



**Working Paper**

Kirsten Kunkel, Irene McMaster, Sabine Zillmer\*

**Regional Conditions in the Candidate Countries  
in Relation to ESDP Objectives**

1.	INTRODUCTION .....	2
2.	THEORETICAL BACKGROUND OF ESDP OBJECTIVES AND METHODOLOGICAL APPROACH.....	2
3.	TENTATIVE TYPOLOGY OF THE CANDIDATE COUNTRIES.....	6
4.	SELECTED POTENTIALS IN THE CANDIDATE COUNTRIES .....	8
5.	REGIONAL CHALLENGES FOR PRE-ACCESSION AID AND FUTURE STRUCTURAL FUNDS .....	16
6.	CONCLUSIONS .....	18
7.	REFERENCES .....	21

Copyright: This working paper of the IRS research department 1 „Regionalisation and Economic Spaces“ is protected by copyright. No part of this article may be reproduced without the prior permission of the authors. Extracts from the text are welcome to be used following the rules of scientific quotation giving complete details of the source as follows:

Kunkel, Kirsten ; McMaster, Irene ; Zillmer, Sabine: Regional Conditions in the Candidate Countries in Relation to ESDP Objectives. Working Paper, Erkner, Leibniz-Institute for Regional Development and Structural Planning, 2004  
(<http://www.irs-net.de/download/ESDP.pdf>)

Leibniz-Institut für Regionalentwicklung und Strukturplanung (IRS)  
Flakenstraße 28-31, 15537 Erkner  
<http://www.irs-net.de>

Erkner, April 2004

---

\* Kirsten Kunkel and Sabine Zillmer are research fellows at IRS in Erkner and Irene McMaster is research fellow at the European Policies Research Centre (EPRC) in Glasgow. All of them belong to the transnational project group working in ESPON project 2.2.2.

## 1. Introduction

This paper is based on interim results of the ESPON project, “Pre-accession Aid Impact Analysis”, led by the IRS. The project draws on empirical research concerning processes of regional differentiation in Central and Eastern Europe and the impacts of EU policies in these countries. Data collected as part of the wider ESPON programme is also used.

In the Candidate Countries strong disparities can, not only, be observed between countries but between central and peripheral regions. Disparities exist not only in levels of GDP, but also in many other socio-economic conditions, such as human capital, accessibility etc. These developments contradict cohesion objectives of the EU formulated by ESDP. In the lead up to EU enlargement in May 2004 and looking to the future EU spatial cohesion, it is important to consider what development 'potentials' are present in the Candidate Countries. For example, which potentials are likely to promote ESDP objectives or present major bottlenecks to development. It is also important to consider the extent to which EU pre-accession aid (Phare, ISPA and SAPARD) measures have already affected spatial issues in these countries.

In order to lay the foundations for this analysis, the following section briefly sets out the relevant ESDP objectives, theoretical considerations and the methodology upon which the subsequent analysis is based. This is followed by a tentative typology of the Candidate Countries, based on a detailed analysis of development 'potentials'.<sup>1</sup> The following section identifies some key potentials for the Candidate Countries and, briefly, describes their regional distribution and relation to ESDP objectives. In order to consider the role of pre-accession aid measures in meeting spatial development objectives, a meta-analysis of EU policies in the Candidate Countries provides an overview over the spatial dimensions of these measures. Final conclusions of the paper are based on the observations of the relation between potentials and policies, and offer some tentative policy recommendations.

## 2. Theoretical Background of ESDP Objectives and Methodological Approach

### 2.1. Spatial Objectives

The European territorial objectives defined in the ESDP can be divided along three lines, namely balanced and sustainable development, in terms of social, economic and environmental issues. This can be translated into the following spatial objectives:

*Spatial cohesion (equity):* This objective states, that inequalities between social groups and regions should be reduced by setting minimum standards of public goods provided or by transfer payments from richer to poorer regions etc.

---

<sup>1</sup> For the detailed potential analysis see Kujath, Kunkel, Zillmer et.al. (2003: 142-178).

*Balanced Spatial competition (efficiency):* This objective states, that policy measures should promote an efficient spatial allocation of resources by taking away bottlenecks and barriers to development (Molle 2001). It also says, that policies should take into consideration not only the core regions. For a balanced spatial competition smaller towns and remote regions should benefit from policy measures improving their competitiveness.

*Protection of natural and cultural heritage:* This objective refers to the conservation of natural resources and cultural heritage. Thus, policies should take into consideration regional environmental conditions as well as different national and regional cultural backgrounds preserving the European variety of cultures(ESDP 1999: 10).<sup>2</sup>

As can be seen, these three objectives focus on different aspects of balanced territorial development, which appear to be logically interconnected and complementary. For instance, territorial equity can only be stabilised, if the economic development differences between core and periphery decrease and balanced economic growth may be a precondition for managing natural and cultural heritage successfully.

The ESDP's objectives were developed in response to the serious economic imbalances amongst the current EU member states, which will only increase further after the accession of the Candidate Countries. While some convergence between some 'poorer' and some more 'prosperous' regions can be observed, regional disparities within many EU countries and especially the Candidate Countries, are increasing, e.g. between economically strong urban centres and poorer – often rural – 'lagging regions'. On this basis, "the ESDP starts from the assumption that growth in itself ... is not sufficient to develop a balanced and sustainable economic and spatial structure in the EU" (ESDP 1999: 9), let alone in an enlarged EU.

## **2.2. Cohesion and Disparities in Theory**

Two main accounts dominate theoretical debates on the emerging patterns of disparity. Neo-classical trade theory suggests that spatial specialisation effects will lead to greater cohesion. While, proponents of the 'new economic geography', suggest that increasing disparities might develop as a result of cumulative processes.

According to neo-classical trade theory spatial specialisation occurs as a result of differences in factor endowments, which translate into regional differences in relative prices and thus cause trade between regions or countries. Diverse factor endowments mean that regions specialise in the production of different goods, e.g. capital respectively labour intensive goods, and these are traded between the regions, leading to converging relative prices of the traded goods. According to the neo-classical model, a region should be able to utilise all its factor endowments and is thus 'fully employed' (Kenen 1989: 51-67). Inter-industry trade amongst the Candidate Countries, and between the Candidate Countries and the EU-15, has strongly intensified over the last decade<sup>3</sup> which according to this theory should foster spatial cohesion

---

<sup>2</sup> This is supplemented by the objective of spatial integration not referred to in this working paper. This latter objective is further discussed in Kujath et.al. (2003-1: 18-21).

<sup>3</sup> For international trade developments of the Candidate Countries see e.g. Economic Commission for Europe (2003: 79-85).

within these countries, as well as at the EU level. However, as these theoretical models are based on a number of assumptions, including properly functioning markets, the outcome of integration is likely to differ whenever these assumptions do not hold. This consideration is to be particularly relevant for the Candidate Countries, as some aspects of their economic and political transformation are not fully concluded, implying e.g. the existence of imperfect markets and changing institutional settings.

