ESPON

ATTREG
The Attractiveness of European regions and cities for residents and visitors

Applied Research 2013/1/7

(Draft) Final Report | Version 31 December 2011

EUROPEAN UNION
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This report presents the draft final results of an Applied Research Project conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

The partnership behind the ESPON Programme consists of the EU Commission and the Member States of the EU27, plus Iceland, Liechtenstein, Norway and Switzerland. Each partner is represented in the ESPON Monitoring Committee.

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This basic report exists only in an electronic version.

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Tarragona, Spain, 31 December 2011

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EXECUTIVE SUMMARY

1. Analytical part including key messages and findings

The policy context of territorial attractiveness as a research topic

Throughout the last decade, the EU has issued a number of policy documents and directives – from the ESDP and the Lisbon and Goteborg agendas, to the series of Economic and Social Cohesion reports and ultimately The recently approved "Territorial Agenda of the European Union 2020. Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions" (Hungarian Presidency, 2011) – that progressively developed a discourse on human mobility as taking place at a European level into the Pentagon from the outside and within countries to capital cities and growing urban areas, and producing a range of imbalances at different spatial scales. Face to these, a more "balanced development" is promoted to reduce these disparities. Cities, especially, have been increasingly seen as "engines of regional development" and main competitive hubs within a global web of economic, knowledge and physical flows. Central to this process is the attraction of talent and visitors, which, increasingly, is explained not only in terms of production structures and accessibility but, increasingly, by the *quality of places*, resting on such untraded features such as inclusiveness, cultural dynamism, provision of public services and effective institutions.

An apparent sea change had begun to take place in thinking, signalled by the Green Paper on Territorial Cohesion (CEC 2008), the subtitle of which was 'Turning territorial diversity into strength'. From the very outset this document emphasised Europe's rich territorial diversity and the need to draw on this in strengthening cohesion and growth. Whilst attractiveness is not explicitly discussed, diversity is conceived as a factor of attraction that can be utilised to generate growth by both attracting investment and mobile populations whilst retaining existing residents. A key assumption underlying this approach is that only by focusing on the (diverse) strengths of places can more harmonious development be achieved. Within this context, greater consideration is given to the impacts of migration, both from outside and within the EU, on either exacerbating or ameliorating regional disparities.

However this policy narrative is marred by an ambiguity with regard to notions of place and mobility in EU policy. The free movement of people is one of the pillars of the EU, but there are inherent tensions underlying this principle when it is related to territorial cohesion and economic development. The emphasis on the endogenous characteristics of place is to a certain extent an "article of faith" – attempting to square the cohesion circle by arguing that all places have a potential to grow/develop if only the right policy mix and associated forms of mobilisation of assets can be achieved. Yet there is little evidence to demonstrate that such an "ideal" can be achieved as much of the evidence, often acknowledged in EU policy documents, suggests that labour movement (i.e. a particular form of mobility and attraction) for a significant section of the mobile population is largely determined by employment opportunities (i.e. based on economic factors).

Thus, attractiveness is to some extent a precondition or an essential dimension of competitiveness, although – as is argued in this report – the two concepts are ambiguously related: lack of attractiveness of a place can hamper its development, but so does, under certain circumstances, "excessive" attractiveness into places, or of one place with respect to others; and, not *all types* of attractiveness are equally beneficial to places. Moreover, different forms of mobility may reflect the importance of different, soft factors, and produce a much richer map of mobilities in Europe, both between regions and within them, and of different ranges, with complex spatial effects, which should be paid full attention when it comes to design policy at all territorial levels.

This project, carried out by a Transnational Project Group of nine European research institutes, and bringing in different disciplinary specialisations, starts form there: the idea that mobility and migrations should be revisioned as one of the main dimensions of territorial development, and the necessity to realise a first exploratory research on the capacity of attraction of European regions for different mobility flows; the characterisation of regions in terms of their attraction potentials; the analysis of the effects of attraction in a variety of contexts; and the identification of policy tools and governance structures that effectively integrate attraction as a key instrument of territorial cohesion.

It so does by assuming – following an important stream of the recent geographic and regional economics literature – that territorial assets may determine to a large extent the pathways of regional and local development, attracting different human flows into regions, or "audiences" that determine important effects locally, because they become embedded, in different ways, in regional development processes: as citizens, workers, taxpayers, consumers, or just passers-by. Such effects are remarkably territorial, because the direction, magnitude, accumulation of these flows is likely to determine a change in development opportunities and their spatial patterns as well as in spatial relationships at various scales.

Human mobility as the study object, *territorial capital* as the "explanatory variable", and *mobilisation strategies* within a multi-scale governance perspective as the "enabling condition", are the lenses through which we address the main policy question included in the terms of reference for this project:

> *How can policy makers improve the attractiveness of their city or region and reconcile the interests of visitors with those of their residents?*

This broad question is then articulated in a number of more operational questions reflecting the different dimensions of this research topic:

1. How do different "audiences" react to different territorial asset endowments? To what extent and how are these responses stratified spatially? What main trends and what key determinants can be observed in the relation between territorial assets and attraction of residents and visitors (of different types)?
2. How does the attraction of specific groups evolve over time? What has been the effect on the sustained capacity of regions and cities to attract other groups?
3. What is the role of mobilisation strategies and specific policies in these outcomes?
4. To what extent has attraction of different groups been a determinant of regional growth and competitiveness? Are such outcomes "sustainable'?
5. What are the roles of different economic sectors in the enhancement of attractiveness for cities and regions? What impact do more general economic trends (e.g. the decline of traditional manufacturing or the increasing importance of services) have on regional attractiveness?
6. What is the likely development in the relation between territorial capital, attraction and competitiveness in the next 15 years under different scenarios?
7. What is the future role of policy, from the local to the pan-European level, in mobilising attraction factors so as to achieve more sustainable development throughout European regions and cities? How can "attractiveness" be integrated into the spatial planning toolbox that is being developed by ESPON?

8. What is particular role of medium-sized cities and small towns as "attractive centres" and how are they integrated in this way into national urban systems and the national economy?

These questions are unravelled in a number of interconnected research activities employing a range of research methods, from desk research into the literatures that help us pinpoint the main study dimensions, to a static spatial analysis aiming at establishing a statistical relation between regional endowments and flows attracted, to case study research (mainly of qualitative nature) looking into the causal direction of such relationships and the enabling factors in different contexts and at different scales, and finally a dynamic analysis projecting these relationships into a scenario framework aimed at offering local, national and European policymakers a consistent appraisal of the potential effects of territorial strategies characterised by different sets of policy instruments.

Analysing the attractiveness of European regions and cities for residents and visitors

In the first part of our analysis we selected and measured the flows of a number of audiences, a number of territorial capital indicators, and we estimated a model of flows as explained by indicators of endowment. The model includes a time lag between endowments and flows, allowing for a "reputation building" effect (or a necessary mobilisation period) until territorial capital potentials exert their attraction.

Having assessed the availability and coverage of data at NUTS2 level across the ESPON space, the project team has thus focused on the following measures of mobility in the mid-2000 decade (generally 2004-07):

- Global net migration into NUTS2 regions, distinguishing between the three working age groups mentioned above (early working age 15-24 y.o., mid-career 25-49 y.o., pre-retirement workers 50-64 y.o.)
- Visitor arrivals (per 1,000 head of population) distinguish arrivals of visitors from the same country ("domestic") from those of residents abroad ("foreign").
- Incoming ERASMUS students in local universities within NUTS2 regions.

Our project has also focused on different forms of territorial capital as potential determinants of attractiveness for specific audiences, as according to different literature streams; therefore characterising regions in terms of their endowment mix – summarised in broad regional typologies – could cast some light on their potential attractiveness to a specific target group and on the assets that need to be enhanced or "mobilised" in order to liberate this potential. An "efficient" short list of 18 indicators, subdivided into 5 classes of territorial capital has been used to this respect.

- *Environmental capital*, involving measures of climate stability and landscape preservation, is richer in regions that are comparatively warmer and more stable in terms of climate, but also by regions characterised by high standards of landscape management; the overall distribution does not show a clear spatial pattern but it does highlight that most Mediterranean coasts, though attractive in terms of climate, may have been "overdoing" in terms of construction and landscape change (e.g. the southern and eastern coast of Spain and southern and insular Italy) and that peripheral regions at the eastern edge of Europe may offer an advantage to this respect, counterbalancing population loss with a high potential as destinations for tourism and retirement migration.

- *Economic and human capital*, measured by indicators of wealth, employment structure and quality, offers a comparatively opposite picture, being richer in the core of Europe and especially in metropolitan areas, as well as in some of the tigers of the European economy of the early 2000s and in mature tourism destinations, while it underplays peripheral and rural regions of Europe and CECs.
- *Antropic capital*, given by tourist sights, urban infrastructure and accessibility, is richer in the European core and especially in metropolitan areas, though the Mediterranean coasts, including some backwards regions in Italy and Croatia, are also very well endowed. Catalonia stands out as one of the regions with the richest endowment in this respect.
- *Socio-cultural capital*, which includes indirect measures of social cohesion and dynamism, puts a prize on "welfare" regions in Northern and North-western countries, like Scandinavia, the Netherlands, and Ireland, as well as some Alpine regions, though capital cities all over Europe seem to enjoy an advantage, and the position of Turkish regions also returns as very favourable to this respect.
- Finally, *institutional capital*, basically caught by the perceived quality of public services, is richer in the North and West of Europe, with a special mention of Belgium, Finland, Iceland, the Copenhagen region, and the Italian autonomous region in Val d'Aosta, while surprisingly also central Eastern Turkish regions score well to this respect.

In order to explore the relationship between our measures of mobility with territorial capital endowments the project team has used the statistical technique of regression analysis, through which we:

- Explored the statistical relationship between outcomes and territorial assets in a way to generate insights about actual processes within regions that link territorial assets to mobility outcomes about which sets of territorial assets may be more important than others;
- Developed a series of equations that the project team will subsequently use in generating a model for considering the potential impact of "policy experiments";
- Identified regions where the data on territorial anticipate different outcomes (in terms of migrating and visiting) than what actually observed, described as "outlier regions".

