION STRUCTURE

According to the last census of February/March 2001 the population of the studied territory amounted to 38 thousand inhabitants (population density 87 inhabitants per km²). In terms of age structure, the local population can be classified as mildly progressive.

One of important factors for the development of marginal regions is the presence of educated population. The highest share (40%) in the group of inhabitants over 15 years

of age is that of persons skilled and with the secondary education without school-leaving examination. A quarter of the enquired inhabitants are secondary school leavers with A-levels, nearly 6% are university graduates. After a more detailed analysis of available data we can say that the least favourable situation in terms of education standard is in villages with up to 300 inhabitants (C. Petrovice, Cenkovice and Orlicky), in Lichkov (562 inhabitants) and in C. Voda (3227 inh.). These municipalities have typically above-average microregional shares of inhabitants with basic education, skilled persons and persons with the secondary education without A-levels, and at the same time below-average microregional shares of people with higher education. The higher-educated population traditionally concentrates in the small towns of the Orlické Mts. piedmont, in Dlouhonovice, Jamné and Helvíkovic, i.e. in villages neighbouring the mentioned towns.

The population's structure of nationalities in the area shows a pronounced homogeneity although the region in question is situated in the borderland. An absolute majority of inhabitants declared Czech nationality, only 5% declared other nationality or did not declare any nationality. The largest minority group living in the Orlicko microregion consisted of 649 Slovak nationals who lived in all municipalities with an exception of Hejnice. A surprisingly small number of inhabitants (137) declared Polish nationality.

Working people (Economically Active Persons—EAP) form 49% of total population in the microregion with a tenth of them being employed in agriculture, forestry and fisheries. The figure was exceeded in two thirds of the communes and in 7 communes the primary sector was employing even a quarter of the population. The above data indicate a rural character of the Orlicko microregion. Communes with the highest percentage of persons employed in the primary sector were concentrated around the town of Zamberk and in the border districts. Processing industries were employing 43% EAP. Districts with the highest industrial employment could be found in Jablonné nad Orlicí and in villages situated to the north and east of the town. Building industry employed a tenth of the population. The tertiary and quaternary sectors together employed only 37% EAP. A relatively highest concentration (40–50 EAP) of people employed in services was found in the south-eastern part of the region thanks to the existence of three small towns.

SELECTED PROBLEM OF REVITALIZING THE ORLICKO RURAL REGION

Rural space revitalization is in fact a synergic effect of internal and external processes of social cohesion. In this study we shall attempt at outlining some processes that can have a significant influence on the microregion's internal cohesion or which may reflect its level.

The microregion's internal cohesion is being impacted by factors such as the quality of traffic and technical infrastructure, local labour market situation, availability and range of civic facilities, personal security, participation of local inhabitants in community life, standard of communication between the key authorities (citizen, private sector, public sector) in the region, government activities in regional development (e.g. Countryside Revitalization Programme), etc. One of indicators of the successful revitalization of the rural residential space is for example population growth.

POPULATION DEVELOPMENT

The number of inhabitants in the microregion was growing from the second half of the 19th century with the highest value recorded in the census of 1890 when the population of the today's microregion amounted to 48 709 inhabitants. The historically highest population numbers before the end of the century were reached in four fifths of the Orlicko communes, which was mainly due to developing industries.

However, from the end of the 19th century the region started to show a slowly proceeding depopulation and the number of inhabitants decreased by about a seventh in forty years. A rapid fall was nevertheless recorded as late as in the period from 1930–1950 when the region shrank by a quarter of its original population. The relatively highest population losses were recorded in Orlický (52%), Ceske Petrovice (60%) and Cenkovice (78%) and the villages have not been able to come to terms with the loss until today. The demographical situation unfavourable for the whole region resulted from the occupation of the Czechoslovak borderland regions, events of World War II and from the subsequent post-war evacuation of German nationals. Communes not affected by the population decrease in the mentioned period were only those of Dlouhonovice and Klasterec nad Orlicí.

Here we have to mention an important phenomenon of the Orlicko region colonization—population of German origin. The first stage of colonization lasted until the beginning of the 17th century. German population gradually spread in all towns and villages of the region under study. A breaking point occurred at the time after the Battle on the Bílá hora Mt. when a massive germanization markedly raised the share of German nationals in the Orlicko region population and schools of all stages were established to teach subjects in German language. The third important period was between the years 1938–1945 when a considerable portion of the territory was cut off the Czechoslovak Republic and annexed to the Reich. Response to the step was a post-war evacuation of most German nationals from the region and its partial gradual compensatory colonization by Czech nationals from all corners of the country (Figure 2).

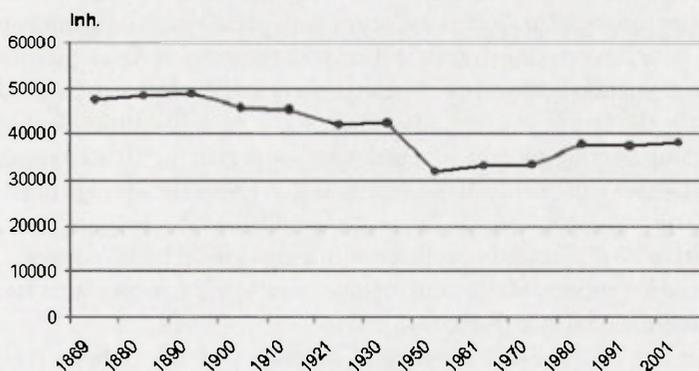


Figure 2. Population development in the Orlicko microregion in 1869–2001

Sources: A Retrospective Encyclopaedia of Municipalities in the Czechoslovak Socialist Republic 1850–1970 (1978), Statistic Year Book of the Czech Republic 2002, Statistic Encyclopaedia of Municipalities in the Czech Republic (1984, 1992)

After World War II, the region began to be slowly repopulated again. The population increment in the 1950s and 1960s was however only 1500 inhabitants and the growth trend concerned only a third of the municipalities of which most rapidly growing were towns. A decade of the highest population gain in the microregion is considered to be the 1970s when the population increased by 1/8 (4296 inhabitants). The growing trend concerned only a third of the municipalities even in this period of time, applying again mostly to the local small towns.

Should we make a more detailed analysis into the course of population development in the individual municipalities we would see that nearly 90% of them recorded a historical population minimum in the second half of the 20th century—with a relatively even distribution into the individual census decades. This was a result of many factors of which most important were demographical population losses of World War II (deaths, post-war evacuation of the German population), marginalization of the region in the country (preference of industrial regions) and the settlement system of centres (preference of towns and large villages whose representation in the microregion is low).

TRANSFORMATION OF ECONOMY, UNEMPLOYMENT

In 2003/2004, the region in question had over 6 thousand registered economically active entities of which 42 reported more than 25 employees.

As mentioned above, the primary sector has been playing not a negligible role for the employment in the region. In the classification of agricultural production areas the Orlicko region is situated in the zones of fodder production (mountains) and cereal production (piedmont) its entire territory meeting the criteria for being included in the so called less favourable areas (LFA). This is why the government supports extensive forms of farming in the region. At the present time, most farms specialize in the production of high-yielding dairy cows. Plant production is focused on the cultivation of fodder crops for own consumption and on growing marketable potatoes and rape-seed. Similarly as in the whole country, the process of transformation brought a major change of ownership structure. Former state agricultural cooperatives became joint-stock companies and there is a number of private farms trying to restore links with the pre-war developmental trends.