A contrasting approach to that of neo-classical trade theory is the 'new economic geography'. This approach is based on an integration of trade theory and location theory. These models allow for imperfect markets, external effects and economies of scale. According to Krugman, this is a valuable addition to the debate as for large countries interregional trade, which depends on industrial location structures, might be even more important rather than international trade. Furthermore, within economically and politically integrated systems such as the EU, it is possible for international and interregional trade to merge. (Bathelt and Glückler 2002: 79)

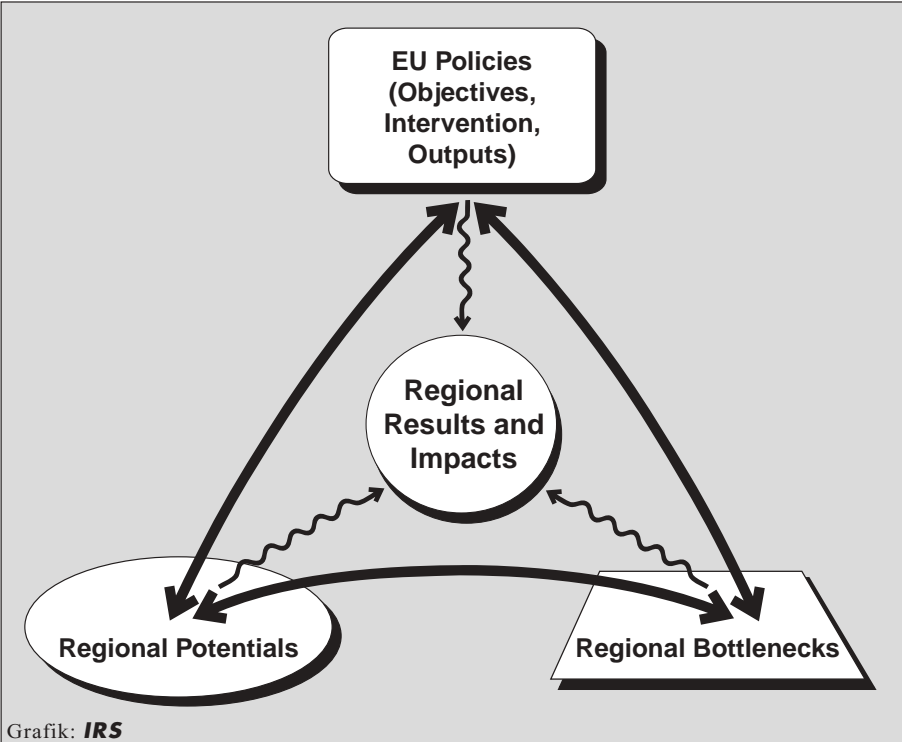
These models, which imply growing divergence within integrated markets, also suggest that initial imbalances will lead to cumulative processes of agglomeration. In other words, investments will concentrate in the most technologically advanced regions and labour will shift to areas where career potentials are relatively high. Therefore, investments and labour movements are likely to aggravate initial divergences. (Roos 2003: 86)

This interpretation of the possible outcomes of integration policies, and, crucially, the integration experiences of the EU-15, suggest that disparities will intensify as a result of EU enlargement. This applies not only to disparities within an enlarged EU, but also to disparities within the range of Candidate Countries. The threat of increasing divergence appears to be particularly high for two main reasons. First, due to limited financial resources, low financial means, the governments in most Candidate Countries apply few, if any, re-distributive measures. This is, not only, the case for sectoral and income disparities, but also for regional disparities. Secondly, as mentioned above, the assumption of perfectly functioning markets certainly does not apply in these countries, thus lending weight to the argument that integration could lead to greater agglomeration and concentration. Under these conditions, EU policies aiming at cohesion and specialisation are potentially of even greater relevance for an enlarged EU rather than for the present EU-15.

### **2.3. Potential Oriented Analysis**

In the context of this research project, the concept of 'potential factor analysis' is fundamental to the identification and analysis of regional disparities. The focus of this type of analysis is the provision of a region, at a given point of time, with factors/resources, which can be used to support the creation of 'welfare' of the region. The availability of these 'factors' can represent a regional potential if they are widely available for use as a regional resource, or a regional bottleneck hampering development if they are unavailable or insufficient (Thoss 1984: 21). For instance, in peripheral rural regions opportunities are limited to increase the regional division of labour and opportunities for productive economic specialisation are limited. The result is out-migration and impoverishment of the respective regions. Concepts of independent regional development, to which the potential oriented concept belongs, aim

at reversing these outcomes (Hahne 1987: 465-466). Consequently, policy approaches derived from this type of analysis seek to utilise the regional development potentials as completely as possible, in order to achieve a balanced quality of life across regions, and related social cohesion (Thoss 1984: 21). Figure 2-1 provides an overview of the key elements to be considered.



**Figure 2-1: Model of Interrelations between Factors Influencing Territorial Impacts**

On the basis of groups of potential indicators proposed by Thoss (1984: 22) and Al-ecke and Untiedt (2001: 45), similar groups of indicators have been developed as the foundation of the tentative typology set out in the next section.<sup>4</sup> The indicators used, are selected with particular reference to the prevailing conditions in the Candidate Countries and are divided into eight groups, given in Table 2-1. Due to lack of appropriate, comparable data, some of the potential factors were not analysed, these are shaded in Table 2-1. For all remaining potentials one or more indicators have been included for the development of the typology.<sup>5</sup>

Labour market potential	Geographical position	Environmental quality
Capital supply	Regional market potential	Institutional conditions
Innovation potential	Agglomeration & localisation advantages	

**Table 2-1: Potential Factors under Consideration for Developing a Tentative Typology of the Candidate Countries**

<sup>4</sup> For different potential classifications see also Schätzl (2003: 156).

<sup>5</sup> For a more detailed list of indicators in each potential group see Kujath, Kunkel, Zillmer et.al. (2003-2: 18).

### 3. Tentative Typology of the Candidate Countries

On the basis of an analysis of the potentials listed above it is possible to identify a number of regional groupings. Strong disparities exist between the agglomerations and the more rural and/or peripheral regions. In fact, disparities in GDP per capita appear to be increasing, as suggested by models of the 'new economic geography'.

This can be translated into a tentative typology showing partially strong disparities between agglomerations and less densely populated regions, as shown in Map 3-1. It should be noted, that this is a general typology, which aims to indicate overall development trends in the Candidate Countries, as opposed to providing details of the specific situation in each region.