Given that the relationships we are dealing with are very complex, the predictive power that we obtained is rather high, indicating that our analysis does capture some important aspects of this statistical relationship. Five measures of territorial assets were consistently identified as having a statistically significant relationship with net inter-regional migration rates over the different time periods:

- the *number of bedplaces in tourist accommodation*, where the more bed spaces there are, the higher is the net migration flow;
- the *seasonal difference in climate index* whereas regions with a smaller difference between warm and cold are associated with higher net migration flows;
- the *proportion of resident working age adults employed in public services* - the greater their proportion the lower the net migration flow;
- the number of *registered students in higher education* (as a share of 1,000 residents aged between 15 and 24 years old), whereas the higher the ratio, the higher the net migration flow;

- the level of *general satisfaction with life* such that the greater the proportion of satisfied residents the higher the net migration flow.

Overall the regression analysis is better placed to explain the territorial assets that might attract higher net migration flows of younger adults than for older adults. This might be the result either of older net migration patterns being more complex (for example older people dividing into "lifestyle" and "ongoing career" migrants) or because the territorial asset variables are less able to capture the things that attract older working age people. For the younger age group, we found an association between higher net migration flows and more "urban" regions or regions with busier airports, whereas for the mid-age group the association was with culture-rich regions (as captured by the monuments index) and again regions with busier airports. By contrast, higher net migration flows for older working age adults were associated with regions with a lower population density and, interestingly, fewer monuments.

Outlier regions in our analysis are those where there appears to be a mismatch between the territorial assets of the region and the levels of net migration into and visiting to the region; these are classified in terms of the type of mismatch with reference to membership to the first of the regional typology of mobility based on net migration rates and visitor attraction rates. It is the "high flying" regions that are the most problematic. For the most part there are regions of Greece, France and Spain where territorial assets would suggest membership to the "overheating" class, but on the basis of observed net migration and visitor rates these regions have attracted fewer people per inhabitant than might have been expected. Equally there are regions in Ireland, the United Kingdom, Greece and Turkey as well as a range of capital city regions that have attracted observed flows of migrants and visitors over and above what might have been expected given their level of territorial assets.

Key messages and findings

This analysis returned the following key information:

- The main trends for different mobile population have been roughly of a global shift of population from the North-East of Europe to the South-West, towards places that are also attractive as destination of short mobilities (various forms of tourism). Also within national systems at the core of Europe there is a north-south drift.
- Flows by age groups (shown in the three maps of Fig. 4) show some distinctive characteristics with regards to where they are occurring. Capital cities remain attractive in terms of having the average net effect of pulling in large numbers of younger and middle-aged adults but having a net outflow of older aged adults. In contrast non-capital city regions, on average, have a net inward attraction for all these three age groups.
- More peripheral regions (whether capital cities or not) as well as peri-urban rural regions have managed to attract large numbers of people throughout the period 2001-07.
- The "silver age drain" seems to be also working from the north-east to the south west of Europe, also at the level of individual countries, towards regions offering higher place amenities, a better climate, and convenient properties, or inland regions well-known for their amenities, whereas the urban powerhouses of Europe emerge as places from where many workers are more likely to flee from when they retire. The mobility drivers for this group are descriptively different from those of the younger working age group.
- Classic destination regions in the Mediterranean Arc, including coastal resort areas, islands, as well as large urban regions and capital cities and a number of rural areas receive the largest share of tourist flows. While domestic tourism privileges rural and

coastal areas within each country, international tourism favours the Mediterranean arc, with coasts, islands and mountain regions at the forefront. Sparsely populated peripheral regions like Iceland, the north of Norway and the north of Scotland also get a high share of short-term flows.

- With some exceptions, the attraction of a non-conventional form of medium-term mobility as student exchanges seem to favour "amenable areas" rather than places with the most famous and established universities.
- While the regional assets related with economic conditions and the structure of the job markets, which arguably remain the most important drivers of work-related migration, clearly favour the core of Europe and especially large cities and national capitals, but also some of the most mature tourist destinations regions in the Western Mediterranean arc, other forms of territorial capital are distributed more evenly and almost all regions of Europe have some kind of "relative specialisation" with one or more factors that may result attractive to specific audiences
- Metropolitan city-regions in Spain and Italy appear to demonstrate unusually high levels of net migration whilst the metropolitan region of Paris demonstrates an unusual combination of very high levels of visiting combined with net out migration.
- Whereas visitor numbers are most clearly (and unsurprisingly) affected by the capacity of regions to receive visitors (regions having accommodation and monuments) foreign visitor numbers appear to be the most sensitive to non-antropic assets. Net migration flows are more sensitive to climate than visitor numbers. Attractive regions with lower levels of official tourism accommodation, cultural heritage assets and more seasonal differences in climate can 'overcome' these territorial assets to attract higher net migration and visitor rates than might be expected otherwise. Equally potentially attractive regions where residents express a general dissatisfaction with life may attract fewer migrants and visitors than they might expect.
- Some unattractive regions appear to be unable to realise their assets in a way that is inexplicable based on the regression analysis alone. However capital city-regions in areas of generally low net migration consistently attract more net migrants and visitors than might be expected based on their territorial assets alone.

2. Options for policy development

From regional typologies to a place based approach to development strategies based on attractiveness

In order to address the main issues with the attraction of different mobility flows within a policy perspective, we first created regional typologies for this data. A first typology is based on two mobility variables: the annual average net migration rate for the period 2001-07; and the average annual visitor arrival rate for 2001-04. The clustering technique used allowed us to identify four classes of regions in this typology depending on the relative values of scores in terms of attractiveness of visitors and global retentiveness of workers.

This typology suggests that there is a broad correlation between receiving visitors and net migration, although the some regions are playing a more specialised role in attracting a high volume of visitors relative to their population. These regions are located in the Austrian Alps, along the Adriatic (Croatian), on Mediterranean Islands and along the Atlantic seaboard from the Algarve to Iceland. These are regional locations where special thought may be required to manage the pressure of tourism on their regional economies and societies.

The conventional wisdom is that migrants are attracted by economic buoyancy and tight labour markets. However comparing labour market statistics and economic performances for these four groups of regions, the most attractive region types ("overheating") do not have the highest average GDP per capita nor the tightest labour market for highly skilled workers, although regions with the lowest net migration rates and low visitor arrival rates consistently do exhibit lower GDP per capita in the subsequent period (2007-09) and employment rates for workers with all forms of qualification.

This typology offers a first insight into classes of problems relative to regional attractiveness that should be addressed with specific local policies.

A second regional typology was developed looking at net migration rates by age group. This was a typology for which we were unable to generate data for Turkey but it does cover all EU27 member-states plus EFTA countries. Again we generated four classes:

- Class 1 is made up of 152 regions (coloured green in the map) that demonstrate net migration rates around zero (a mix of net out and in migration rates) for the younger adults and older adult groups;
- Class 2 is made up of 82 regions (in pink in the map) that demonstrate broadly positive net in-migration rates for both younger and older adult groups (greater than Class 1);
- Class 3 is a group of 36 regions (in brown) that demonstrate relatively high net migration rate for younger adults but net out-migration rates for older adults (lower than Classes 1 and 2);
- Class 4 (age related) is a small group of 21 regions (in blue) that demonstrate net positive migration rates for younger adults (similar to the range of Class 3) but net migration rates for older adults higher than for all the other clusters.

The regions in Class 3 appear to be the most interesting in this typology in terms of policy messages. This group includes many regions of capital cities such as Inner London, Paris, Berlin, Stockholm, and some other major economic hubs of Europe like Bavaria and the region of Frankfurt. These regions may have been so attractive to the point of having reached some sort of threshold by which, even if they continue being very attractive for starting workers, they experience problems retaining the older age groups possibly due to declining urban quality and high prices.

The Mobilisation Process

In the analysis outlined in Section 1 we showed how it is possible to predict a fair amount of the attractiveness of regions and cities over the 2000s decade considering the endowment of different types of territorial capital. However, this analysis is neither exhaustive nor sufficient to understand the full picture of the way in which territorial assets are mobilised in order to function as attraction factors. For this reason this project has considered a number of case studies, with a double objective:

- Gaining insight in what makes cities and regions attractive and especially the role of policy and governance structures in influencing the ability to attract different audiences;
- Explore dimensions of attractiveness and its drivers which were not explicitly considered in the statistical analysis carried out in the previous research stage, both in terms of indicators considered, and in terms of scale of the analysis.

To cover in an exhaustive way these objectives, we have used a mix of case study methodologies, from qualitative research to quantitative techniques, and a rather broad range of case study regions, from cities to whole countries.

The case studies dealt with eight regions that have their own unique characteristics. First of all the regions are located in different parts of Europe, also broadly covering geographical specificities, and dealing with differing units of analysis, from the very local (within national systems) and cross-border regions to NUTS2 regions and whole countries.

The eight regions we analysed differ in their ability to attract and retain people. Regarding the way in which case studies addressed the issue of attractiveness and retention of specific user groups in the different regions, some cases only discuss migration or mainly focus on the attractiveness for residents. The case of Cornwall paid attention to both tourism and migration and the respective synergies, while Trento and Algarve are the more tourism-oriented case studies in our sample as you would expect from these important tourism destinations. In the case of Istanbul we looked at tourism flows but also at the attraction of foreign firms and their workers. The case studies and the discussion with the stakeholders support the relevance of the endowment factors used in the global statistical analysis, though real estate prices and affordability proved to be a driver of attraction especially for internal migration and second-home tourism.

They also illustrate the great diversity in institutional contexts among European regions. In general the mobilisation of regional attractiveness is a combination of top-down EU and state policies and bottom-up initiatives of local and regional stakeholders such as municipalities, universities and businesses. Organisations that operate on the level of the region we selected are not necessarily leading in the development of the region. A good example is the cross-border partnership for the Lille-Kortrijk-Tournai *euro-metropole* (LKT), which is only one of the many institutions that can mobilise attractiveness in this French-Belgian region. As a conclusion is that EU policies play an important role in making regions attractive for particular audiences; this was mentioned explicitly in the cases of Denmark/Bornholm, Cornwall, LKT and Lubelskie.