A new phenomenon is observed to be organic farming which can be used to develop agro-tourism in the future. At the end of 2002, there were 10 entities dealing with environment-friendly farming on 8.6% of farmland resources in the Orlicko region the figure being markedly above the national average as well as above the average of EU countries. Most of the farmers keep beef cattle for meat and milk, less sheep, goats, pigs and poultry. Plant production is of a lesser importance with crops grown being potatoes, oats, buckwheat, peas and sugar-beet. Methods of organic farming are however still often combined with the conventional farming methods.

Regarding the climatic and orographic conditions of the Orlicko region and the general withdrawal from subsidized intensive farming, local agriculture exhibits a great potential for the production of ever more demanded organic food products and cultural landscape maintenance, which can be both well used in the newly developing segment of travel industry—rural tourism. As to their spatial distribution, the organic farms are concentrated in the eastern part of the region in question.

Despite the process of national economy restructuring, most local people still work in industries. The region's strength consists in a wide range of light industry operations and this is most likely a reason why the otherwise marginal region shows a generally tolerable rate of unemployment. Nearly a half of inhabitants employed in industries work in electrotechnical firms. Other important industries are textiles, engineering, plastic materials and wood-processing. Main centres of employment in production are logically the above mentioned small towns. The orientation on light industries, their colourful range, dislocation in multiple locations and a high number of owners are good prerequisites for a successful functioning of the secondary sector of local economy.

Services are the most progressively developing sector of national economy and at the same time the most important employer. However, its role in the Orlicko region is still underestimated with the sector of services employing only 37% EAP. Basic classification is into services of commercial and non-commercial character. Non-commercial services necessary for the population include pre-school and school education, health and social care. School and pre-school facilities are entirely missing in villages with up to 400 inhabitants who have to use schools in neighbouring villages or towns. Secondary schools can be found in three small towns and with 3 secondary technical apprentice centres, 3 secondary grammar schools and one technical college the microregion in the foot-hills of the Orlické hory Mts. with four small towns is above the national average.

All towns and the largest rural village of Červená Voda provide a complex medical service (general practitioner, paediatrist, dentist, gynaecologist and GP with specialization) on which usually depend inhabitants of smaller rural villages. Acute care is provided by the hospital in Ústí nad Orlicí, some complementary facilities of hospital character in the microregion can also be found in the town of Zamberk and in Červená Voda. The existing system of health care cannot be expected to show any pronounced change in the future due to the size structure of seats and their population numbers. Also, the five largest municipalities in the region have an old people's house each whose capacity is however insufficient with respect to the ever increasing share of retired population and taking into account the existing situation on the housing market. It is therefore considered useful to both extend the provision of community care to older people directly in their abodes, and to establish a new smaller accommodation facility (e.g. by adapting an older apartment house).

Most attention in the field of commercial services is paid to retail shops, restaurants and other boarding facilities, hotels and banks. Even the smallest settlements have a grocery to serve their inhabitants. Textile shops, drugstores or butchers occur only in some of the rural villages. A nearly full assortment of goods is offered to the Orlicko inhabitants in separate outlets or supermarkets located in small towns and in Červená Voda.

Restaurant services are offered in almost all villages, smaller private accommodation capacities can be found in every other village and hotels are localized in small towns. The existing network of restaurants and accommodation facilities might be extended in the future with respect to the natural potential and a dense pattern of marked tourist routes, cycling and cross-country skiing tracks. Banks can be found in towns and in the largest rural village similarly as most other commercial service operations.

Tourism, sustainable development of rural space and transport services are together the main direction of the common strategy for the region's development. In addition to

well-kept landscape with a hilly relief the Orlicko region can offer visits to the monuments of folk architecture in the countryside, urban zones of historical sightseeing; in four small towns, a chateau, castle ruins, a system of military fortifications from the 1930s, a number of tourist paths, cycling and cross-country skiing tracks, twenty pistes for down-hill skiing (a popular centre of winter sports in Cenkovice-Buková hora), an aqua-park and the Pastviny water reservoir. An important element not only in the tourism itself but in reinforcing the territorial identity of local population is a relatively high number of nine museums where visitors are informed about the history and genius loci of the region.

With a gradually improving technical infrastructure and civic amenities, maintenance of the existing production operations, development of extensive forms of farming and commercial services the Orlicko region has a good perspective to become attractive environment for people wishing to settle in the landscape with a relatively unimpacted natural component of environment and relatively good job possibilities.

At the time of the census in 2001, there were 1275 persons looking for jobs in the region, which represented an unemployment rate of 6.8%, i.e. by about 2.5% lower than the national average. According to data publicized by the Labour Exchange Office in Ústí n.O., the unemployment rate in the microregion increased to 8.3% in 4/5 of the municipalities as at 30 April 2003. The most affected area not only within the microregion studied but in the entire district of Ústí nad Orlicí was the town of Králíky and its surroundings with 12.5%. A year later, the situation in the Orlicko region stabilized at 7.8% which is again by about three per cent less than the national average in the Czech Republic. Villages and towns with the lowest rate of unemployment are concentrated in the south-western part of the microregion and the town of Králíky and its surroundings have been most affected over a long time.

HOUSING STANDARD DEVELOPMENT

Data from the last census carried out in 2002 indicate that there were 16 thousand apartments in the microregion, of which a sixth were uninhabited. Approximately two thirds of the permanently inhabited flats were situated in single family houses and a third in apartment houses. One of indicators to classify housing standard is the technical equipment of housing resources. The apartments in the Orlicko region are nearly at 100% connected to the water supply pattern (with only 146 flats not mentioning the facility). A somewhat lower percentage of permanently inhabited flats (95%) are equipped with a bathroom or a shower, 93% with a water closet (in some of villages with less than 600 inhabitants the figure ranging from 75% to 85%) (Figure 3).

Apart from the age and the technical equipment, other factors to decide on the housing standard include attendance expressed by indicators such as the number of persons per a dwelling room over 8 square meters (8 m²+) or the housing area per a person. As far as the first of the two indicators is concerned we can state that its maximum values (1.10—1.15) are reached in villages with the population less than 300 and in C. Voda (1.13). In contrast, a 'comfort' of a number of dwelling rooms '8 m²+' greater than the number of inhabitants is exhibited in a third of villages with a minimum of 0.95 persons per a room reported in Jabloně nad Orlicí. Average housing area per inhabitant of the microregion amounts to 18.7 square meters; the value approximately holds for towns while a minimum was reached

in Cenkovice (15.2 m²). On the other hand, the average area per inhabitant in Kunvald, Mladkov, Pastviny and Studene ranged from 20–21 m². The available data do not make it possible to draw an unambiguous conclusion about the housing standard in the region as a whole. Variances occur even when classifying the towns and villages for the individual criteria. It can be concluded, however, that in terms of the technical equipment, number of dwelling rooms and housing resources age the highest housing standard is offered by small towns and rural villages in the south-western part of the Orlicko microregion.