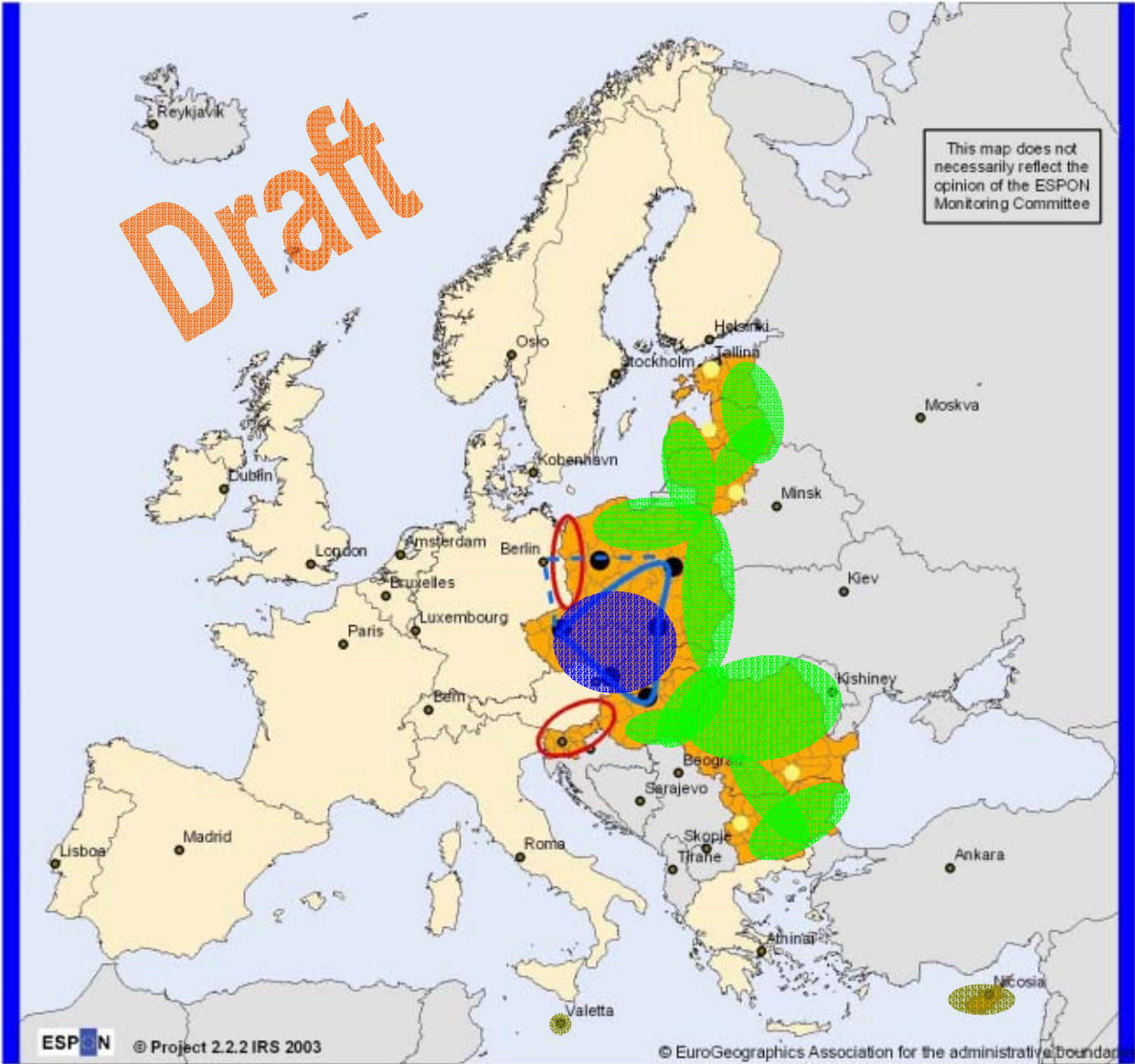
In Map 3-1, a first group of regions can be characterised as *capital cities/major urban agglomerations*. These regions demonstrate the most favourable economic indicators and benefit from, for example, high investment, skilled labour force and training facilities, more developed infrastructure, business services and access to decision makers. Of particular note, is the dominance of some capitals (e.g. Budapest, Prague, Bratislava and Tallinn), within national economic structures.

Map 3-1 also suggests that some urban agglomerations have a key role as economic drivers. Highlighted on the map are agglomerations with a heightened ability to foster regional development. These centres are most commonly located close to the EU-15 countries. In contrast, Candidate Country agglomerations, which are located at the European periphery, especially those in Romania and Bulgaria, seem to have less dynamic urban centres. It is also worth noting, that apart of Poland, none of the Candidate Countries have more than one urban centre, namely their capitals, which can be classified an 'economic driver'. This reflects a strong tradition of monocentric economic development.

A second regional group are *Western border regions*. These regions have the advantage of proximity to the EU-15, which encourages investment, trade, tourism and cross-border retail as well as educational/technological initiatives.

In contrast to the Western border regions, a third regional group, *peripheral Eastern and rural regions*, are among the most economically disadvantaged in the Candidate Countries. Geographical location, poor infrastructure, low investment, declining agriculture and rural out-migration are all contributory factors to their low levels of economic development and high rates of unemployment.

Map 3-1: Tentative General Regional Typology Based on Potential Analysis



The economic position of the Western border and Eastern peripheral regions are, to a large extent, dictated by their geographic position. Large parts of Romania and Bulgaria, as well as large parts of the Baltic countries, share the problems of the Eastern peripheral regions. It is also interesting to note that a number of weaker pe-

ripheral regions are relatively close to urban agglomerations, e.g. Budapest, Warsaw and Poznan, suggesting that linkages between these urban agglomerations and surrounding regions may be weak.

The group of Candidate Countries also includes the two island economies Cyprus and Malta. On one level as peripheral countries, they face some similar development challenges as the peripheral regions already discussed. However, they also have a distinct developmental background from the Central East European Countries and as islands on the periphery of the EU face particular economic challenges. Consequently, they are classified as a separate group – *peripheral island economies*.

A final group is the *old industrial regions*. These regions were drivers of economic activity under socialism and were dominated by heavy industry. More recently, they were particularly affected by privatisation, enterprise restructuring/closures, loss of subsidies and market re-orientation. Restructuring processes are still underway in many countries and these regions, in particular, face high levels of unemployment, lack of entrepreneurship and environmental decline. Whilst these old industrialised regions face considerable economic development difficulties, they occupy a key position surrounded by a triangle of growth centres within this part of Europe. Currently, the economic development 'triangle' appears to reach from Prague in the West, across Bratislava and Vienna to Budapest in the South and, in the North across Krakow to Warsaw. This growth triangle could even be extended to include EU border regions and the agglomerations of Berlin and Poznan. In the longer-term, this 'triangle' of economic growth could become a counterpart to the Western European 'Pentagon'.

For the regions defining the growth triangle, especially in the key urban agglomerations, quite a range of development potentials can be identified. Relative to the rest of Central and Eastern Europe, most of these regions have, for example, comparatively high incomes, large populations, a high density of the economically active population and access to motorway network. However, if this triangle – or an area extended by Berlin and Poznan – is to become a counterpart of the West European Pentagon, the available development potentials need to be recognised and utilised. Further, persistent bottlenecks to development, e.g. old industrial structures, need to be reduced. In order to stress some of the major economic development challenges faced by the Candidate Countries in general and, in particular, the regions within the growth triangle, the potential role of a number of key development potentials is considered in depth in the following section.

#### **4. Selected Potentials in the Candidate Countries**

Any analysis of factor endowments does not necessarily need to refer only to the production factors of land, labour and capital. Instead, factor endowments may also be understood in terms of all factors relevant to economic activity in a region. As pointed out in section 2.3 such factors can include infrastructure, environment, market potentials and institutional settings and others. There are also the key areas of labour market potential, innovation potential and advantages linked to urbanisation and localisation, where, in relation to Western European standards, the Candidate Countries face particular development problems. Thus, in the following sections, selected indicators characterising parts of these potentials are presented.