Policy makers and other stakeholders see various possibilities to invest in the attractiveness of regions and cities for residents and visitors. In view of the transition to a global knowledge-based economy it has become particularly important for regions to invest in the access to (higher) educational institutions as we could see, for example, in Cornwall. Another frequently used tool to attract audiences is place marketing. While some regions are more selective, targeting specific groups, other regions have no explicit policies to attract particular audiences. When the costs of agglomeration (diseconomies) become higher than the benefits (economies) regions tend to become choosier: paying more attention to quality and the contribution of migration and tourism to the prosperity and wellbeing of the current citizens.

Options for EU territorial policy development

The territorial policy focus of ATTREG is based on the exploration – by way of formulation of scenarios – of the long-term impact of the application of specific policy bundles in different regions that are the target of European policy. In relation to normative policy discourses this entails the definition of a set of variables and *alternative policy bundles* related to the three dimensions identified in the EU 2020 Strategy (i.e. smart, cohesive and sustainable growth). The aim is to define a set of key drivers within each normative policy discourse and their implications for attractiveness-enhancing policies.

Although the three dimensions are not mutually exclusive alternatives, we have decided to emphasize the three policy approaches (smart growth, inclusive growth and sustainable growth) mentioned in the EU2020 strategy, drawing out their territorial consequences. The idea is to extrapolate each of them (through the scenario model developed as part of RA5)

to their logical conclusion thereby emphasising the different potential trajectories and their implications:

- The **smart-growth policy approach** entails a concentration of resources and efforts in hi-tech investments, and particularly the NBIC sectors (Nanotechnology, biotechnology, information technology and cognitive science).
- The **inclusive-growth policy approach** is characterized by major investments in social capital with a particular focus on deprived areas, on overcoming internal and external borders building cross-border metropolitan regions, and on balancing development capacities between the EU core area and peripheral areas.
- The **sustainable-growth policy approach** will be characterized by a strong emphasis on improving the resource efficiency of Europe, especially in peripheral locations, through a proactive push of regions and cities toward greener economic development strategies, and supporting measures of adaptation to climate change and regional resilience.

These approaches have been translated in three "policy bundles" using as inputs variations in the explanatory variables, which are then fed into a complex scenario model whereas policy bundles were applied in specific target regions:

- Convergence (Objective 1) regions as defined in EU policy with less than 75% of the EU average GDP.
- "Overheating" regions as classified in Cluster 4 from our regional typology on retentiveness and visitors attractiveness (see above).

The outcomes represent the cumulative/endogenous effects of territorial capital: If population increases, so does by definition population density, which leads to higher in-migration flows, which leads to higher population and population density etc. Similarly, higher population leads to lower population accessibility scores, which reduces immigration potentials.

In general the "inclusive" policy bundle seems to have positive effects in increasing the performance of regions that are underperforming, and at the same time a negative effect on overheating regions. Thus, it shows a specific capacity to reduce disparities among EU regions. The impacts on employment seem to be mixed: in general they are negative for target regions where labour participation rates are high for young and old age groups, whereas the impacts are positive for those regions in which the decline in the population dependent employment outweigh the reduction in the labour force. However, among the various policy bundles, the inclusive one is the only one that does not show a strong correlation between job opportunity and mobility of population.

Regarding the "smart" policy bundle, effects in both convergence regions and overheating regions vary considerably. The impacts on employment is generally negative for the target regions where labour participation rates for younger and older age groups are high, whereas they positive in case of regions with high dependency rates. In general, it seems that this policy bundle is able to affect positively population mobility, job availability and GDP, but with some limits, and it does not affect those regions with limited territorial capacities and a predisposition for smart growth strategies. Indeed, application of this policy bundle on average-performing regions does not seem to be particularly effective.

Finally, it appears that the "sustainable" policy bundle is able to determine positive direct effects in both convergence and overheating regions, attracting population from neighbouring regions. Although it appears as the least effective in terms of GDP increase,

probably due to more investments in quality of life (and soft factors), it has the highest impacts on the regions that in absolute terms present less job opportunity and lower GDP, thus suggesting an important rebalancing role.

3. Final remarks

This project has used the available data for the ESPON space (including the three European Candidate Countries) and had been fairly successful in exploring the main regional trends with regard to the attraction of human flows of different types, their main drivers and the integration of the mobility dimension in terms of local mobilisations strategies as well as European territorial policy.

As a general conclusion, we observed that there is no simple relationship between increases in (forms of) attractiveness and economic growth. Much depends on the forms of territorial capital present and how they are utilised. However, we now have a better understanding of several aspects of the overall process:

- There are different forms of mobility (i.e. related to specific groups or mobile populations), and these are driven by different assets;
- There are different typologies of territorial performance (stickiness, retentiveness);
- Economic growth can be one of the effects of attractiveness but not necessarily always of retentiveness;
- Some territories that were extremely attractive in the period up to 2007 have become "fragile" in the current crises – it appears that they may have been "overheating" and that their attractiveness was based on the attraction of flows that were not embedded in the local context;
- A longer term perspective suggests that territorial balance associated with a higher degree of territorial cohesion may be better suited to withstand crisis and generate sustainable economic growth and retain population;
- Territorial cohesion strategies that successfully address territorial capital are long-term strategies; in the short term they may be less "successful" in terms of generating rapid economic growth, but they have demonstrated a capacity to make territories less fragile and development more sustainable.
- While some regions are more selective, targeting specific groups, other regions have no explicit policies to attract particular audiences. One factor that may drive regions to adopt a more selective and focused approach is that when the costs of agglomeration (diseconomies) become higher than the benefits, it becomes more important to pay more attention to the quality and the contribution of migration and tourism to the prosperity and wellbeing of current citizens.

In terms of the mobilization process it is important to bear in mind the "time" issue. This refers to the recognition that it requires time to build governance processes, as well as to change territorial performance through implementation and mobilization of assets and thus changes in patterns of mobility. There will inevitably be, a somewhat lengthy, time-lag between actions and results, and this requires a long term perspective. In particular, the building of institutional capital, which in a cross-border area implies the definition of cross-border capacity to cooperate, requires time in building vertical and horizontal relationships (mutual trust, institutional settings, etc), as well as the involvement of citizens and the private sector.

However, our analysis of attractiveness, with its focus on the wider aim of territorial cohesion, suggests a somewhat different, broader, approach to attractiveness than merely focusing on economic pull factord, that implies the introduction into both analysis and strategy of the territorial capital as a factor explicitly affecting the mobility of populations. In this light, for instance, the acknowledgement that in the transition to a global knowledge-based economy it has become paramount for regions to invest in the development of (higher) educational institutions and improve access to them, is not limited to the economic sphere (students as future human capital) but extends to issues of citizenship and social dynamism.

These indicative conclusions must be taken with more than a grain of salt in the next context of economic crisis, which in the shorter term is probably bound to "re-centralise" population and jobs out of the regions more exposed to the economic downturn: this is actually happening as demonstrated by recent ESPON evidence as shown by the "map of the month" of September 2011 on European Regions 2010: Economic Welfare and Unemployment (www.espon.eu/main/Menu_Publications/Menu_MapsOfTheMonth/map1103.html). Yet they indicate that in the longer term places that will be able to mobilise their territorial capital assets in a coherent way could be more resilient to external shocks anchoring place advantages in terms of working population and tourism.

Obviously there is a need for further research to confirm and further operationalise these indications.

A first area of study is related to following on this line of research for a longer time horizon. In this project we were constrained by data availability on migration to a two-period analytic framework (endowments and changes in endowments in the early part of the 2000 decade being assumed to produce effects on flows in the mid-late 2000s); it will be especially important to analyse the post-crisis effects re-doing this analytic exercise in a couple of years' time when the data on migration in the latest part of the 2000s will be available.

Secondly, it would important to dispose or more disaggregated data on migration and tourism, not only at a regional scale (NUTS3 and LAU level) but also in terms of matches between origins and destinations, both within and outside the ESPON space, and motivations for mobility. These data are not available now, but they may become available in the future if an "European Migration Observatory" will be given this type of mandate for regional evidence.

Thirdly, focused case study research may gather further insights on place processes and policies that have a bearing on attractiveness for different groups. This issue was addressed through a necessarily limited number of case studies in ATTREG but in our opinion it could become a topic for targeted analysis in specific regions and cities characterised by different place profiles and endowments, like for instance coastal tourist regions, large cities at the centre of knowledge and innovation networks, and transition regions in the north and east of Europe.

Fourthly, there is a need for further development of extended interregional demographic models (such as the ATTREG future model) for scenario evaluation. This involves scenario modelling of future development within alternative baseline scenarios as well as for the impact assessment of policy packages. Especially the inclusion in the modelling framework of the interaction between demography, human mobility and the regional economic system seems to be of special importance to capture and project into the future the effects of policy initiatives and external shocks.

ATTREG

The Attractiveness of European regions and cities for residents and visitors

Draft Final Report 31.12.2011

REPORT

1. INTRODUCTION: KEY ENTRY POINTS AND RESEARCH OBJECTIVES

1.1. The EU policy context

The ATTREG project is situated within a particular conception of the role of spatial and non-spatial policies, particularly those of the EU, that assumes they may have a significant role in enhancing the attractiveness of places and regions, by developing and supporting place assets – or different forms of "territorial capital", as we conceive them in this study – determined largely by idiosyncratic geographical, cultural, institutional and historical contexts. Spontaneous changes in these factors and initiatives to "mobilise" them bring about shifts in the relative "positioning" of regions in terms of their attractiveness and developmental potentials. In this light, policymakers need to understand what constitutes the attractiveness of cities and regions and the implications of policies designed to achieve European objectives, both in terms of sectoral policies and of overarching agendas such as Europe 2020. The ATTREG project is about setting up a conceptual and methodological framework which may serve to understand the policy relevance of territorial attractiveness, and the relationship between attractiveness and human mobilities at a variety of scales, and to analyse through it the situation of the European territory and the foreseeable future.