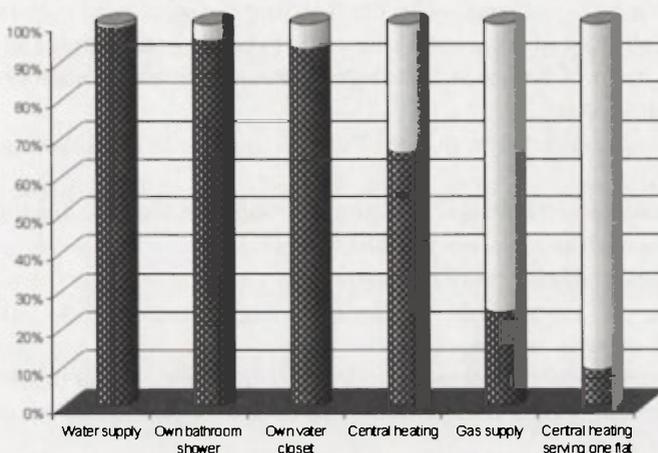


Figure 3. Technical equipment of flats in the Orlicko microregion in 2001

Source: Czech Statistical Office, Provincial Representation in Pardubice

RURAL SPACE REVITALIZATION PROGRAMME

The first programme document with a special focus on the issue of Czech rural space revitalization was the Programme of Village Revitalization approved in 1991. This initiative was joined by about a fifth of the villages. The Programme was to raise an interest of local inhabitants and self-governments to improve their own nearest environment, to encourage their active approach and own initiative in the enhancement of their village architectonic appearance, development of small businesses, restoration of traditional crafts, environment care and protection in the village and surrounding landscape, and in the revival of spiritual life and togetherness of social life in the village.

Most significant achievement in the field of Czech rural space revitalization and development at the turn of millenia is the Programme of Rural Space Revitalization (POV) as one of the most important whole-area programmes of regional development. Its significance is underlined also by the fact that the Programme was adopted by the European Union as a joint programme for the development of regions bordering with the EU countries within the PHARE CBC programme, and that having had been approved by the government of the Czech Republic in 1998 it becomes in reality a more efficient follow-up project of the above mentioned Programme of Village Revitalization. Unlike the

preceding project, it is much more financially supported by the government, being integrated with the regional policy of the Czech Republic, structural and regional policy of the European Union, promoted at a level of microregions (formerly supported only by individual communes) and applied within a framework of territorial and factual priorities. The Programme was gradually winning popularity in more and more municipalities and it is a majority of Czech towns and villages that are engaged in it at the present time.

We could specify a range of indicators for rural space revitalization such as club life revival and return to traditions, maintenance of certain typical crafts, refurbishment of buildings, reclamation of land properties, extension of local road patterns and road reconstructions, increase of households connected to public water supply and sewage system, enhanced quality of surface and underground water, increasing number of furnaces burning environment-friendly fuels, etc.

The indicators are specified within the POV programme in the following nine subsidized titles:

- Refurbishment and maintenance of rural housing area and civic amenities
- Complex reconstruction of open public spaces
- Renewal and establishment of public greenery
- Reconstruction of local roads, building of cycling and tourist tracks, refurbishment and construction of public lighting
- Elaboration of urban development studies and area development plans
- Projects of municipalities for education and counselling in rural space development and village revitalization
- Integrated projects of rural microregions
- Projects for the development of infrastructure
- Direct subsidies into technical infrastructure.

Based on the data from the Register of Area Identification it is possible to say that the Programme of Rural Space Revitalization was joined by all towns and villages of the studied microregion in the course of the first five years of the project. The most frequently mentioned reasons for applications from the individual municipalities were reconstructions of local roads (18 municipalities), reconstructions of local educational facilities (14), public lighting (11), investments into buildings of municipal authorities (7), maintenance of sacral historical monuments (6) and cultural facilities (6). Integrated projects of rural microregions logically reported the highest numbers of engaged municipalities. In this subsidized title, municipalities could have gained as much as 70% of costs covered in a current year. The subsidies were meant for elaboration and implementation of projects interconnecting restoration of civic amenities and technical infrastructure with active strategy of employment, promotion of small- and medium-sized non-farming trades, support of farming businesses and landscape management.

In reality, the subsidies into the Orlicko microregion were used for the following purposes:

- Counselling services of specialized entities for implementation of the strategic plan of development
- Documentation, marking and maintenance of cycling tracks, nature trails, cross-country skiing tracks

- Improved traffic accessibility of areas attractive for tourists (the recreation area of Buková hora Mt.—Suchý vrch Hill; interconnection of individual objects of the Králicko fortification system)
 - Development and regular operation of a complex system of information centres
 - Promotion of the microregion and the Orlicko Association of Towns and Villages on websites and at an international travel fair
 - Reconstruction of existing civic amenities and building of the new ones (reconstruction of the existing cultural facility, new premises with artificial ice surface)
 - Maintenance of cultural traditions and historical affinity of local population to the region (repair of single small historical objects, publication of Legends from the Orlicko Region).

CONCLUSIONS

Orlicko is a marginal microregion whose development was to a considerable measure affected by the occupation of the Czechoslovak borderland, by events of World War II and by the subsequent evacuation of German population. Villages in the watersheds of Divoká Orlice and Tichá Orlice lost a quarter of their population in just twenty years and they have not been repopled yet to reach their pre-war condition. Club life was fading, traditional local weaving was replaced with textile factories in towns, and farmland started to be managed by state farms and agricultural cooperatives. Countryside was affected by the exodus of young people, by poor infrastructure and by the absence of services. Subsidized development of housing, light industries and services supported only the growth of small towns. After political and social changes of the 1990s, a revival of the rural landscape as an important segment of the Central European space began to be pointed out with activities in this direction being referred to as a process of rural space revitalization. The process consists in the permanent enhancement of living standard in the rural space both in the socio-economic sphere and in the sphere of landscape management and production and non-production functions of the landscape. After the decades of passivity on the part of local inhabitants and authorities, the present objective is to enhance the architectonic appearance of the towns and villages, to revive small businesses and trades, to properly care of environment in the village and in the surrounding landscape, to develop spiritual and community life in the village. All these activities are observed to have beneficial effects on the so much promoted and built regional coherence, in our case on the cohesion of towns and villages in the Orlicko rural microregion.

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POSSIBILITIES OF ENVIRONMENTAL CO-OPERATION IN THE BORDER REGIONS OF HUNGARY AFTER THE EU-ACCESSION

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INTRODUCTION

Hungary shares its border with seven different countries: Slovakia, Ukraine, Romania, Slovenia, Croatia, Yugoslavia and Austria. The environmental problems that Hungary faces today are the result of a combination of geographical, political, social-economical and cultural-historical factors, and are not limited to national boundaries. As contaminants, comes through the air or water, ignore boundaries, transborder problems may arise as pollutions leave one country and enter another.

The border regions are atypical in terms of the spread of pollutants and have a significant influence not only on contiguous areas, but on the environments of whole countries. The goal of this study is to understand how these buffer zones operate in their own countries and how they are affected by the new political circumstances in Central-Eastern Europe as a whole with the expanding market economy.

In addition, the changing political climate since the fall of communism and the development of new relationships in Central-Eastern Europe have affected the treatment of these issues. It appears that in most cases, cross border cooperation for environmental management is being supported by new international organizations and agreements, although initiatives at the local level are lacking.

This study presenting cardinal transborder problems, the present state of solutions to those problems, and issues of development.

We would like to feature all the deciding factors which are indentifying in the state of

the environmental border regions of Hungary and also in terms of the joint corporation with the neighbouring countries.

STATE OF THE ENVIRONMENT

Hungary, Slovenia and Slovakia as the EU 25s new Member States carried out a lot of environmental issues. The latest Commission Reports examined how the newly joined countries adopted the community *acquis* regarding the environment.

Hungary¹ has to implement the *acquis* the following areas: horizontal legislation, air quality, waste management, water quality, industrial risk management, chemicals and genetically modified organisms, noise, nuclear safety and radiation protection.