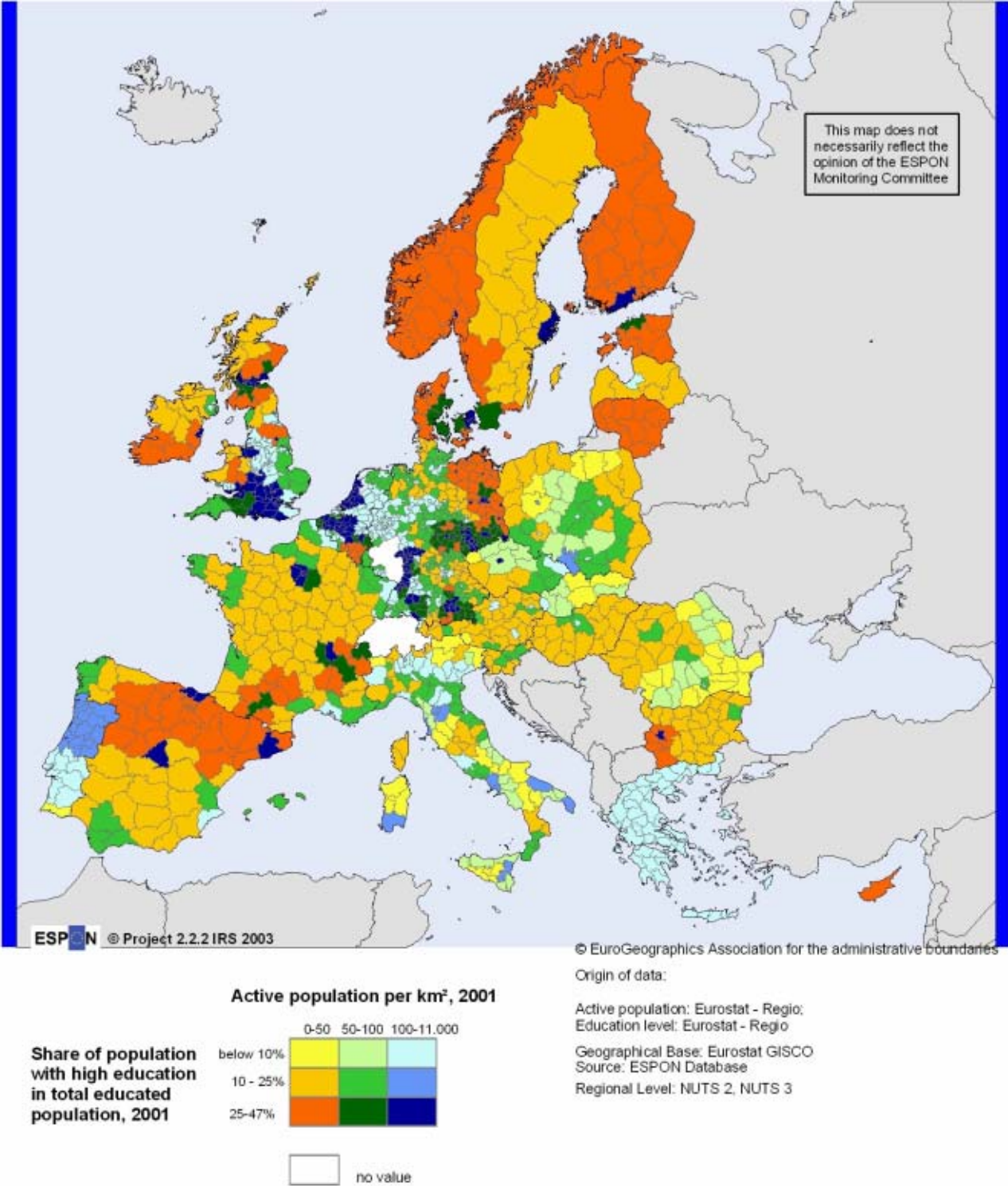
#### **4.1. Labour Market Potential**

Regional labour endowment can be understood in terms of both quantitative as well as qualitative aspects. The quantitative component of the labour endowment is measured in terms of the density of the economically active population. Measurement of the qualitative component is done on the basis of the percentage of the population with a tertiary education. However, this measure does have some limitations. First, even if a similar classification is used for all the countries, e.g. by using the number of school years, this indicator is not sensitive to the actual quality of the education. Secondly, even if the qualification level can be assumed to be similar after the same number of school years or at the same degree, it does not take into account the practical relevance and use of the qualification. This is particularly relevant when taking into account skills levels for high-tech industries and advanced services. Thus, the qualitative measure of the labour market potential needs to be interpreted with caution.

Regarding the quantitative aspect of the labour market, with the exception of a few regions in the North East of Austria, along the Eastern EU-15 border there is a consistent measure of labour force density. Central and Southern Poland and the North-Eastern part of the Czech Republic also exhibit relatively high measures of density. This feature is further extended across the West of Slovakia down to Hungary's capital region. Unsurprisingly, it is the more peripheral regions from an EU-15 point of view, that show a lower density of labour force.

Whilst measures of labour endowment are fairly consistent along the border of the EU-15 and the Central East European Candidate Countries, differences in education levels appear to be greater. Only Slovenia, the South West of the Czech Republic and the Bratislava region have formally compatible levels to the neighbouring regions in the EU-15. In most other border regions of the candidate countries the level appears to be somewhat lower. Differentials are particularly high along the East German border. Most striking is the regional variability of education levels within the Central East European Countries. In the Czech Republic, Slovakia, Hungary, Bulgaria and Romania, the capital region have the highest share of the population with high education. Apart of the capital regions, shares of high education, comparable to those along the German border, are found in the Baltic countries and Cyprus.

**Map 4-1: Active Population per km<sup>2</sup> Combined with Share of Highly Educated Population in 2001 on NUTS 2 / NUTS 3 Level**



Map 4-1 charts both measures of the labour potential. The Baltic countries stand out as having a comparatively small but seemingly highly educated labour force. These measures indicate that the three Baltic countries should have a comparatively good labour market potential with a labour force capable of working in higher-value added

sectors<sup>6</sup>. Cyprus reflects a similar labour market potential, although with higher labour force density. However, a comparison with sector employment shows, that Cyprus already has moved to other sectors than agriculture and fishery leading consequently to higher income generation.<sup>7</sup> The position of these countries lies in contrast to most of the remaining regions of the Candidate Countries, with the notable exception of some capital regions. In the majority of regions low to medium measures of educational endowment mean the labour force is likely to be less well adjusted to modern technologies. Furthermore, the quantitative potential of the labour market cannot be fully utilised as long as the bottleneck of low levels of education persist. In the Candidate Countries simultaneously high quantitative as well as qualitative labour market potentials are only to be found within most of the capital regions. Even regions close to the capital cities appear to lack favourable development potentials, which implies related limitations for regional development.

## 4.2. Innovation Potential

The innovation potential can be illustrated by different kinds of indicators. However, for most EU countries and the Candidate Countries, only data on research and development expenditures are available for the NUTS 2 level. R&D expenditure distribution, related to regional GDP, is illustrated in Map 4-2.

Generally speaking, relative R&D expenditure in the Candidate Countries is lower than in many parts of the EU-15 and in most EU-15 border regions. Taking into account the different levels of GDP, this results in much higher absolute R&D expenditures in the EU-15 and Norway rather than in the Candidate Countries. Relative differences are particularly high along the East German border.