Territorial assets and the quality of places have been for at least three decades now acknowledged by policymakers as location factors for economic agents, and consequently as important dimensions of regional development strategies within a globalised world where competition has intensified and financial resources have become increasingly footloose. Regions, cities, whole countries have embraced a proactive "place marketing" approach to strengthen their attraction capacity, in some cases achieving remarkable success in the transformation of their resource base. Becoming more attractive for the financial and knowledge sectors and their workforce is the new mantra of local politics, often pumped up by international consultants and policy advisors - and sometimes a tad on the blurry side for what regards the design of contextualised strategies or the specification of ultimate objectives and impacts.

This strong focus on financial flows has to a large extent overshadowed the parallel issue of the flows of people. The role that human mobility plays in development, the problems it may generate for territorial cohesion, and the features that regions can – and should – enhance in order to attract people, of whatever type and for whatever lapse of time, remain largely unexplored issues. Most of the policy debate in various countries has centred on managing (if not slowing down altogether) migration from the poorer neighbours of Europe, sometimes with the overtones that are typical of social emergency, or on reverting the brain-drain to more advanced countries or capital cities and metropolitan areas, which is possibly the greatest source of erosion of the resource base for the development of lagging and peripheral regions.

As a counterpoint, the common orientation of regional policymakers in regard to tourism has been for a long time "the more the better", resulting in strong competition and boosterist policies which not infrequently have led to episodes of over-exploitation of natural and cultural resources, especially in coastal areas, to excessive dependency on an economic sector characterised by strong volatility and suboptimal social impacts, and to unbalanced territorial development.

Even the ESPON programme has so far taken mobility almost as a "given": many projects have developed analyses in which human mobility is basically a neutral variable, and propose policy receipts that may boost the capacity of different sources of capital to

migrate, but very few of them include mobility as a policy instrument or analyse the spatial effects of migration that is leveraged by other policies. Thus, a project dealing explicitly with mobility is a welcome addition to the portfolio of ESPON applied research, especially in the current times, when all regions are called to make an extra effort to find their own way to development based on local resources that are shrinking, and the EU is called to ensure a fundamental level of coherence and cohesion in these local mobilisation strategies.

Indeed, the importance of attracting people has slowly made its way in the policy debate of the post-2000 European Union. In the Lisbon and Göteborg strategies there is no explicit mention of these issues. Put simply, Lisbon was largely concerned with making the European economy the most competitive in the world, while Göteborg bolted on a sustainability dimension. The publication of the European Spatial Development Perspective (ESDP, 1999) signalled a new recognition that the economic and social development of Europe involved territorial dimensions which policy needed to take into account. What began to develop was an argument that policy, at European, national, regional and local levels, needed to be framed with this in mind and that it could, if developed and applied in an integrated and targeted manner, address regional imbalances (the over concentration of economic activity and population in the Pentagon in particular), which, in the 3rd Report on Economic and Social Cohesion (CEC, 2004) are considered a threat to the harmonious development of the Union economy in future years (p. 27). Mobility is understood as taking place at a European level into the Pentagon from outside and within countries to capital cities and growing urban areas, producing a range of imbalances at different spatial scales. This report goes on to argue: 'These territorial disparities cannot be ignored, since…they affect the overall competitiveness of the EU economy.' (p. 28). The answer proposed is the promotion of more "balanced development" to reduce these disparities (see also Dutch Presidency, 2004, where similar arguments are developed).

Thus by around 2004-5 a more explicit consideration of the role of cities and regions in relation to territorial cohesion began to emerge in EU policy documents, like the series of Reports on Economic and Social Cohesion (see details in Ch. 1 of the ATTREG Scientific report). Metropolitan areas are seen as powerhouses of regional development; their role as attractive hubs in the global economic network is understood partly in terms of accessibility but, reflecting the influence of R. Florida's works (2002, 2003), it is also related to the quality of life and amenities that they provide, among which socio-cultural capital is increasingly acknowledged as a "soft" location factor that attracts knowledge workers. Attractiveness and mobility thus start to be addressed as policy dimensions, as they affect cohesion. The key determinants of attractiveness are seen as 'good basic infrastructure and accessibility; a well educated work force; good ICT infrastructure and extensive use of ICT; a relatively high level of spending on R&D' (CEC, 2007, p. 74), but it is also noted that '… non-economic factors, and, in particular, the quality of life and the attractiveness of the environment, seem to have an increasing effect. The regions concerned include a number with relatively low levels of GDP per head …' (ibid, p. 46). Also included among the non-economic factors, related to quality of life, are health service provision and effective institutions.

Thus a more complex notion of attractiveness and mobility (and by association the reasons for mobility) had begun to develop, signalled by the Green Paper on Territorial Cohesion (CEC 2008), the subtitle of which was "Turning territorial diversity into strength". Whilst attractiveness is not explicitly discussed the Green Paper emphasises Europe's rich territorial diversity and the need to draw on this to generate cohesion and growth by both attracting investment and mobile populations whilst retaining existing residents. The Green Paper represents a step, albeit hesitant, away from understanding a place-based approach as referring to a restricted range of "special urban and spatial initiatives" towards a more generic approach bringing together the territorial, the social and the economic dimensions

(see Barca, 2009: 93). A key assumption underlying this approach is that only by focusing on the (diverse) strengths of places can more harmonious development can be achieved.

The Sixth Progress Report on Economic and Social Cohesion (CEC, 2009) highlights several of these themes arguing that: 'The goal of territorial cohesion is to encourage the harmonious and sustainable development of all territories by building on their territorial characteristics and resources' (ibid, p. 11). Moreover, following Florida, it contains a specific focus on creativity and innovation arguing that these two factors are crucial to regional development in all regions (ibid, p. 4-6). Central to this process is the attraction of talent and visitors. Within this context greater consideration is given to the impacts of migration, both from outside and within the EU, on either exacerbating or ameliorating regional disparities (ibid, p. 84-90). Improving attractiveness is seen as crucial to this approach and the report recommends a wide range of actions to achieve this (see for instance Chapter 1, Section 2). The conception of the dynamics driving population mobility has shifted from one based on an assumption that population movements are determined mainly by economic forces towards one that includes a notion of the "search for quality" (RWI, 2010). It also assumes that "rooting" a mobile society into places may be the key challenge for regions and cities shaken by the great financial turmoil of the last years, sustaining what is proposed by the recently approved Territorial Agenda of the European Union 2020 (Hungarian Presidency, 2011) to foster territorial cohesion in a context of increasingly economic vulnerability, that is the development of innovation and smart specialisation strategies making the best use of social capital and territorial assets to achieve greater and integrated competitiveness.

1.2. The ATTREG research topic

We can detect a duality in the above policy narrative. On the one hand, the more long-standing (and arguably dominant) discourse is that EU policies should support the competitiveness of regions and cities through development strategies designed to boost regional economic growth and (more recently) to assist in recovery from the crisis: in essence, this involves supporting the strongest. On the other, a "cohesion approach" has started to pay greater attention to spatial issues (territorial and social cohesion, sustainable development, etc.) and disparities, fostering initiatives directed at lagging and peripheral regions. This duality reveals a degree of ambiguity with regard to notions of place and mobility. The free movement of people is one of the pillars of the EU, but there are inherent tensions underlying this principle when it is related to territorial cohesion and economic development. Local populations are relatively fixed in terms of human capital relative to a place, and each place has its own identity, national traditions, specific welfare structures, etc, which additionally tie people to them. In this situation cohesion is crucial and local factors can (potentially) boost economic growth. Place-based policies are thus central.

The problem is that this emphasis on the endogenous characteristics of place is to a certain extent an "article of faith" – attempting to square the cohesion circle by arguing that all places have a potential to grow/develop if only the right policy mix and associated forms of mobilisation of assets can be achieved. There is little evidence to demonstrate that such an "ideal" can be achieved as much of the evidence, often acknowledged in EU policy documents, suggests that labour movement (i.e. a particular form of mobility and attraction) for a significant section of the mobile population is largely determined by employment opportunities (i.e. based on economic factors). As we suggest in this report, other forms of mobility may reflect the importance of different, "soft" factors, and produce a much richer map of mobilities in Europe, both between regions and within them, and of different ranges, with complex spatial effects, which should be paid full attention when it comes to design policy at all territorial levels.

The main goal of the ATTREG project, carried out by a Transnational Project Group of nine European research institutes bringing in different disciplinary specialisations, was to fill this knowledge gap, developing a full understanding of the attractiveness of cities and regions in the ESPON space (including European Candidate Countries, which we cover in our study) and its implications, and positioning it as one of the main elements shaping spatial development of Europe, as well as a dimension of territorial policy, requiring the development of a richer knowledge base and the design of a new analytical toolbox.

In order to achieve a full understanding of its implications, and to contribute to its full integration in EU territorial policy, ATTREG has interpreted territorial attractiveness as a characteristic of places that varies spatially according to its constituting natural and environmental, social, cultural and economic components. Following an important stream of the recent geographic and regional economics literature, we assumed (and, to some extent, we could prove through our analysis) that territorial assets influence sensibly the pathways of regional and local development, attracting different human flows into regions, or "audiences" as we call them. These are distinguished by the character of their displacement (ranging from permanent or long-term, as in the case of the immigration of new residents, to short-term, in which case we are mostly talking about tourism) and by their nature or motivation, generally defined in terms of a work-leisure binary.

All these audiences determine important effects locally, because they become embedded, in different ways, in regional development processes: as citizens, workers, taxpayers, consumers, or just passers-by. Such effects are remarkably territorial, because the direction, magnitude, accumulation of these flows is likely to determine a change in development opportunities and their spatial patterns as well as in spatial relationships at various scales. Thus, attractiveness is to some extent a precondition or an essential dimension of competitiveness, although the two concepts are ambiguously related: lack of attractiveness of a place can hamper its development, but so does, under certain circumstances, "excessive" attractiveness into places, or of one place with respect to others; and, not *all types* of attractiveness are equally beneficial to places.