It needs to finalise the legal alignment as regards the following areas: horizontal legislation, waste management, water quality, industrial pollution, genetically modified organisms, noise, nuclear safety and radiation protection. It also needs to complete air quality plans and programmes, air quality monitoring, water quality monitoring (drinking water quality, discharges of dangerous substances to water by accession), local waste management plans, waste collection systems and recovery and disposal facilities, waste shipments. Hungary partially meeting the commitments and requirements in the areas of nature protection and industrial pollution.

Slovakia² needs to accelerate the legislative alignment process and to adopt a comprehensive strategic approach including implementation plans and financial strategies necessary to ensure implementation, particularly for those Directives having important financial implications.

The country has to implement the *acquis* the following areas: horizontal legislation, air quality, waste management, water quality, industrial risk management, chemicals and genetically modified organism, noise, nuclear safety and radiation protection, nature protection. It needs to finalise the legal alignment as regards the following areas: horizontal legislation, waste management, water quality, industrial pollution, noise, nuclear safety and radiation protection. It needs to complete air quality plans and programmes, water quality monitoring, waste collection systems recovery and disposal facilities Slovakia partially meeting the commitments and requirements in the areas of nature protection.

In Slovenia³ the Law on Water has not been adopted yet, in order to take into account the new EC framework directive. The key institutions for implementing the environment *acquis* are already in place. The administrative capacity requires reinforcement, which has already started.

It has to implement the *acquis* in all areas of environment policy by accession. Moreover Slovenia needs to finalise the legal alignment as regards the following areas: horizontal legislation, waste management, water quality, industrial pollution, genetically modified organisms, noise, nuclear safety and radiation protection, air quality, nature protection. It needs to complete water quality monitoring, waste collection systems and

¹ Commission Report [COM(2003) 675 final—SEC(2003) 1205

² Commission Report [COM(2003) 675 final—SEC(2003) 1209

³ Commission Report [COM(2003) 675 final—SEC(2003) 1208

recovery and disposal facilities. Slovenia partially meeting the commitments and requirements in the areas of Nature protection and industrial pollution.

Romania⁴ expectedly will join to the EU soonest 2007. Many terms has to be executed until then. The October 2004 Report states that Romania has made good progress in aligning its legislation with the *acquis*, but that additional efforts are required to fully implement the legislation in key sectors such as air quality, waste management and water quality. Particular attention also needs to be given to implementation, especially establishing the necessary administrative structures and securing investment. Romania has provisionally closed negotiations on the environment chapter.

A law on the ratification of the Aarhus Convention has been adopted. Romania has also ratified the Espoo Convention on Environmental Impact Assessment in a Transboundary Context and the Kyoto Protocol. As for the remaining horizontal legislation, the adoption of legislation on environmental impact assessment represents a great step forward. Nevertheless, its implementation will require increased administrative capacity, particularly at local level.

ENVIRONMENTAL PROBLEMS IN THE BORDER REGIONS

THE HUNGARIAN-SLOVAKIAN BORDER AREA

The 700 km long Slovakian-Hungarian border section stretching between the Rivers Danube and Tisza is the longest in Hungary, of which almost 40% is natural border (Danube, Ipoly). A deposit of the River Danube, the lowland along the river is bisected by two branches, either widening into a river in the north and the south, respectively. From the mouth of the River Ipoly as far as the area of Bodrogeköz the state border line meanders through basins surrounded by hills and mountains on another 450 km-long section.

Most of the current environmental problems arise from the differing geographical situation of the two countries. In addition, the harmful effects of the not exactly environment friendly heavy industry (chemical industry, paper manufacturing /Sturovo/ and heavy industry /Kosice/) established in the past decades can be detected as well.

Although pollutant levels are far lower than they were in the 1960s and 1970s problems, reated by heavy industries, exist.

Hungary is exposed to pollutants from Slovakia via prevailing northwest winds and both hungarian and slovakian industries contribute to the serious pollution of the region.

At the Hungarian side there are also been heavy and light industries such as cement factory, paper mill, coal mines, chemical industry.

The most complex issue unresolved for nearly a decade now is how to eliminate or perhaps mitigate the negative environmental effects of the uncompleted Gabcikovo-Nagy-maros dam.

The construction procedure was stopped because of a number of existing and potential political problems surrounding the project.

The increasing road traffic is the main source of the NO₂ pollutants, especially in

⁴ Commission Report [COM(2004) 657 final—SEC(2004) 1200

towns with heavy border traffic. Also a problem the pollutants from Bratislava plants (200 000 SO₂/year). The heavy industrial plants have been closed down elsewhere, the sulphur dioxide concentration along this border is now the highest in Hungary.

The Mochovce Nuclear Power Plant representing a potential environmental threat to the Hungarian-Slovakian border area.

The Danube River has poor water quality because the Bratislava sewage treatment plant and the lack of regional sewage conveyance system. The Ipoly River is moderately polluted when it enters Hungary. It has high level of NH₄, N, PO₄. The Sajó, Hernád and Bodrog Rivers are enters Hungary with considerable levels of bacteriological pollution. The Hernád River has high levels of fecal coliform and fecal streptococcus. The Zn, Al levels are also high (Figure 1).

PHARE-CBC support has made a significant contribution to the protection of the karst water table of this border area.

Several Slovakian protected areas are contiguous to Hungarian ones, such as the protected areas of the Karancs and Latorca, Aggtelek National Park, Slovakian Karst, which are on the World Heritage List since 1995, furthermore the Fossils of Medves, Tarna Area, Zemplén and Karancs and Latorca.

The first realisation of cross-border co-operation is the Carpathian Euroregion Co-operation, comprising Central and Eastern European countries exclusively.

The Foundation was established in 1994 in order to provide financial support for civil organisations and local self-governments in the region.

It is the Ipoly Euroregion comprising the areas along the border river (5 000 square

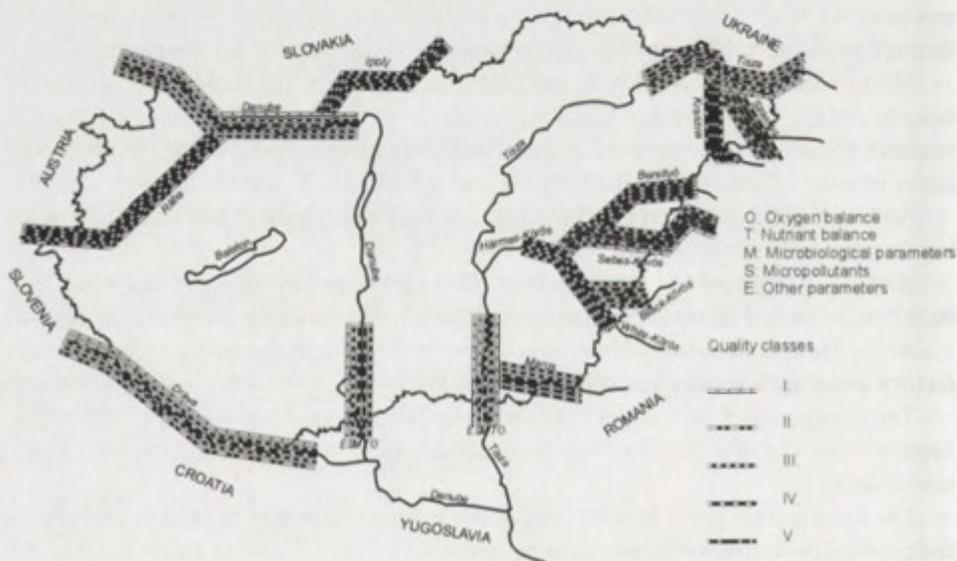


Figure 1. Quality of surface waters

kilometres, 500,000 residents) that has proven to be the most successful. The co-operation programme aims at handling the difficulties arising from economic restructuring, easing employment problems, restoring railway communications and, last but not least, encouraging the member areas to get a better understanding of each other.