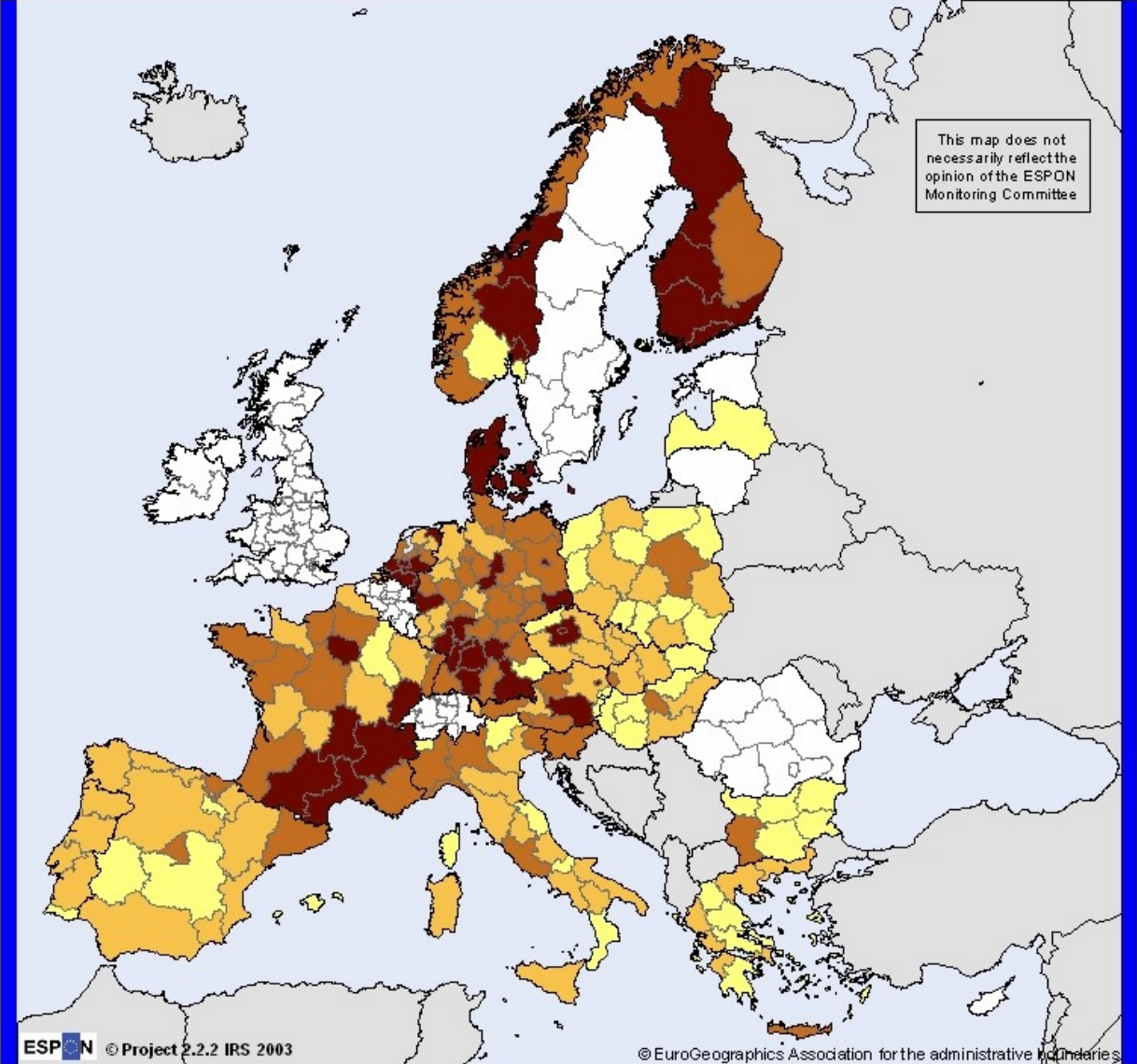
Within the Candidate Countries, the capital city regions generally have the highest R&D intensity. Despite this concentration on the capital regions, it is still low compared to levels achieved in large parts of the EU-15. Prague and the surrounding region has by far the highest R&D expenditure rate of the Candidate Countries, particularly taking into account the relatively high income level in this region compared to the rest of the Candidate Countries. Therefore, in absolute terms, R&D expenditures in the region of Prague exceeds those in all other Candidate Country regions, including the other capital regions. This measure translates into a high innovation potential in the Prague region coinciding with a high qualitative labour market potential, which could also suggest the potential for spill-over effects in the neighbouring Czech regions. Combined with high R&D intensity in the German border region of Dresden, the North and Northwest of the Czech Republic could be in a particularly advantageous position. However, there is a need to improve the qualifications of the labour force in order to capitalise fully on their innovation potential. Map 4-2 also displays a comparatively high R&D intensity in Slovenia, compared to the other Candidate Countries, though it is still below 2 % of GDP.

---

<sup>6</sup> For the features of sectoral employment see chapter 4.3, and especially Map 4-3.

<sup>7</sup> Compare Kujath, Kunkel, Zillmer et.al. (2003-2: 152) and Map 4-3 in below chapter.

Map 4-2: Research and Development Expenditures as % of GDP in 2000 on NUTS 2 Level



RnD Expenditure as % of GDP, 1999  
 (PL, CZ, SK, SI, HU, BG 1999, AT 1998, NO 1997)

Light Yellow	0.0 - 0.5 %
Orange	0.5 - 1.0 %
Brown	1.0 - 2.0 %
Dark Brown	2.0 - 6.3 %
White	no value

Origin of data: Eurostat Database NewCronos  
 Geographical Base: Eurostat GISCO  
 Regional Level: Nuts 2

R&D intensities also decrease the more peripheral the Candidate Country is from the EU-15 point of view. Low income overall, combined with low percentage expenditure on R&D means that innovation could be a substantial bottleneck for future development. For a country like Latvia, with a relatively well educated labour force (see above Map 4-1), this observation might support a policy shift towards assistance for R&D activities in order to improve the utilisation of the labour force and to foster the restructuring process. However, basically all regions classified as peripheral Eastern and rural regions in Map 3-1 are characterised by, not only, comparatively low levels

of qualitative labour market potential, but also poor innovation potentials and face even more substantial challenges.

### **4.3. Urbanisation and Localisation Advantages**

Urbanisation and localisation endowments can be measured by a number of different indicators as suggest by Kujath et.al. (2003-2: 18, 170-179). A key characteristic of the measure used here is an element taking account of the 'regional sector structure', measured in terms of people employed in the different economic sectors. Levels of employment in the primary and the service sectors, from which the secondary industrial sector can be deducted, are set out in Map 4-3.