The investigation on territorial attractiveness has been grounded in a conceptual "model" that links the three main components of this complex interaction:

- A set of "audiences" (either targeted explicitly or defined in terms of their mobility characteristics) that can be attracted and for which there is a menu of expectations, each with a different profile in terms of the development processes that it is expected to engender locally and in surrounding areas;
- A set of "endowment" factors or territorial assets that potentially determine attractiveness (conceptualised as territorial capital) in either a general sense or to one particular audience;
- A set of processes by which territorial assets may be mobilised to enhance attractiveness either for all or for a specific "audience'.

Human mobility as the study object, *territorial capital* as the "explanatory variable" (or rather set of variables), and *mobilisation strategies* within a multi-scale governance perspective as the "enabling condition", are the lenses through which we address the main policy question included in the terms of reference for this project:

> *How can policy makers improve the attractiveness of their city or region and reconcile the interests of visitors with those of their residents?*

Concretely, our approach to this broad topic is the following: knowing which factors potentially attract which audiences into specific types of regions and cities, and what policies and policy structures stand in the way or enhance the "liberation" of this potential, offers a sort of ready-to-use, place-based "textbook" to be more attractive. Indeed, local and regional policy is mostly concerned with attracting the right "mix" of audiences to ensure places the best opportunities, and to do so, it generally seeks to boost the attraction capacity of place assets.

However, European policy – and at a finer scale, national and even regional ones – should be tuned to the objectives of territorial cohesion, and this calls for a more sophisticated and multi-layered territorial strategy, which our project nuances. This involves some degree of "harmonisation" of attraction potentials, recognising that not all places can be winners in the race to attract large masses of tourists or stand the best chances to retain all segments of their population.

In the next sections, we summarise the main outcomes of the project in terms of trends and impacts of territorial attractiveness (2) and the options for policy development deriving from this (3). Following, Section 4 will provide an insight on the key analysis, diagnosis and findings as well as on the most relevant indicators and maps that were produced within this project. Section 5 concludes reflecting on further analytical work and research needed.

2. MAIN RESULTS, TRENDS, IMPACTS

Our research unbundled in a series of steps. The first is the geo-statistical analysis of the NUTS2 regions of the ESPON space for what regards the main dimensions of attractiveness and its effects. Secondly we conducted an in-deep analysis in eight case study regions that to some extent stood out in our analysis. Finally we expanded the statistical analysis, also using the insight from case studies, into a scenario model that allowed us to address options for policy and their foreseeable effects.

Mobilities in the EU territories in 2001-2007

The first part of the analysis conducted in ATTREG has been concerned with the measurement and analysis of mobility flows of different audiences across Europe in the central part of the 2000s decade (for which we had data available) – which allows us to relate these flows with the different endowments of regions or their potential "territorial attractiveness".

Our analysis distinguishes structural or long-term mobility of residents, which could be conceived as migration flows, and short- or medium-term mobility of people that are statistically considered visitors and who do not become residents in the regions and city they visit. The former is measured through net migration rates in regions of destination, and we have called it *retentiveness* – capacity to retain human mobility in the longer term. Within it, we have focused on different age groups, which relate, according to the migration literature, to different drivers (determinants) for moving: the "early career" workers of 15 to 24 years old, the mid-career workers (25- to 49 y.o.) and the pre-retirement workers of 50 to 64 y.o.). Among visitors, we considered the *attractiveness* for traditional tourists, distinguishing between domestic and international, as well as an unconventional form of non-work related medium term mobility, that of Erasmus exchange students, which proxies to some extent the lifestyle mobility of creative workers. The main trends observed in relation to these groups in the 2001-2007 period turned out to be the following:

- The different mobile populations have been globally shifting, to varying degrees, from the North-East of Europe to the South-West, towards places that are also attractive as destination of short mobilities. The same trend is observed within national systems in the core of Europe. Within this global trend we have observed more fine-grained phenomena largely determined by geographical specificities.
- Capital cities are still important destinations for younger working age adults but more peripheral regions, whether capital cities or not, as well as peri-urban regions have managed to attract large numbers of people in the other age groups.
- Mountain regions appear to be attractive in both attracting and retaining population.
- Regions located in countries that have a higher proportion of foreign-born residents tend to experience higher levels of inter-regional mobility than regions in countries with a lower proportion of these. Regions in countries where internal migration is relatively more important are more likely to see higher mobility amongst older working age adults.
- The Western Mediterranean arc (regions from Valencia to the centre of Italy), has been the region in Europe with the highest combined levels of attractiveness and retentiveness.
- Some regions, especially in the Western Mediterranean arc and in the economic "tigers" of the early 2000s, appear to have been "overheating" from an excessive attractiveness of various mobilities that was not sufficiently bound in place assets.

Attraction potentials – territorial capital endowments and trends, 2001-2004

Following the theoretical reasoning in our project, we identified, measured and analysed various assets broadly related to five general categories of territorial capital (antropic; human-economic; environmental; socio-cultural; and institutional) in the early part of the 2000s decade, also looking at the main spatial trends emerging from this picture. The hypothesis, to be verified in the next step, is that different endowments of territorial capital (and their mix) would be attractive to different audiences. These were the key findings:

- The regional assets related with economic conditions and the structure of the job markets, which arguably remain the most important drivers of work-related migration, clearly favour the core of Europe and especially large cities and national capitals, but also some of the most mature tourist destinations regions in the Western Mediterranean arc
- Other forms of territorial capital are distributed more evenly: almost all regions of Europe have some kind of "relative specialisation" with one or more factors that may result attractive to specific audiences

The attractiveness of European cities and regions: relating flows to assets

The last step of our geo-statistical analysis looked into the interaction of endowments with types of territorial assets and the realised attraction of flows. The idea behind it was to analyse whether territorial capital endowments can explain the different performances of regions in attracting the various audiences considered in this study, "predicting" the attraction of a specific audience.

However, the most interesting outcome was the identification or regions that perform differently than expected, revealing the existence of factors not captured by statistical analysis (with the available data) and thus to be further investigated at case study level. These are the main conclusions from this part of the research:

- Higher net inter-regional migration is generally associated with regions that have a busier airport, more tourist accommodation, a better educated adult population, a milder winter, less dependence on public sector employment, more university students and a population that is more satisfied with life.
- Capital city-regions in areas of generally low net migration consistently attract more net migrants and visitors than might be expected based on their territorial assets alone.
- Metropolitan city-regions in Spain and Italy appear to demonstrate unusually high levels of net migration whilst the metropolitan region of Paris demonstrates an unusual combination of very high levels of visiting combined with net out migration.
- Based on the evidence in this study, there does not appear to be any change in the territorial assets associated with overall net migration flows or visitor numbers before and after the accession of 10 member-states in 2004.
- In relation to antropic assets (measures of tourism infrastructure and built environment) and socio-cultural assets (measures of the social and cultural characteristics of regions), higher net migration flows for the younger, mid-aged and older groups are associated with different bundles of assets.
- For economic, environmental and institutional assets there is a high degree of similarity between the territorial assets associated with higher net migration flows for both the younger and mid-aged groups. Net migration flows for older working age adults are associated with milder winters (in common with the other age groups) and regions with less active economies (lower GDP per resident).
- Whereas visitor numbers are most clearly (and unsurprisingly) affected by the capacity of regions to receive visitors (regions having accommodation and monuments) foreign visitor numbers appear to be the most sensitive to non-antropic assets. Net migration flows are more sensitive to climate than visitor numbers.
- The basic statistical analysis also revealed that some regions appear to have been unable to realise the attraction potential of their territorial assets in a way that is inexplicable based on the regression analysis alone.

From statistical to causal relations: case study research on attraction determinants and mobilisation strategies

In the case study research, we looked at eight "exemplary" regions, varying in scale and geographical features, in terms of their capacity to attract specific flows (as from the general statistical analysis) or for their geographical specificity. The case studies chosen were: Cornwall and the Isles of Scilly (UK), Lille-Kortrijk-Tournai (a cross-border metropolitan region between France and Belgium), Algarve (Portugal), the Province of Trento (Italy), the island of Bornholm (Denmark), Lubelskie (Poland), the Republic of Slovenia, and Istanbul (Turkey).

The case study research used both quantitative and qualitative techniques to ascertain whether some aspects had not been taken into account in the statistical model, or of such regions had been very good (or bad) at "mobilising" their territorial capital in order to realise its attraction potential, either through specific policy initiatives, or as a result of particular forms of territorial governance. Thus the key questions were:

- Is the conceptual model of this study, and the way it has been operationalised into a global statistical model, meaningful to policymakers and stakeholders of regions that

have been selected on the basis of their scores in that model and due of their specific characteristics?

- Do the relationships on which it consists hold at different spatial scales?
- What factors of attractiveness that were not included on our model are still very important to explain the spatial trends in attractiveness?
- What policies have been crucial in different contexts to mobilise local territorial capital assets to attract specific audiences and target groups?
- What systems of governance, at different scales, facilitate (or hamper) attraction strategies?

The key messages from case study research can be so summarised:

- The case studies and the discussion with the stakeholders support the relevance of the endowment factors used in the global statistical analysis, though real estate prices and affordability proved to be a driver of attraction especially for internal migration and second-home tourism.
- The mobilisation of regional attractiveness is generally a combination of top-down EU and state policies and bottom-up initiatives of local and regional stakeholders such as municipalities, universities and businesses; EU policies play an important role in making regions attractive for particular audiences.
- Place marketing, paying attention to the quality and the contribution of migration and tourism to the wellbeing of the community, helps to select "target" audiences and develop instruments to attract them.