THE HUNGARIAN-UKRANIAN BORDER AREA

The present Ukrainian-Hungarian border region was a contiguous area with a shared historical past and development until the end of World War I. The 215 kilometres long Ukrainian-Hungarian borderline is the second shortest in Hungary. It is mainly land border as the River Tisza only takes over as a border river at Záhony, Tiszabecs and Szatmárcseke.

Traffic is especially in a dire situation as no motorway crosses the area. Road and railway network can only handle thin traffic. In addition, it is in bad repair and outdated.

Environmental conditions are good owing to the fact that, given the dismal state of Ukrainian economy, Ruthenia's industrial production and, as a result, waste emission have practically halted.

The region belongs to the water catchment area of the River Tisza and abounds in gullies. The water quality of the Tisza and its tributaries is good, however, reckless lumbering in the past decade has alarmingly increased the chances of devastating floods.

Tourism poses many such potential problems along the Tisza because there is so little infrastructure to accommodate it. Another serious problem is the gold mine of Muzsaj (Romania). If the operations were to begin again, they might also yield serious pollutant that would adversely affect Hungary.

Záhony station used to handle 50 percent of the total good transported to Western Europe from the former Soviet Union.

Very important problem in the Hungarian-Ukrainian border areas the flooding of the Tisza River and its tributaries. Possible cause is large-scale, wasteful deforestation in the Carpathian Mountains (Ukraine and Romania). Recent flooding on the Ukrainian side of the border has pointed to the need for Hungarian-Slovakian-Ukrainian collaboration to solve developmental problems and better manage the environment in this three border region.

Waterquality in the Upper Tisza is good (industrial wastes have been suspended), the main contaminants are the sewage released bacteriological pollutants, heavy metals from Transylvania, waste salt from the Aklaslatina salt mine (Romanian-Ukrainian border) and gold mines of Muzsaj and the household solid waste pollution.

There is a good fact the river transportation developed with EU support. Záhony-Chop railway and border crossing is a special area where the risk of the accumulating of hazardous wastes and the air pollution is high.

There are a number of natural areas in the Sub-Carpathia region such as Nagydo-brony Protected Area (disturbed aquatic bird life).

After the change of regime the international cooperation initiated by the self-governments of counties and settlements had better chances. The targets of cross border cooperation are mainly neighbouring border regions. Some forms of cooperation are even specified by law, e.g. Ruthenia and Szabolcs-Szatmár-Bereg Counties are twin counties, but many other Hungarian settlements have twin settlements as well.

Szabolcs-Szatmár-Bereg County and Ruthenia are founding members of 'The Carpathians' Euro-Region. Unfortunately, the organization has neglected publicity, consequently, the majority of the population of the border region have not even heard of it.

Cross-border cooperation is far from being exemplary, one of the main reasons being that economy is hardly involved in it. Ukrainian authorities often hamper it, too, e.g. they balked Hungarian aid in Ruthenian settlements hit by floods in 1998.

THE HUNGARIAN-ROMANIAN BORDER AREA

The 432 kilometres long Hungarian-Romanian border, running in a NE-SW direction on the eastern edge of the Hungarian Plain, is a land frontier easy to cross where the border is only sporadically marked by rivers.

The Hungarian side of the border zone can be described as a typical flatland. In the northeast the Szamos-Kraszna region and the Kis-Sárrét encircled by the Berettyó and Körös Rivers are poorly drained low floodland areas. On the Romanian side the Szamos lowland covered with undulating drift sand is adjoined by a broad marshland (Ecsedi lap). The gravelly soil between Szamos and Kraszna is fed by small streams. The Körös Region is intersected by the Rapid, Black and White Körös rivers.

On the Romanian side the 20–50 km wide eastern plain gradually rises into the foothills of the Carpathians intersected by deep river valleys. The terrain of Romanian Banat lying south of the Maros River can be best described as a basically flat surface with undulating hillocks gently sloping to the west.

The dominant hydrographic elements of the region are the rivers (Tisza, Túr, Szamos, Kraszna, Körös, Maros) as well as the Ecsed marshland and the Biharugra lake. Floods usually occur in early summer, small floods in early autumn and winter. Surface water is also a source of constant concern in the whole border zone. Groundwater below the surface is polluted (or contained in rocks sensitive to pollution). The rivers entering Hungary from Romania are the most specific indicators of the pressures on environment. The pollution of the Szamos, Körös and Maros Rivers present grave problems.

There are serious pollutants come from Romania from the Szamos River to the north and the Körös and Maros rivers to the south (Figure 1). The Szamos River burden with volume of organic-matter, N- and PO-levels, dissolved iron and magnesium. The Kraszna River has high concentration of pollutants (organic nutrients and NH_4).

The White and Black Körös are polluted by bacteriological materials thanks to the lack of sewage collector system and poultry processing plants and pig farms in Salonta.

The Maros's water comes from the Carpathian Mountains in Romania. This river is only partially protected and potential pollutants along its course. Could seriously endanger this vulnerable water supply. The river is polluted by N and faecal pollutants. Important alluvial deposits area regarding water supply Hungarian-Romanian Joint Committee of Water Management Technology. The vulnerable water base of the Maros alluvial cone, gaining 70 % of its water from Romanian territory and supplying more than 20 settlements on the Hungarian side of the border may be seriously endangered by potential surface pollutants both in Hungary and Romania.

The Romanian city of Oradea, which has a population of 150 000, lies only 7 kilometres from the border. It has heavy and light industry (outdated technology) such as

chemical industry (pesticides), furniture manufacturing, aluminium industries, pig farms (sewage), cement factory, and clay mines (Figure 2 and 3).

In 1997 the threat to the aquifer of the romanian fertilizer plant was clearly established and both countries agreed to collaborate to solve the problem. Hungarian-Romanian Joint Committee of Water Management Technology, negotiations are taking place that will result in an international project proposal.

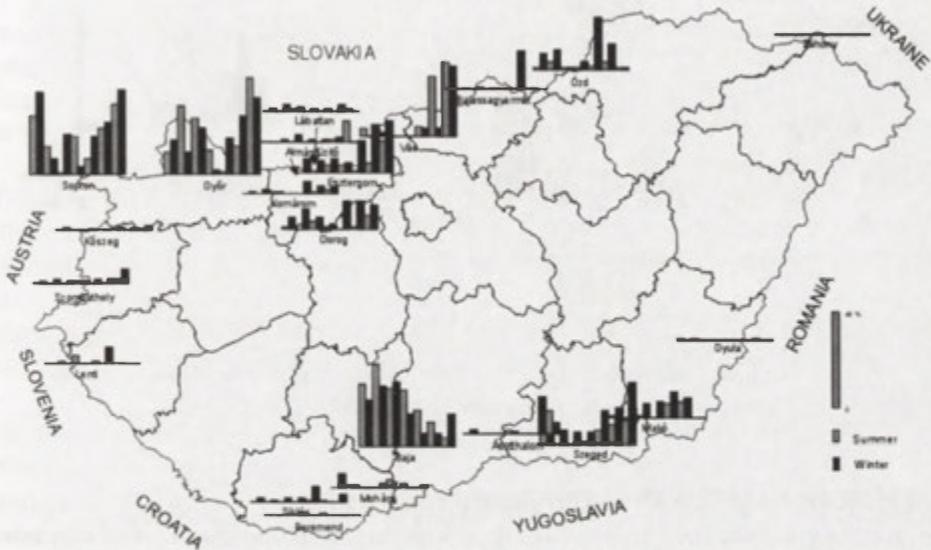


Figure 2. Air quality of border settlements (NO % of measurements above limit value), 1991–1998

There are several important natural areas like Szatmár-Bereg, Bátorliget Meadows, Bátorliget Marshlands, Fényi Woods, Hajdúság region.