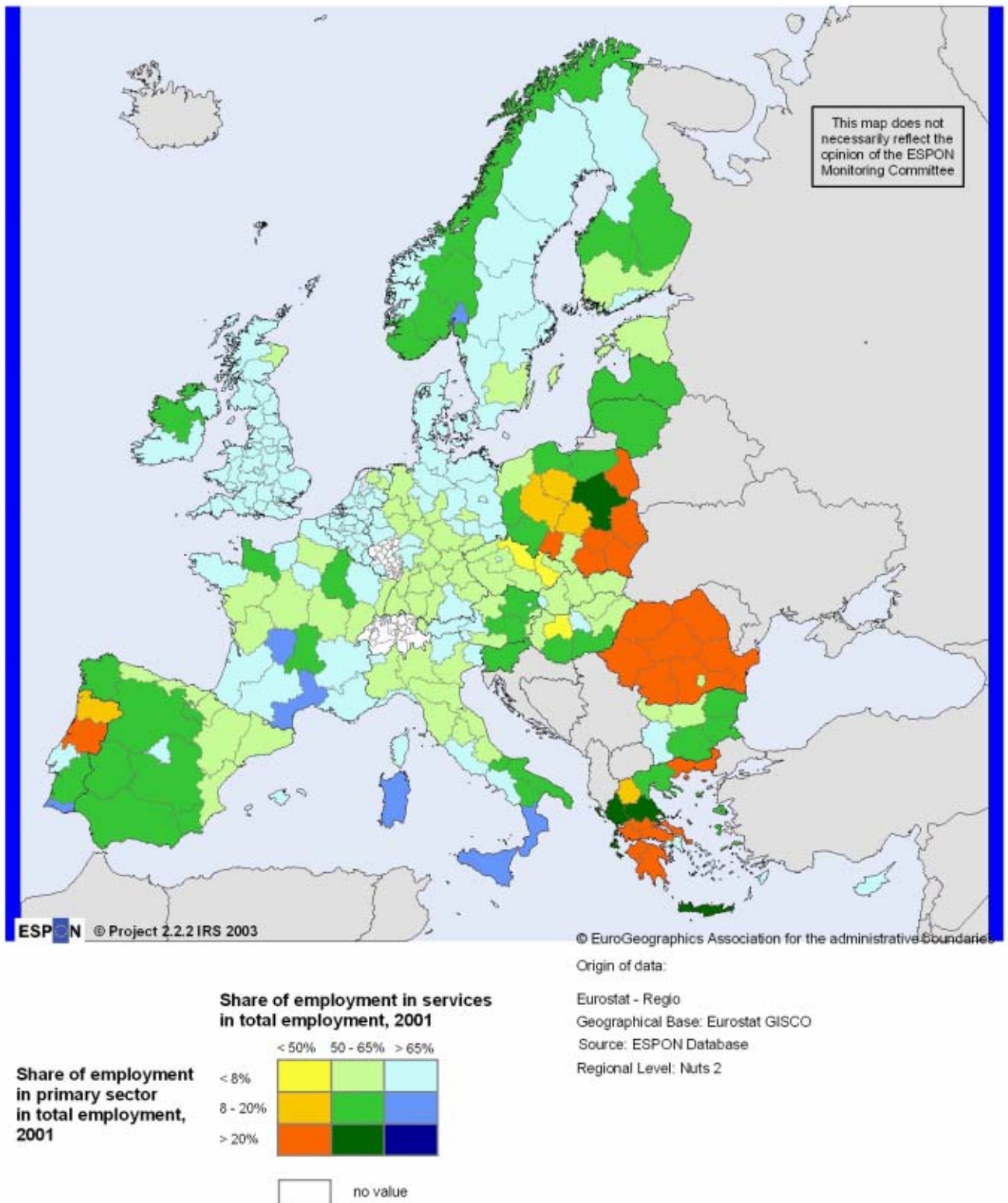
Despite the problems associated with measures of sectoral employment, the two measures used in this paper, agricultural and service sector employment, can be used to highlight specific 'localisation disadvantages' of regions, which are still dominated by primary production and can be found in some areas of the Candidate Countries. These 'localisation disadvantages' then have knock-on effects hampering qualitative labour market and innovation potentials. A map of the growth of regional service sector is an indication of progress with the restructuring process, i.e. to what extent regional economies have diversified into new areas of economic activity. Though it should be recognised that these figures do not display the quality and kind of services produced in these regions, e.g. in terms of their sophistication or value added.

Measures of employment structures are also closely linked to the qualitative labour market potentials. Usually, labour cannot be shifted between sectors easily without undergoing some re-qualification and training. Therefore, a region dominated by agricultural employment can be expected to also have a bottleneck concerning the qualitative structure of its labour force. In contrast, employment in the tertiary sector can be assumed to be of great variety, implying possibly a relatively high qualitative labour force potential.

Mapping these indicators demonstrates both common ground and differences in employment structures along the border regions of the EU-15 and the Candidate Countries. Almost everywhere along the EU-15 side of the border, with the exception of Niederösterreich and Steiermark in Austria, agricultural employment shares are in the lowest category. Interestingly, on the side of the Candidate Countries, there are only few regions along this border, in Slovenia and in Poland, which have medium agricultural employment levels. The main exception, where agricultural employment seems to be higher in the EU-15 border region rather than the neighbouring Candidate Country, is in the Greek region of Anatoliki Makedonia. In how far this appears to be an indication of the true employment structure shall be discussed below.

Despite these broad similarities in relation to the role of agriculture, differences are more distinct when comparing employment in the tertiary sector. Overall employment structures seem to be comparatively homogenous along Bavarian and Austrian borders, though this does not exclude strong intra sectoral differences. Yet, service employment is of much greater importance in the East German regions than in the neighbouring Polish regions. A similar observation can be made for the Italian-Slovene border region.

Map 4-3: Sectoral Structure of Employment in 2001 on NUTS 2 Level



Within the Central East European Candidate Countries there is a clear East-West split for many indicators. However, this only holds partially when observing shares of agricultural employment. For example, in Poland, levels of regional employment in

agricultural employment are higher the further East the region. Compared to other Central East European countries, Poland has average levels of agricultural employment especially in the centre of the country. However, in the East of the country levels are considerably higher, in some cases over 50 %. In the Baltic States, the Czech Republic and Hungary levels of agricultural employment are generally average to low, relative to other Central East European Countries. With the exception of the Bucharest region, levels of agricultural employment are considerably higher in Romania. In Bulgaria levels appear to be slightly lower. Official figures suggest employment in agriculture is below 15 % of total employment. However, it is likely that this figure may not represent a fully accurate account. Farming in Bulgaria is often in the form of low intensity, subsistence plots, which are not necessarily captured in official measures of farming activity. At the same time, employment density in most Bulgarian regions is of low and population density is of a medium level (Kujath et.al. 2003-2: 170-172), which suggests, either high levels of unemployment or low levels of working age population. In either case, this presents a challenge for a country with a relatively weak system of social security and, a high dependence on subsistence agriculture (Pavel 2001: 71). Therefore, it can be assumed that the apparent difference in agricultural employment between Bulgaria and, for example, neighbouring Greek regions, is not as large as it appears in the map.

Within the Candidate Countries only the regions incorporating national capitals achieve employment levels in the service sector assigned to the highest group. More generally, shares of tertiary employment are also still quite low in large parts of Poland, as well as in selected regions of the Czech Republic and Hungary. In Poland and Romania, these low shares are combined with the, above mentioned, dominance of agriculture. In the Czech Republic and the Northwest of Hungary neither of these two sectors is of dominant importance. Instead, most parts of the Czech Republic, Slovakia and some parts of Hungary are dominated by industrial employment. Although the border regions along Austria seemed to be relatively homogenous in terms of primary and tertiary sector employment, more pronounced differences are apparent if types of industrial employment are taken into account. Cyprus does not fit into the same pattern of development as the Central East European Candidate Countries. Cyprus has a very high share of tertiary employment combined with a low agricultural employment share. This feature can be attributed to the high number of off-shore companies located on the Island, as well as the role of tourism.

Taking all the preceding observations together, urbanisation and localisation advantages/disadvantages and their resulting potentials respectively bottlenecks can be identified. Localisation disadvantages seem to be particularly relevant in the cases of Eastern and South-Eastern parts of Poland and the whole of Romania, due to the dominance of agriculture. Development bottlenecks in these regions, which are linked to their economic structure, are compounded, in the case of Romania, by the low levels of labour force education. Thus, especially for the case of Romania, it seems to be appropriate to support the reduction of these existing bottlenecks, possibly in particular in the regions surrounding the Romanian capital. For instance, promoting the growth of modern enterprises could result in comparatively high marginal returns, multiplier effects for the neighbouring regions and drive improvements in the education of the labour force.

In the Eastern parts of Poland, the existing development potential of a skilled labour force could be used to advance restructuring processes in the region. However, it is

likely that strong incentives would have to be offered in order to achieve a sound movement away from family farming. Without the support of the local populations, the restructuring process intended by the political elite cannot be achieved.<sup>8</sup> Therefore, one could argue, that the attitudes of the agricultural population might be regarded as another, more qualitative indicator, indicating regional bottlenecks. The extent to which key development policies actually go on to address these potentials and bottlenecks is the focus of the following section of the paper.