Looking into the future: policy scenarios and the development of attractiveness

The last part of our project rejoined the analysis of the trends and typologies of territorial attractiveness with the policy focus of our project. The main instrument to do this was the development of a prediction model that expands the "static" structure of the statistical model used in the earlier parts of this study to take into account in a dynamic way the feedbacks and cumulative effects that the attraction of specific audiences produces in places. Specifically, we assume that the attraction flows produces effects locally (for instance altering the characteristics of the local job market and structure of prices) and in other regions (flows are drawn from *somewhere*, altering the characteristics there; this is all reflected in a change of attraction potentials in the future.

Through this model (which uses a more fine-grained set of indicators than the basic "static" model, having been tested in some of case study regions) we could examine the expected territorial effects of policies aiming at increasing competitiveness. We used a place based approach for EU policy - different policies in places with different characteristics and potentials - and we characterised our policies as different "bundles" of meaningful changes to our set of explanatory variables according to the three main orientations of the EU territorial cohesion policy, i.e. "inclusive", "smart", and "sustainable" policies. As for target regions, we performed this experiment in convergence (Objective 1) regions but also in a typology of regions derived from our analysis ("overheating" regions, having been extremely attractive and retentive in the 2001-07 period, but having experienced problems in sustaining this performances in the subsequent years when the economic crisis struck).

Detailed results from this exercise, as well as more general insights on attractiveness as a policy dimension, will be given further on. In general terms, it was found that the "inclusive"

and “sustainable” policy bundles appear to have the capacity to rebalance the concentration of employment opportunities and GDP in the EU core area. Moreover, the “inclusive” and “sustainable” policy bundles also seem to counterbalance the dominance of metropolitan areas. Conversely, the “smart” policy bundle seems to provide a further boost to the urban conurbations. The results also indicate that the application of the policy bundle in clusters of regions characterized by spatial continuity tends to be more effective, due to the synergies induced by an extended and continuous spatial critical mass.

3. OPTIONS FOR POLICY DEVELOPMENT

3.1. A policy development framework

The concept of “territorial attractiveness” has been developed in the ATTREG project as the interaction of a complex set of characteristics based on the presence (or absence) of certain forms of territorial capital with the attraction of various “audiences”, varying in their level of transience in place from long-term residents as working populations to short-term visitors and some hybrid mobilities between these two. In prescriptive terms, then, achieving place attractiveness means finding the right balance in territorial endowments depending on the groups that are the object of attraction strategies (high skilled workers, second home owners, tourists, etc). From this perspective on regional development the ATTREG has identified the roles of environmental, physical and social attributes in reinforcing (or diminishing) the attractiveness of regions for each group.

However, the mere presence of the necessary territorial capital does not automatically lead to attraction and retention of population (or economic development). A strategic approach to attractiveness is based on the identification of what brings about changes in how a place is perceived and trends in population mobility, the consideration of the different ways in which assets can be utilised to make places “different” and “unique”, the analysis of problems and opportunities in the retention of specific groups, and the development of longer-term strategic and integrated policies that simultaneously address a number of different issues and audiences in order to enhance the attractiveness of a place through the creation of new development paths and visions.

Of major importance in this context is the capacity of local governance systems to mobilise these assets, both with regard to existing residents and potential future residents, and various types of visitors. Governance processes have a crucial role to play through what we have termed the *mobilization process* (this is one of the things we investigated in greater depth in RA4), this is because by bringing together the different stakeholders in a place a strategic and action dimension can be developed which is necessary to mobilise the assets that constitute territorial capital.

Mobilisation involves two key elements:

- the role of public authorities and their capacity to strategically instigate and direct the mobilization processes;
- the differential capacities of stakeholders to mobilise assets in a multilevel governance framework.

Thus “agency” (including organisational/ institutional actors and leadership) and the local networks through which mobilization is possible are central to our understanding of the process.

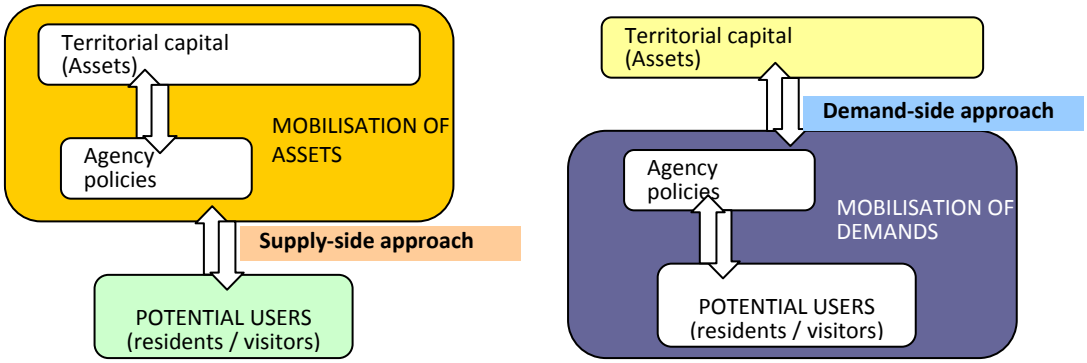

Figure 1 – Supply-side (left) and demand-side (right) approaches in the development of territorial attractiveness

The scheme in Fig. 1 illustrates two different approaches in the development of territorial attractiveness, which are not mutually exclusive and need to be combined in an integrated place-based strategy.

The first (left side of the figure) focuses on the mobilisation of territorial capital; it may either emphasise what already exists (e.g. by identifying and valorising certain qualities of a territory such as heritage and autochthonous cultural elements), or take deliberate actions to enhance territorial capital, through "hard" investments in physical assets (like enhancing accessibility with a new or enlarged airport). Another way to achieve this relates to the so-called "soft" factors (e.g. enhancing the perception of tolerance of a place, by formalising homosexual relationships) that are increasingly recognised as contributing to the quality of places.

In right side of Fig. 1 we suggest that another approach may be to target specific potential place "audiences" implementing a particular vision of the territory and its future development. As was shown in Section 3.1, this may involve territorial marketing or branding (e.g. the choice of some cities to privilege mainly cultural forms of tourism, some regions with a diffuse network of SMEs may target skilled workers, or coastal areas attract flows of wealthy retired migrants). In this case, the aspect of marketing and diffusion of a particular image of the region, related to the target audience, is paramount.

Again, these two approaches should be articulated and integrated; the coherence of this is determined by the capacity of the governance system of a place to develop a shared strategic vision and a related set of coherent measures and policy bundles. In what might be termed "best cases" there will be a clear strategy while in other cases the strategy will be implicit and the aims uncoordinated leading to potential (and actual) divergences among stakeholders which in turn may produce divergent measures and contradictory policies; some case studies in the ATTREG project show a clear difference in this sense (see 4.5).

In terms of policy, the combination of these two approaches represents the capacity over the short period to steer attractiveness and attraction process. The time factor is crucial: policymakers have to bear in mind that mobilisation strategies related to integrated strategies can only be successful in the medium-long period. This combination of specific policy measures is what has we have termed policy bundle(s) that are part of a place-based approach.

The consideration of "territorial attractiveness" – and, in connection, mobility of different audiences – as a key element of EU territorial trends and dynamics lead us to devise a number of ways in which this concept could become operational for policy. For simplicity we

distinguish between a local/regional policy focus by which every regions tries to become more attractive, optimising the balance between its territorial assets and its performance in terms of flows attracted (whereas the *mix* of audiences is also an important issue) or enhancing its territorial capital in order to increase its attraction potential; and a territorial focus, which would be framed into the EU territorial agenda, which identifies optimal combinations of policies according to the general philosophy of the "place-based" approach, leading to a more cohesive and competitive Europe of regions.

Obviously these two policy levels can be harmonised to a certain extent, whereas regions pursue their own interest but the EU channels investments, resources, and favours the empowerment of "mobilisation coalition" and governance structures in order to steer mobility towards more general territorial goals. The ATTREG project has covered both policy focuses, without the pretence of being exhaustive of the ways, territorial levels and targets which could frame a "mobility policy" for a more cohesive EU territory.

3.2. Regional strategies: pursuing attractiveness for place competitiveness

The analysis performed in the early parts of our project (to be illustrated in more detail in the next section) yielded very simple and intuitive messages that suggest which policy initiatives might be the most appropriate in each context, like the fact that attractive regions with an underdeveloped tourism infrastructure, low provisions of cultural heritage assets and more accentuated seasonal climate differences can "overcome" these shortcomings in territorial capital to attract higher net migration and visitor rates than might be expected by mobilising other territorial capital sources (i.e. socio-cultural and economic assets), or that potentially attractive regions where residents express a general dissatisfaction with life tend to attract fewer migrants and visitors than they might expect.

A more structured approach to yielding policy prescriptions suited to regions with specific issues passes through the development of regional typologies based on the main dimensions of our analysis of attractiveness. In Section 4.2 we will show how these typologies have been created and their characteristics. Here we just want to highlight the main messages from this type of approach, looking in particular at one typology that divides regions into four groups characterised by combinations of the values of their global net migration rates and visitor attraction rates (visitor arrivals per 1,000 head of population). Broadly, this subdivision picks

- regions that are both attractive and retentive;
- those that are tourist destinations, but cannot retain their residents;
- those that are retentive for their residents in spite of their lack of attractiveness for tourists;
- those that are neither attractive nor retentive.

This "a priori" classification could hint at very and simplistic general prescriptive messages, by which the first set of regions are in the "optimal" situation and all regions should strive at being as attractive and retentive at possible, and that it is generally better to attract "staying" workers that integrate to the local job market than tourists whose economic impacts are not always optimal and often excessively volatile.

However our analysis allows a better characterisation of the regions by type of mobility attracted. First of all, Fig. 2 shows the approximate position of four classes of regions obtained with the statistical technique of clustering with respect to the two discriminating variables, and some of the regions that are therein included, marking in red the regions

chosen as ATTREG case studies to illustrate the diversity of situations in this respect that we have addressed in the next step of our research.