Hajdú-Bihar and Szabocsszátmár-Bereg Counties as well as the cities of Debrecen and Nyíregyháza are founding members of the Interregional Association of the Carpathian Euroregion. Szatmár and Bihar Counties on the other side of the border are also members of the same region. The Romanian counties of Arad and Temes as well as the Hungarian ones of Békés and Csongrád are members of the Danube-Tisza-Körös-Maros Eureregion.

The relations of environmental and water directorates being authorities with regional role are not perfect, however, mutual trust has increased since the Romanian systemic change, and this is also reflected in information flow and mirror-projects with the same objectives.

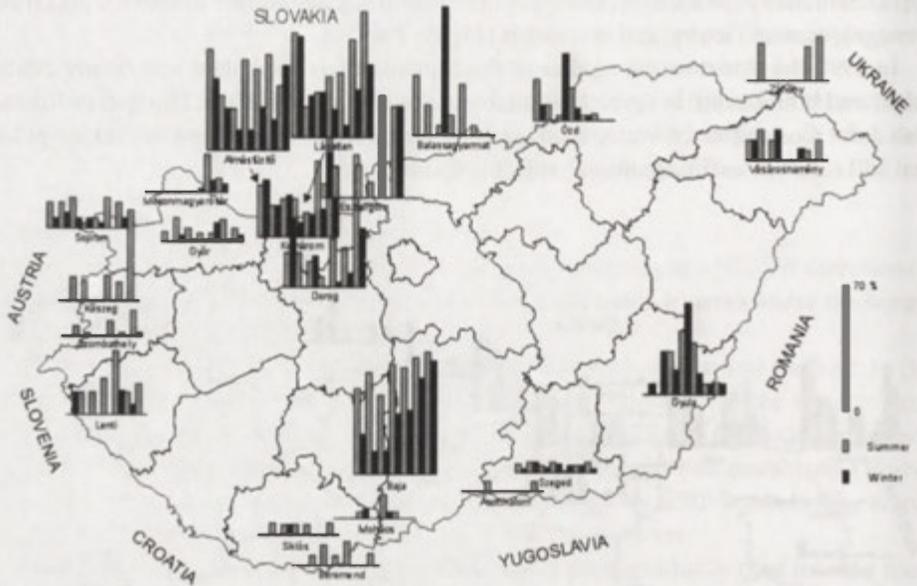


Figure 3. Air quality of border settlements (Solid particulate matter % of measurements above limit value), 1991–1998.

THE HUNGARIAN-SERBIA AND MONTENEGRO BORDER AREA

At one time this was the longest of Hungary's international borders. It's now only one-third of its original length and only the Vojvodina area is contiguous with Hungary situated between the Danube and Tisza rivers, the land here is mostly sandy and alkaline, and hasn't been farmed intensively.

The terrain of the border region lacking in water is made up of sand and loess covered with flood forests and fur. Parts of this same terrain are valleys with 3-15 meters wide marshland and protected flood forests as well. Moderately polluted rivers (the Tisza and the Danube) and especially temporary pollution from both road border stations and the chemical factories in Szabadka pose danger to the environment.

The area is rich in crude oil and medicinal waters, thus oil production and health tourism are major industries in both regions.

Rivers of the northern borders are polluted (Figure 1). The Danube river leaves Hungary more polluted than when it entered. Its biological oxygen demand (BOD), the chemical oxygen demand (COD) figures and coliform count are higher. The heavy metals were found to be within acceptable limits.

The Tisza river's water quality is determined by several factors. Because the untreated sewage from Szeged the level of bacteria and inorganic and organic matter are high.

The Szelevény Forest, which has recently been declared a protected area, sits between the Hungarian-Serbian border and the newly constructed Beograd state motorway. The sandy areas on the other side of the border have been recommended for protection and

this forest could be an ideal adjunct as it would significantly expand the possibilities for ecotourism in the region.

Joint efforts are also needed to solve the water problems of the sandy area.

Natural areas are the Lake Ludas (nature park) and Palics (recreation areas). Protected areas are the Szelevenyi Forest (between the border and the motorway), the Upper Danube Region (forest on the flood and alluvial plains of the Danube).

The cross-border collaborations are necessary to lowering of the water level, to alleviate borderland sewage problems and to deal with arsenic in the water table.

Since the change of regime Serbian-Hungarian cross-border cooperation has been mainly restricted to some between settlements and cities, as there are no 'mid-level' administrative units in Serbia. Cooperation has only continued between Subotica and Szeged, but Sombor and Baja have also taken steps to revive their links. Twin settlements of smaller size have only confined themselves to hosting cultural and sports events.

THE HUNGARIAN-CROATIAN BORDER AREA

The Hungarian-Croatian section of the border with Zala, Somogy and Baranya Counties on the Hungarian side is 355 kilometres long. The Mura is a border river on a 50 kilometres stretch, the the Drava River meanders on over another 90 kilometres. Therefore, 40% of the common border run along the rivers, out of which 55% are along the Drava. Only a small part is land border including the Berzence bridgehead and the Baranya triangle.

The most decisive environmental factor of the Hungarian-Croatian border region is the Drava River. Unfortunately, its shared utilization is just another source of arguments. The Danube-Drava National Park runs the entire length of the 329 kilometres long Hungarian-Croatian border. Croatia, however, urges the utilization of the hydro-electric power of the Drava, not only on its own section, but on the shared ones as well.

There is some conflict between Croatia and Hungary over the construction of a Croatian hydroelectric plant in this region. For environmental reasons, the Hungarians blocked Croatian plans to build a river dam and creation of the Danube-Drava National Park was raised by the Croatians as an issue.

The daily peaks of water consumption for hydroelectric and other uses produces large ebbs and tides twice per day in the Drava River, causing a 1-1.5 metres flood wave. This effect would be increased by a new hydroelectric plant at Djurdjevac, which would jeopardize both terrestrial and aquatic ecosystems at the NP and the future of local water sources.

Such events would change land cultivation, wetlands would evolve at higher elevations, and tilled lands would give way to meadow and pasture. It should be noted that Croatians are not united in the support of the hydroelectric plant. Croatia probably doesn't suffer from a shortage of energy and environmental groups have protested the construction of the dam by the 'water management lobby'.

The quality of Drava River is bad because of the lack of dissolved oxygen, the high volume of petroleum products, detergents and high concentrations of heavy metal. The Rinya Stream is periodically polluted and Pecs Brook carries sewage from the city of Pecs. The 2001 strategy program has a lot of objectives in connection with it.⁵ The top

⁵ CARDS 2001 Programme 'Strategy development capacity building', the implementation of a 'National Waste Management Strategy Framework' project (2002)

priorities are concern the elimination of arsenic from drinking water, protection of the water tables and surface water quality.