## **5. Regional Challenges for Pre-Accession Aid and Future Structural Funds**

At the EU-level, pre-accession aid programmes are key main instruments capable of promoting ESDP objectives in the Candidate Countries. The focus of the PHARE programme is economic and social cohesion, ISPA targets the establishment of EU environmental standards and expansion of Trans-European transport networks and SAPARD is related to the implementation of the *acquis* concerning the Common Agricultural Policy. This section focuses on the question of whether pre-accession aid tackles the challenges (bottlenecks and potentials) faced by specific regions in the Candidate Countries and the Candidate Countries themselves and whether it contributes to realisation of ESDP objectives. Pre-accession aid spending in the Candidate Countries is relatively modest in comparison to future Community programmes (or to Structural Funds in the EU-15). Hence, measurement of relevant impacts in terms of spatial cohesion, balanced spatial competition and spatial integration is rather difficult. Nevertheless, assessment of the policy relevance of EU pre-accession aid programmes, i.e. to identify to which extent they actually target genuine regional problems and challenges, is possible and necessary. This type of assessment is particularly important in light of the application of Structural Funds in the new Member States, post-2004. In order to come to a territorial impact assessment of pre-accession aid three analytical questions need to be answered:

1. Are the existing priorities of pre-accession aid and in the future Community Funds sufficient to answer the specific regional challenges in the Candidate Countries?
2. How are the principles of solidarity and efficiency compatible with pre-accession aid interventions, taking into account regional bottlenecks and potentials of each separate candidate country?
3. In which way should trans-national problems and bottlenecks be managed and which contents and strategies should be emphasised by trans-national policies?

Answers to these questions can be found, first by looking at the extent to which programme priorities are oriented towards specific regional potentials and, related, ESDP objectives. Secondly, by analysing whether a systematic regional variation of financial amounts can be identified and finally, by asking in how far structures of programme and project implementation contribute to strengthen regional institutional capacity. An analysis of pre-accession aid projects on regional level (NUTS 3) is still

---

<sup>8</sup> For further explanations on the willingness of Polish farmers to leave the agricultural sector see e.g. Zillmer (2002: 99-101).



in process at this stage, thus, only preliminary insights resulting from a meta-analysis are outlined in the following sections.

#### *Potential orientation of priorities*

Territorial development aims are not a compulsory element of pre-accession programmes and only few national programmes explicitly refer to them. However, it is possible to highlight a number of ways in which the various programmes have addressed and impacted on territorial development themes. For instance, several fields of action of PHARE are related to specific regional potentials and thus affect spatial cohesion and balanced spatial competition. Developing human capital respectively the labour market potential is supported in the programme through funding for education and training; training to promote institutional capacity building and promotion of human rights/social integration. Although the projects are not necessarily spatially targeted, the nature of the projects addresses one of the main bottlenecks in many regions in the Candidate Countries (see section 4.1).

The PHARE programme also contributes to regional capital supply via the funding of construction projects and SME funding. This funding can be related to a wide range of spatial development goals. For instance, business infrastructure and support can contribute towards more balanced spatial competition by allowing towns and regions to promote economic development and target regional potentials and bottlenecks. Transport and service infrastructure projects are capable of contributing to balanced development by improving accessibility and networking and to spatial integration between regions and wider European networks.

Also institution building, as long standing and core element of the PHARE programme, contributes to spatial development objectives. Traditionally with respect to institution building, PHARE aims to create “an institutional framework for the economic catch up process,” (Brusis 2000) to a large part through the ‘Twinning’ programme. Although most institution building measures concern the national level, capacity building projects have gradually been extended beyond the national level to new regional authorities.

With regard to SAPARD, it can be stated that since SAPARD addresses the fundamental structural disparities between urban and rural areas, the broad objective of reducing territorial disparities by supporting economic and social cohesion is implicit in the SAPARD programme. SAPARD affects mainly three regional potentials, namely capital supply, geographic position and environmental quality. Investments in agricultural holdings and economic diversification are central fields of action within SAPARD, thus, contributing to the regional capital supply. All SAPARD programmes incorporate measures for improving rural infrastructure and therefore have an impact on the geographic position or accessibility of regions. SAPARD interventions addressing such issues as the redevelopment of villages, better water resource management, land improvement and re-parcelling and land consolidation, and agricultural production methods designed to protect the environment and maintain the countryside will improve the quality of life and the environment in rural areas.

In their ISPA strategies most of the Candidate Countries do not explicitly address spatial development themes. However, the core rationale of ISPA is to improve basic infrastructure in order to allow for stronger economic development in the Candidate Countries. It therefore contributes to enhanced territorial cohesion at the level of the

EU-27. Within the transport sector, ISPA funds focus on sustainable forms of transportation infrastructure, thus affecting the geographic position of regions. Precedence is given to the Trans-European Transport Network as defined in the TINA (Transport Infrastructure Needs Assessment) Report. Around half of the ISPA projects are allocated to the environmental sector. Through the funding of technical infrastructure projects in this field, ISPA has a direct impact on the environmental quality in the respective regions.

### *Regional targeting*

The extent to which the three pre-accession aid programmes regionally vary their funding differs. Within the PHARE programme a number of countries have used regionally targeted projects and programmes from a relatively early stage. By targeting lagging regions, these programmes have the potential to contribute in some way to the promotion of balanced national development. However, in most countries the national dimension is much more important than the regional one and a systematic regional variation of PHARE funds can not be observed. In contrast, SAPARD already implies a systematic regional variation of funding by concentrating on rural regions, which in nearly all of the Candidate Countries are the most lagging regions.

For the most part, ISPA funds do not give priority to the less developed regions. ISPA's transport funds are focused on core transport networks, often between the main agglomerations, while the environmental funds tend to be targeted on those places where the population is concentrated, whether in terms of e.g. waste water treatment plants, or actions to address severe environmental damage e.g. linked to nuclear sites. Nevertheless, the localised character of the main environmental problems and transport potentials and bottlenecks, as well as the large-scale character of ISPA project financing, results in rather few and clearly spatially targeted projects.

### *Regional institutional capacity*

In addition to the more tangible impacts upon territorial development, the pre-accession funding programmes have important capacity and institution building elements. Appropriate institutional and programming frameworks are required for the management of pre-accession funds. Thus, the development and delivery of projects and programmes could, for instance, promote international institutional cooperation (e.g. PHARE CBC), strengthen the participation of regional and local levels (e.g. PHARE, SAPARD) or improve policy coherence. Programming commitments and project requirements encourage increased partnership within and between national and regional levels of governments, involvement of civil society groups and the establishment of new development organisation at national and regional level. Experience gained through these structures and approaches moreover provides potentially useful lessons for future involvement in Structural Funds Programmes.

## **6. Conclusions**

So far, the analysis showed that, on the one hand, regional disparities within the Candidate Countries with regard to the endowments of regions with potentials and the burden of bottlenecks are extremely wide and have been growing. On the other hand, the analysis suggests that pre-accession aid affects different regional situations but in an indirect and diffuse way, since territorial development objectives are

not addressed directly in the different programmes. Thus, the need for a more differentiated policy which is oriented on regional potentials and bottlenecks, can be identified. Relating this conclusion to the typology of regions developed the following preliminary policy recommendations can be stated:

Though the capital cities and major urban agglomerations are least in need of Structural Funds assistance, their integrating function (geographic position) for the surrounding regions, the national territory and the trans-national territory within Europe is frequently underdeveloped, often due to poor accessibility. Against this background, a strategy of territorial cohesion has to give precedence to the trans-European transport networks (TINA) as well as to the national and regional transport infrastructure, for which the ISPA funds lay a foundation.