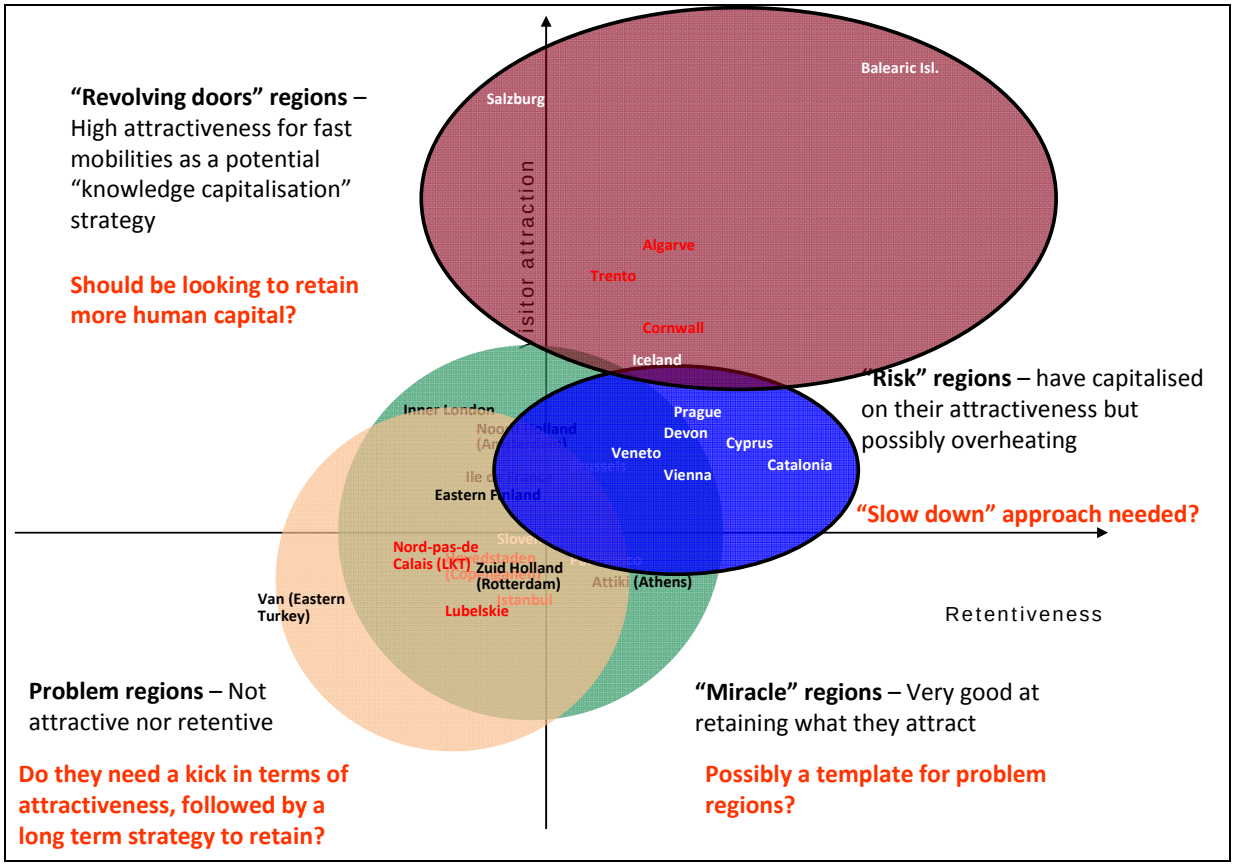

Figure 2– Regional typology by retentiveness/visitor attraction and regional strategies

The four classes do not match exactly with the four "a priori" situations described above, although that classification offers some indications. In any case, the analysis of the regions included in each class – both quantitative statistical aspects and insight from case studies – allows going beyond the simplistic statements quoted above.

Focusing on Class 4 (the brown cluster on the top right of the diagram), which is almost coinciding with the first quadrant of this scheme (high visitor attraction rates and high retentiveness), we found these regions as possibly "overheating" from excessive attractiveness due to factors that are not totally embedded in the local territorial assets, like the expansion of the tourist sector or other driving economic sectors whose capital structure is relatively more "footloose" and exposed to external shocks: for instance they have been the ones that resented more from the economic slump of the late 2000s.

Regions in the second quadrant, where we find most of the Class 3 regions (green cluster on the top left) are characterised by higher-than-average visitor attraction rates and lower-than-average retentiveness and could be characterised as "revolving doors" regions, whose main strength is the capacity to attract tourists and other shorter-term mobilities. This does not need be a bad thing, as it emerged from our conversation with policy stakeholders during the ATTREG Second International Workshop (held in Tarragona on 27.10. 2011), if it is the only available attraction strategy, as is the case especially for small university cities retaining a medium-term population which does produce important "structural" impacts on

the local economy and social capital. However, it might be the case that these regions should to more to try to retain these transient populations through a "rooting" strategy: for instance fidelising tourists into converting them in temporary residents or offering favourable conditions for housing young households at the end of their study careers.

Regions in the fourth quadrant offer no great insight except from the fact that they may be seen as having been successful in capitalising on their local assets for retention of the workforce in spite of their low capacity to attract visitors. Finally regions in the third quadrant, where most Class 1 regions are positioned (bottom-left cluster in pink), have low attraction rates for both migrants and tourists, and are possibly the most problematic cases, in spite of the fact that this does not necessary means that their economic performance was bad, as noted earlier; arguably they could design a growth strategy based on an "attraction kick" in terms of attractiveness for visitors and short term mobilities (as having an event strategy, new and differentiated visitor attractions, or a new university) and using this potential to enhancing their human capital base in the medium term and accomplish a transition to the "safe" fourth quadrant.

3.3. European strategies: balancing attractiveness for territorial cohesion

Local and regional strategies need to be "balanced" within the broader territorial policy approach of the European Union. This brings us to reflect again on the role that attractiveness may play in territorial cohesion, taking in consideration that mobility is mostly a relative concept that connects territories through flows of people – people moving into some place albeit for a short time, and enriching it or in any way altering its development potential, are going out from another, producing opposite effects.

If attractiveness is a way to strengthen competitiveness (something that should not be given for granted, at least within the broader European context, as we suggest in this report[1]), a European policy approach should be concerned with making Europe as a whole more attractive, and in the context of place-based territorial development, this means striving for some balance in the attractiveness of different places, so that as a result of the flows thereby mobilised, in the longer term, the European territory is globally more competitive, but also no less integrated and cohesive.

This approach would be consistent with the EU2020 strategy (CEC, 2010) in that it expresses a need to acknowledge the potential consequences of different choices in the translation of smart, inclusive and sustainable development into policy strategies that have implications for Europe's overall social, economic and territorial cohesion and the relationship between different territories. This, in turn, would produce "winners" and "losers" which could lead to new population movements.

However, in a context in which the dominant policy aim has been to improve Europe's competitiveness, and policies are framed by the need to regain competitiveness or suffer continued relative decline, the increasing interest in mobility associated to the policy objective of "territorial balance and harmonious development" and territorial (and social) cohesion across the European space has not been matched by an approach explicitly targeting mobilities. The challenge for the research community is therefore to provide a

[1] The evidence presented Section in 4.2 is that only a handful of regions across Europe experienced high rates of mobility, and in these regions, despite high rates of net migration and the capacity to attract large numbers of visitors relative to their resident populations, the number of people in employment has grown enough to match the ongoing demand for work; thus at the end of the period average unemployment rates remained high.

systematic evidence base to policymakers (as advocated by the Barca Report, 2009) for strategic decision-making and multilevel governance processes.

There are further reasons why the utilisation of local assets (i.e. endogenous characteristics) within a place-based strategy is of such importance – put simply they have the potential to boost economic growth, etc, and in this context place-based policies take on a crucial role (evidence in support of this approach can also be found in the *Second State of European Cities Report*, RWI, 2010: 17-18). The crux of the issue concerns the extent to which the development and deployment of assets, and the consequent generation of attractiveness, are the result of unplanned market processes, or of conscious government interventions.

Thus ATTREG explores the territorial dimension of *mobilities as produced by attractiveness policies*, and presents European policymakers with an evaluation framework that should facilitate taking decisions which explicitly consider attractiveness and mobilities as elements of the policy toolbox. Our approach entailed the definition of a set of variables grouped into "policy bundles" related to the three dimensions identified in the EU 2020 Strategy (i.e. smart, cohesive and sustainable growth). The aim was to define a set of key drivers within each normative policy discourse and their implications for attractiveness-enhancing policies.

Although the three dimensions are not mutually exclusive alternatives, we decided to emphasize the three policy approaches (smart growth, inclusive growth and sustainable growth) mentioned in the EU2020 strategy, drawing out their territorial consequences. The idea is to extrapolate each of them (through the *ATTREG future* scenario model) to their logical conclusion emphasising the different potential trajectories and their implications. This method raises a number of technical questions such as how we define "good decisions", which assets can be affected by policy, the nature and effect of territorial spillovers and lock-in effects, which are summarised in Section 4.6 and illustrated in detail in the Scientific Report, Chapter 8. We have then combined the scenario methodology with the place-based approach, emerged as a mode of action that seeks to support more long-term, sustainable, development processes, based on the (endogenous) development of territorial assets, and pointing to the significance of the variety of factors we have included in our categories that constitute territorial capital. Thus, "policy bundles" have been applied in specific areas:

- Convergence (Objective 1) regions as defined in EU policy with less than 75% of the EU average GDP.
- "Overheating" regions as classified in Class 4 from our regional typology on retentiveness and visitors attractiveness (see Section 4.2).

These two categories represent "extremes" in terms of regional development that require different approaches to support endogenous development based on attractiveness and territorial capital as we have defined them.

The choice of policy bundles and target regions feed the key experiments that are fed into the "*ATTREG future*", a sophisticated multivariate dynamic model which generates scenarios for the future. This exercise is subject to unavoidable limits, due to the relatively simple assumptions of the model and to the limited number of variables that are included. Our objective is merely to reflect on the general issues and implications emerging from the inclusion of "attractiveness" as a key dimension of EU territorial policy, without any attempt at a straightforward prediction.