Regional air quality is also at risk. The Beremend cement factory, only a few kilometres from populated areas along the Croatian border. It's a source of dangerous air pollution that is exacerbated by prevailing northwest winds.

The cross-border relations heavily depend on the presence of border stations and the economic hubs. Cross-border co-operation has become intensive between Pécs and Osijek and the Hungarian Baranya and the Croatian Baranya, respectively. Both twin town and twin county relations have been reinterpreted. The Chamber of Commerce in Pécs has established a branch in Osijek in order to foster economic cooperation. However, there have only been a few initial results of the deliberate shaping of cross-border relations and cooperation.

THE HUNGARIAN-SLOVENIAN BORDER AREA

This is the shortest (102 km) stretch of Hungary's borderline. Its most decisive feature is that both its northern and southern part is a triple border (Hungary, Slovenia, Austria and Hungary, Slovenia, Croatia, respectively). The presence of the Rivers Mura and Dráva even makes it a quadruple one.

The region close to the border is poor in nature resources, abounding only in waters, forests, fauna and pebbles. The quality of soil falls behind the average.

Environmental attributes and characteristics are almost identical in the border regions. The natural environment of the border region is determined by the Mura River, whose water quality is influenced by a third country, i.e. Austria (Figure 1). It is in good conditions on either side, chiefly due to the past disadvantages of lying near the border. Favourable climatic conditions, the abundance of natural water and pristine land make the border regions a potential destination of eco-tourism.

Only the problems caused by road traffic are significant and although the Lenti region is one of the cleanest areas of Hungary (ecological importance of the border zone—Orség and Szent György Valley Protected Area) the amount of particulate matter frequently exceeds recommended limits. Those border settlements with twin-city connections are setting goals for joint environmental projects.

THE HUNGARIAN-AUSTRIAN BORDER AREA

With the border station of Hegyeshalom, the northwestern part of Győr-Moson-Sopron County has always been regarded as the western gateway to Hungary. Hegyeshalom has traditionally handled the largest international traffic between West Europe and Hungary as well as the countries lying east of Hungary. Serious pollution damaging the environment is not typical. However, intensive farming and communal sewage do lead to pollution figures exceeding permissible limits in the border region. There are wide forest belts as well as large areas like the Fertő-Hanság National Park and the Kőszeg-Orség Nature Reserves stretching into the border region. This border district can be considered Hungary's most advanced as far as environmental protection and development of collaborative programs are concerned. Aside from this relatively low and periodic river pollution, this region is cleaner than others.

It is along the Austrian-Hungarian border section that the most important cross-border cooperation has been established. Győr-Moson-Sopron and Vas Counties became members of the Alpine-Adriatic Cooperation immediately after it was set up 13 years ago.

Border counties and the province of Burgenland, i.e. members of the former Cross-Border Regional Council, founded Euroregion in 1999, whose activity is based on shared past, current connections and the joint performance of common tasks.

Another organization with 22 self-governments called 'West Gateway' Area Development Association, a micro Euroregion along the Austrian-Hungarian-Slovakian triple border, was founded in 1999.

The common environmental management, the developing of local economies, tourism and trade are the main priorities of the development plans. There are some example of the common projects, such as Lake Fertő recreation area of the Viennese (since 1990), Joint Hungarian-Austrian National Park ('National Park of Europe' 1993), Bordside Regional Council, Hungarian-Austrian Regional and Physical Planning Committee.

The principles of the Local Agenda is a push for the construction of regional sewage treatment plants along this border.

Sewage treatment plant of Szentpéterfa and Moschendorf is one of the best examples of the practical application of EU guidelines and transborder cooperation.

A new Hungarian-Austrian Collaborative program now supports the discovery and use of renewable energy sources. For example the solar and biomass energy.

- Quality of surface waters
- Air quality of border settlements (NO % of measurements above limit value), 1991–1998
- Air quality of border settlements (Solid particulate matter % of measurements above limit value), 1991–1998

ENVIRONMENTAL POLICY OF THE BORDER AREAS

ENVIRONMENTAL CONVENTIONS

Today there are over 500 international treaties and other agreements related to the environment, of which over 320 are regional. Nearly 60 percent date from 1972, the year of the Stockholm Conference, to the present. Since 1972, there has been an accelerated increase in multilateral environmental agreements; over 300 agreements were negotiated.

These are the core environmental conventions and related agreements of global significance whose negotiation, development and/or activities have been associated with UNEP's work, which is further reflected in a number of Governing Council decisions dating back to the establishment of UNEP these are listed in Table 1.

INTERGOVERNMENTAL AGREEMENTS

Hungary conclude environmental and nature protection agreements with four neighbouring countries of it.

Hungarian-Austrian intergovernmental agreement

There has been a principal agreement with Neusiedlersee-Seewinkel National Park,

Table 1. parties to selected core environmental conventions and related agreements

	AUSTRIA	CROATIA	HUNGARY	ROMANIA	SLOVAKIA REPUBLIC	SLOVENIA	UKRAINE	YUGOSLAVIA
Vienna Convention	X		X	X			X	X
MLF for the Montreal Protocol	X		X	X			X	X
UNFCCC	X	X	X	X	X	X	X	X
CBD	X	X	X	X	X	X	X	X
CITES	X	X	X	X	X	X	X	
CMS		X	X	X	X	X	X	
AEWA		X		X				
EUROBATS		X	X	X	X		X	
Ramsar Convention	X	X	X	X	X	X	X	X
World Heritage	X	X	X	X	X	X	X	X
Basel Convention	X	X		X	X	X	X	
UNCCD	X	X	X	X				
Barcelona Convention		X				X		

Vienna Convention for the Protection of the Ozone Layer

Montreal Protocol on Substances that Deplete the Ozone Layer

United Nations Framework Convention on Climate Change (UNFCCC)

Convention on Biological Diversity (CBD)

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

Convention on Migratory Species (CMS)

Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)

Agreement on the Conservation of Bats in Europe (EUROBATS)

the Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat

Convention for the Protection of the World Cultural and Natural Heritage

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

the United Nations Convention to Combat Desertification (UNCCD)

Barcelona Convention for the Protection of the Mediterranean Sea against Pollution

in which Austria and Hungary jointly try to achieve a way for the Lake Fertő and its surrounding area toward the World Heritage of UNESCO.

Neusiedlersee is an extensive cross-border lake shared by Austria and Hungary. Due to its position, elements of different regions converge to give the site its special value.

The Austrian government leases the southern part of the lake, as well as all connected pastures. The rest consists of large estates and private properties

Hungarian-Slovakian intergovernmental agreement, 1999

In 1999 an intergovernmental agreement was reached connected with environmental and nature protection and just before this agreement a part of the Duna-Ipoly National Park was dedicated (1997).

Hungarian-Ukrainian intergovernmental agreement, 1991

Environmental and spatial developmental intergovernmental Agreement

Hungarian-Romanian intergovernmental agreement 1999

Environmental intergovernmental agreement (1987)

The intergovernmental committee coordinate the cooperation between various special fields.

In the last few years the Romanian side realized that how important can this cooperation be and we started a bilateral relation with them.

As a result of this the Environmental Inspectorates of the three counties published a communal database in environmental protection and lately there have been some researching work on pollution sources.

Slovenia, Croatia, Serbia

We need to mention all those practical steps with Slovenia and Croatia which has brought result mainly in the environmental protection like the Hungarian-Croatian cooperation at 1997 when the Duna-Dráva National Park was dedicated.