The Western border regions play a major role for the Candidate Countries' integration with the EU-15. Structural policies should further assist this process of trans-national regionalism by targeting measures of interregional co-operation, dismantling barriers between regions and combining transport networks across border regions. In the long run, economically strong border regions will be able to become transmission regions of cohesion. These considerations are already supported by PHARE CBC programmes, combined with INTERREG measures along the EU-15 border. However, these programmes could focus more strongly on co-operation issues in order to dismantle existing barriers to development and co-operation.

At this stage, structural policy assistance for many of the peripheral Eastern and rural regions, which are affected by several bottlenecks and endowed with few, if any, considerable potentials, will struggle to offer growth incentives in all areas. Assistance of this type runs the risk of becoming 'social aid', without any associated economic growth effects. Structural policies for this type of Objective 1 regions should, therefore, be spatially concentrated on a small number of urban areas in order to achieve some positive growth effects. These areas could have the basic development potentials of urbanisation and localisation, of labour market and demand potential, which may be strong enough to be mobilised by Structural Fund aid.

Currently, eligibility of pre-accession aid funds is not regionally limited, with the exception of cross-border co-operation funds. This means that limited resources are allocated across regions without a strong regional focus to support efficient use of funds. The situation is, however, somewhat different with regard to the small peripheral island economies of Malta and Cyprus. The special programmes aiding these countries in their preparation already take account of their specific situation. Due to their small size and distinct economic differing structures, Structural Funds can be much more focussed from a spatial point of view, thus avoiding a potentially dispersed allocation of funds and a limited contribution to cohesion and balanced spatial competition.

Old industrialised regions generally constitute the geographic centre of the Candidate Countries and the trans-national industrial core region (Southern parts of Poland, Czech Republic, Western parts of Slovakia, North-western parts of Hungary). Furthermore, this macro region constitutes the territory with the highest density of economically active population and urban agglomerations. Though processes of industrial conversion are at an advanced stage, especially in the Czech Republic and Slovakia, these regions still require specific assistance to promote successful economic

restructuring, improved environmental conditions, improved infrastructure and labour retraining. As the old industrial regions are likely to remain one of the core economic zones in Central Europe, Structural Funds policies must give particular attention to their development bottlenecks and to concentrate public funds on problems they still have to overcome.

Special attention should also be paid to the “Triangle” of Central Europe. This triangle can be seen as a European macro region, which constitutes an agglomeration of major cities, human capital, and comparatively high innovation potential with long industrial traditions comparable to the European macro region of the Northwest. Supported by EU Structural and Cohesion Policies it may, in the long term, develop as economic counterpart to the so-called ‘Pentagon’ in North-western Europe. Nevertheless, it should be noted that the regions within the development triangle also suffer from low potentials and also bottlenecks, compared to conditions in the EU-15. Thus, in this new macro region structural policies need to be focussed not only thematically, but also spatially.

Looking to the future, the 10 new Member States as well as Bulgaria and Romania have drafted already National Development Plans (NDP), which will become the basis of EU co-financed Structural Funds programmes in 2004-2006. The NDPs are strategic documents, frameworks for setting policy priorities. They identify main spatial challenges of catching up with the EU average level of economic development and, at the same time, aim at reducing internal regional disparities. These plans generally identify similar types of regions and development concerns as those identified in this paper. However, the future developments of the individual Candidate Countries in Central Europe are also closely intertwined with each other, neighbouring countries of the EU-15 and often with Eastern external countries. From a European viewpoint, it therefore seems to be vital to co-ordinate the plans of neighbouring countries. This particularly affects the triangle of Central Europe. Between the countries of this central region – perhaps even including the East German regions near the border – a common trans-national approach has to be found to co-ordinate mobilisation of potentials and overcome bottlenecks. This suggests strong co-operation within the framework of INTERREG and possibly further trans-national institutional measures.

A final point to note is, that current NPDs try to tackle the two goals of catching up with EU-15 levels of GDP per capita and reducing interregional disparities within the country. These goals are generally seen as complementary rather than conflicting. However, they are generally only manageable in countries with a lot of resources to be allocated to all eligible regions. The Candidate Countries’ limited financial resources are likely to limit the possibility of combining both overall growth strategies and disperse funding to all lagging regions. As described above, under these conditions funding should be concentrated on the growth poles of the second and third order, strengthening growth potentials even in peripheral regions.

## 7. References

- Alecke, B. and Untiedt, G. (2001): Strukturpolitik und Raumplanung in den Regionen an der mitteleuropäischen EU-Außengrenze zur Vorbereitung auf die EU-Osterweiterung – Untersuchung zu Deutschland: Teilprojekt D-3 – Regionale und sektoriale Wettbewerbsfähigkeit der deutschen Grenzregionen an der EU Außengrenze. *Preparity Report*.
- Bathelt, H. and Glückler, J. (2002): *Wirtschaftsgeographie*. Ulmer, Stuttgart.
- Brusis M. (2000): Regional Policy and the Management of the EU Structural Funds, Presentation to : Preparation for EU Accession, Summer Seminar for Young Bulgarian and Romanian Public Servants, Economic Policy Institute, Sofia, 30 September – 1 October 2000, Bulgaria (available at [http://www.epi-bg.org/en/book\\_032.ht](http://www.epi-bg.org/en/book_032.ht).)
- Economic Commission for Europe (2003): *Economic Survey of Europe 2003*, No. 1, Geneva.
- European Commission (1999): ESDP European Spatial Development Perspective, Potsdam.
- Hahne, U. (1987): Das Regionstypische als Entwicklungschance? In: *Informationen zur Raumentwicklung*, No.7/8.1987, pp.465-473.
- Kenen, P.B. (1989): *The International Economy*. 2<sup>nd</sup> edition, Prentice Hall, Princeton.
- Kujath, H.J.; Zillmer, S. et.al. (2003-1): *Pre-accession Aid Impact Analysis - First Interim Report*. ESPON project 2.2.2., [www.espon.lu](http://www.espon.lu)
- Kujath, H.J.; Kunkel, K.; Zillmer, S. et.al. (2003-2): *Pre-accession Aid Impact Analysis – Second Interim Report*. ESPON project 2.2.2., [www.espon.lu](http://www.espon.lu)
- Molle, W. (2001): *The Economics of European Integration – Theory, Practice, Policy*. 4<sup>th</sup> edition, Ashgate, Aldershot.
- Pavel, F. (2001): Success and Failure of Post-Communist Transition - Theory and an Application to Bulgaria. In: Beckmann, V. and Hagedorn, K. (ed.): *Institutional Change in Agriculture and Natural Resources*, Vol. 2, Shaker, Aachen.
- Roos, M. (2002): Ökonomische Agglomerationstheorien - die Neue Ökonomische Geographie im Kontext. In: Gläßer, E. et.al. (ed.): *Wirtschaftsgeographie und Wirtschaftsgeschichte*, No. 10, Josef Eul, Lohmar - Köln.
- Schätzl, L. (2003): *Wirtschaftsgeographie 1 – Theorie*. 9th edition, Schöningh, Paderborn.
- Thoss, R. (1984): Potentialfaktoren als Chance selbstverantworteter Entwicklung der Regionen. In: *Informationen zur Raumentwicklung*, No.1/2.1984, pp.21-27.
- Zillmer, S. (2002): Arbeitsangebotsverhalten im Transformationsprozess – Eine empirische Analyse des polnischen Agrarsektors. In: Beckmann, V. and Hagedorn, K. (ed.): *Institutional Change in Agriculture and Natural Resources*, Vol. 9, Shaker, Aachen.