ENVIRONMENTAL ISSUES IN SPATIAL DEVELOPMENT STRATEGIES

In most Hungarian border districts, active cross-border cooperation is being organized and enjoys considerable support from the EU. Establishing the first cross-border cooperation programme (PHARE-CBC) and pursues similar aims, in particular economic development in the border regions of central and eastern European countries and greater convergence of their level of development with that of the European Union. In addition to these measures providing additional funding, the action plan of the Commission proposes a better co-ordination of existing policies. The aim of this action plan is to strengthen the coherence and efficiency of Community policies with an important impact on border regions to improve the co-ordination between PHARE-CBC and INTERREG. Actions eligible for funding under the cross-border cooperation programme include several environmental issues such as improvement of infrastructures and the provision of local water, gas and electricity supplies; environmental protection; agricultural and rural development; measures in the fields of energy and transport aimed at the development of trans-European networks.

Interregional cooperation brings a further dimension into cross-border cooperation and transnational cooperation under Interreg III. The objective of interregional cooperation is to improve the effectiveness of policies and instruments for regional development and cohesion. By encouraging a more strategic approach by programme, the Commission proposes that Interreg III C should operate as a general framework.

Another two EU programme are the ISPA and SAPARD, which helped to launch several important common environmental acts. The ISPA Programme aims to help Candidate States by familiarising them with the policies and procedures of the European Union, helping them catch up with EU environmental standards, and expanding and linking with the trans-European transport networks.

The SAPARD Programme aims to help Candidate Countries deal with the problems of structural adjustment in their agricultural sectors and rural areas.

One of the most successfully growing communal project is the Development Strategy of the Slovenian-Austrian-Hungarian Border Area. Another similar project to this is the Development Strategy of the Hungarian-Romanian Border Area a PHARE pilot project between Arad and Békéscsaba. The main developmental priority of the Hungarian-Croatian Cross-Border Cooperation is the sustainable environment and nature protection development.

The two most important regional cooperation around the Hungarian-Serbian border area are the Dél-Alföld Border Region Operative Development Program and the Development Strategy of Felső-Bácska and Észak-Bácska.

Another existing natural agreement between Hungary and Ukraine aims the Tisza-valley and its surrounding site to be a natural protected area called The Development Conception of the Border Area of Ukraine and Hungary.

ENVIRONMENTAL DEVELOPMENTS IN THE EUROREGIONS

The border regions concerned are defined as regions at NUTS II level. Environmental protection developments and arrangements can be carried out most effectively on this kind of levels, given the above mentioned financial assistance (Phare-CBC, INTERREG III, ISPA, SAPARD) by the European Union. For this reason international euroregions were founded:

- West-Pannon Euroregion
- Vág-Duna-Ipoly Euroregion
- Ipoly- Euroregion
- Kassa-Miskolc Euroregion
- Kárpát-Basin Euroregion
- Duna-Körös-Maros-Tisza Euroregion

ENVIRONMENTAL COOPERATION OF LOCAL GOVERNMENTS

A lot of project launched at lower level of administration. These are mainly local initiatives with own financial sources. The Öko-Business Plan (Győr-Vienna) training of specialist for management of environmental problems especially waste management. Useful examples of bilateral agreement was a sewage treatment plant set up by the settlements of Austria and Slovakia. Similar project started between Subotica–Szeged–Acron and another one between Bors and Biharkeresztes in order to manage the sewage issues of Orodea, Romania.

NATURE PROTECTION COOPERATION

In Hungary the natural protection is a regional development category. NGOs and the local governments play an important role in indicating natural protected areas. During

the natural protecting activities the application of the concept of sustainability (not only environmental issues) involves priority.

In 1997, the first comprehensive 'List of Transfrontier Protected Area Complexes' was compiled for the IUCN/WCPA Parks for Peace Conference held in Somerset West, South Africa (Zbicz and Green, 1997). Since then, interest in this topic has increased significantly, and many new examples of transboundary co-operation have been identified. There are currently 169 complexes of internationally adjoining protected areas containing 666 individual protected areas in 113 countries.

To provide consistency, two criteria were used for inclusion of sites on the list of adjoining protected areas sites had to adjoin across one or more international boundaries; and sites had to qualify as protected areas, based on the IUCN definition and be assigned an IUCN management category (I–VI).

TRANSBOUNDARY PROTECTED AREA COMPLEXES IN THE BORDER REGIONS OF HUNGARY:

Proposed Mura-Drava Biosphere Reserve:

Unteres Murtal Nature Reserve, Mur Protected Landscape Area (Austria)

Danube-Drava National Park (Duna-Drava) (Croatia/Hungary)

Drava Landscape Park (Slovenia)

Lake Fertő (1991)

Neusiedlersee Nature Reserve, Neusiedlersee—Seewinkel National Park, Neusiedler See und Umgebung Protected Landscape Area (Austria)

Fertő Hanság National Park (Fertő -Tavi) (Hungary)

Kopacki Rit Special Reserve, Kopacki Rit Nature Park (Croatia)

Mohacsi Tortenelmi Emlék hely Nature Conservation Area, Duna-Drava National Park (Hungary)

Aggtelek National Park (Hungary)

Slovenský Kras National Park, Slovenský Kras Protected Landscape Area (Slovakia)

Karancs-Madves Protected Area, Bükki National Park (Hungary)

Protected Landscape Area Cerová Vrchovina (Slovakia)

Kiskunsági National Park (Hungary)

Selevenjske Pustare Nature Reserve (Serbia)

HINDERING FACTORS OF COOPERATION

We have to consider that we can come across with some hindering factors of cooperation.

The state of the Hungarian environment—because its special geographical situation—mainly depends on the environmental activities of the neighbour countries. So, the reason why we need more and more intergovernmental agreements is to solve some transborder environmental problems. In several situation the practical application of the already existing agreements are delayed.

In terms of getting an effective prevention of environmental accidents we need to accomplish a unified monitoring and information system and also we have to standardize the different measures. Having all of these there is a possibility to minimize the environmental hazards, environmental damages and the cooperated countries are able to have a continuous check on the state of the environment.

Generally the more sufficient environmental policy, administration and institutions the less lack of cooperation.

Finally we can circle around another hindering factor: conflicts due to non-harmonized development strategies. Such as water plant building initiated by Croatia.

REGIONAL SPECIALITIES OF COOPERATION

The most widespread type of bi- and multilateral cooperation are the common nature protection. The natural values around the border in most ways are continued in a kind of natural protected area or regional conservation parks on the other side of the border. In this case the most important thing between the owners to protect these valuable areas.

Because of 92 percentage of Hungarian rivers flows from abroad the cooperations for water management are very frequent.

The environmental cooperation at the rural surrounding of the border areas are mainly create twin-sewage treatment plants and regional waste deposit.

CONCLUSION

Changing boundaries and relationships within Hungary's seven border regions have meant new challenges and opportunities for transborder cooperation regarding environmental issues. All of Hungary's border regions have valuable natural resources and populations that need protection, including various protected areas, water sources, agricultural zones and so on.

Border regions are increasingly encouraged to create linkages and cooperate in the face of European integration. The expanding market economy creates incentives for neighbours to work with their asymmetry and share their comparative advantages to gain economically. The new political climate, typified by the expansion of the EU, provides both political and economic incentive to cooperate across boundaries in the form of PHARE/EU programs.

The increasing openness to cooperation that changes within Europe have spurred are a positive step in this direction, allowing efforts that would have never been able to take place under previous political and economic conditions.

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