The detailed analysis of the impacts from the application of the three policy bundles in the two classes of target regions are detailed below Table 1 (See section 4.6 for a graphic illustration of results through the use of comparative maps). They refer to the scenarios for three variables (population, p.c. GDP, and export jobs) in 2025 produced by changes in

selected indicators of territorial capital (different ones for the three "bundles"), expressed as variations with respect to the baseline predictions of the DEMIFER project. In this sense, our scenario model allows to "correct" the predictions from that project and to revise some general indications from other projects which did not take explicitly into consideration the diverse character of human mobilities and the (unwanted) second-round effects that these can have on territorial policy targets.

Table 1: Scenario analysis – indicative overall Impacts of policy experiments

Policy target regions: CONVERGENCE regions									
	impacts on target regions			impacts on neighbouring regions			impacts on other regions		
Policy bundle	pop.	p.c. GDP	exp. jobs	pop.	p.c. GDP	exp. jobs	pop.	p.c. GDP	exp. jobs
INCLUSIVE	**–**	**+/–**	**=**	**–**	**=**	**+**	**+**	**=**	**+**
SMART	**+/–**	**++**	**–**	**+**	**=**	**+**	**+**	**=**	**+**
SUSTAINABLE	**++**	**+**	**++**	**––**	**–**	**––**	**–**	**=**	**–**

Policy target regions: "OVERHEATING" regions									
	impacts on target regions			impacts on neighbouring regions			impacts on other regions		
Policy bundle	pop.	p.c. GDP	exp. jobs	pop.	p.c. GDP	exp. jobs	pop.	p.c. GDP	exp. jobs
INCLUSIVE	**+/–**	**++**	**+/–**	**+/–**	**+**	**+**	**+**	**=**	**=**
SMART	**+/–**	**++**	**+**	**+/–**	**–**	**=**	**+/–**	**=**	**=**
SUSTAINABLE	**++**	**+**	**++**	**––**	**–**	**+**	**–**	**–**	**+**

Legend:
++: large general growth compared to baseline scenario
+: general growth compared to baseline scenario
=: no overall change compared to baseline scenario
−: general decrease compared to baseline scenario
−−: large general decrease compared to baseline scenario

In general the "inclusive" policy bundle seems to have positive effects in increasing the performance of regions that are underperforming, and at the same time a negative effect on overheating regions. Thus, it shows a specific capacity to reduce disparities among EU regions. The impacts on employment seem to be mixed: in general they are negative for target regions where labour participation rates are high for young and old age groups, whereas the impacts are positive for those regions in which the decline in the population dependent employment outweigh the reduction in the labour force. However, among the various policy bundles, the inclusive one is the only one that does not show a strong correlation between job opportunity and mobility of population.

Regarding the "smart" policy bundle, effects in both convergence regions and overheating regions vary considerably. The impacts on employment is generally negative for the target regions where labour participation rates for younger and older age groups are high, whereas they positive in case of regions with high dependency rates. In general, it seems that this policy bundle is able to affect positively population mobility, job availability and GDP, but with some limits, and it does not affect those regions with limited territorial capacities and a predisposition for smart growth strategies. Indeed, application of this policy bundle on average-performing regions does not seem to be particularly effective.

Finally, it appears that the "sustainable" policy bundle is able to determine positive direct effects in both convergence and overheating regions, attracting population from neighbouring regions. Although it appears as the least effective in terms of GDP increase,

probably due to more investments in quality of life (and soft factors), it has the highest impacts on the regions that in absolute terms present less job opportunity and lower GDP, thus suggesting an important rebalancing role.

3.4. Final remarks in relation to attractiveness as a policy dimension

Clearly there are no simple and easy recipes for economic growth – a complex range of factors interact to determine economic growth and there is no simple relationship between increases in attractiveness and economic growth; there is no inevitable link between forms of attractiveness and economic growth. Much depends on the forms of territorial capital present and how they are utilised. However, we now have a better understanding of several aspects of the overall process:

- There are different forms of mobility (i.e. related to specific groups or mobile populations), and these are driven by different assets;
- There are different typologies of territorial performance (stickiness, retentiveness);
- Economic growth can be one of the effects of attractiveness but not necessarily always of retentiveness;
- Some territories that were extremely attractive in the period up to 2007 have become "fragile" in the current crises – it appears that they may have been "overheating" and that their attractiveness was based on the attraction of flows that were not embedded in the local context;
- A longer term perspective suggests that territorial balance associated with a higher degree of territorial cohesion may be better suited to withstand crisis and generate sustainable economic growth and retain population;
- Territorial cohesion strategies that successfully address territorial capital are long-term strategies; in the short term they may be less "successful" in terms of generating rapid economic growth, but they have demonstrated a capacity to make territories less fragile and development more sustainable.
- While some regions are more selective, targeting specific groups, other regions have no explicit policies to attract particular audiences. One factor that may drive regions to adopt a more selective and focused approach is that when the costs of agglomeration (diseconomies) become higher than the benefits, it becomes more important to pay more attention to the quality and the contribution of migration and tourism to the prosperity and wellbeing of current citizens.

In relation to the development of a strategic vision and associated set of integrated policies It is important that those responsible for policy carefully identify the forms of territorial capital present, assess its strengths and weaknesses, develop an integrated vision, strategy and set of policies that build upon existing territorial assets while seeking to address deficiencies (in relation to the overall strategy) in the existing territorial capital. Such an approach requires a long term perspective with clear objectives that will be pursued in an integrated manner. This is more likely to lead to sustainable forms of development better able to withstand the "storms" of the current crisis.

In terms of the mobilization process it is important to bear in mind the "time" issue. This refers to the recognition that it requires time to build governance processes, as well as to change territorial performance through implementation and mobilization of assets and thus changes in patterns of mobility. There will inevitably be, a somewhat lengthy, time-lag

between actions and results, and this requires a long term perspective. In particular, the building of institutional capital, which in a cross-border area implies the definition of cross-border capacity to cooperate, requires time in building vertical and horizontal relationships (mutual trust, institutional settings, etc), as well as the involvement of citizens and the private sector.

Inevitably the main focus of attention is given to economic development strategies. However, our analysis of attractiveness, with its focus on the wider aim of territorial cohesion, suggests a somewhat different, broader, approach to attractiveness, that implies the introduction into both analysis and strategy of the territorial capital as a factor explicitly affecting the mobility of populations. In this light, for instance, the acknowledgement that in the transition to a global knowledge-based economy it has become paramount for regions to invest in the development of (higher) educational institutions and improve access to them, is not limited to the economic sphere (students as future human capital) but extends to issues of citizenship and social dynamism.

The case studies have also shown that targeting economic development and building critical mass for international competition may be easier and, to a certain extent, more politically neutral than creating a long-term strategy that seeks to internally balance different trajectories to development. However, this does not necessarily translate into long term sustainable "success", such forms of developed are particularly vulnerable to external (exogenous) changes as the post-2007 period has shown.

Finally, the case studies have identified the crucial role of strategic spatial planning: the role of a vision of the territory assists in the process of generating a consensus based on specific territorial considerations, and the associated discursive apparatus facilitates the coordination of various interventions (in the sense of developing a shared understanding of their role and aims. In this sense visioning is at the very least a supportive structure for the coordination of ongoing processes. The institutional setting of governance processes should pay attention to the features that support the creation of an effective combination of vision, implementation, feedback and revision of the strategy to allow for necessary reorientations. This also requires project-based cooperation (i.e. around concrete actions) and nested-scale territorial analysis which are complementary to the processes of formal institutionalization that occur in the formation of governance capacity/mechanisms both within a region and in cross-border regions.

4. KEY ANALYSIS, DIAGNOSIS, FINDINGS AND THE MOST RELEVANT INDICATORS AND MAPS

4.1. Research objectives, structure, and methodology

This project aims to answer a number of specific research questions, derived from the more general objectives of the study:

9. How do different "audiences" react to different territorial asset endowments? To what extent and how are these responses stratified spatially? What main trends and what key determinants can be observed in the relation between territorial assets and attraction of residents and visitors (of different types)?
10. How does the attraction of specific groups evolve over time? What has been the effect on the sustained capacity of regions and cities to attract other groups?
11. What is the role of mobilisation strategies and specific policies in these outcomes?

12. To what extent has attraction of different groups been a determinant of regional growth and competitiveness? Are such outcomes "sustainable'?
13. What are the roles of different economic sectors in the enhancement of attractiveness for cities and regions? What impact do more general economic trends (e.g. the decline of traditional manufacturing or the increasing importance of services) have on regional attractiveness?
14. What is the likely development in the relation between territorial capital, attraction and competitiveness in the next 15 years under different scenarios?
15. What is the future role of policy, from the local to the pan-European level, in mobilising attraction factors so as to achieve more sustainable development throughout European regions and cities? How can "attractiveness" be integrated into the spatial planning toolbox that is being developed by ESPON?
16. What is particular role of medium-sized cities and small towns as "attractive centres" and how are they integrated in this way into national urban systems and the national economy, depending on the specificities of each country and the specific phase of development, historical and institutional background? And what about other "geographical specificities" like border regions, peripheral sparsely populated areas, islands, etc., that are the focus of attention of recent policy documents like the Territorial Cohesion Agenda of the EU?

These questions are unravelled in a number of interconnected research activities, allowing for feedbacks and loops and also including a number of interaction moments with other ESPON projects. Methodology-wise, we distinguish *four* main blocks of research.

The *first* is conceptual research on attractiveness and place development, mainly conducted through desk research of the relevant literature, and identifying a "knowledge gap" between concepts by now established mainly in the regional-economic and geographic studies about human mobility and the way EU policy has until now addressed these issues and integrated them into agendas. The main objectives of this initial strand of research were, on one hand, to define exactly what we should be looking for, and, on the other, to convert these concepts into variables for analysis and to fine tune analytic methods to the outputs of a new wave of ESPON projects that have become available during this period (EDORA, DEMIFER, FOCI, etc.). In doing so, we took into account key developments and innovative perspectives in geographic and regional economic studies:

1. ***The increasingly "mobile" character of the contemporary society.*** While the idea of migration evokes without doubts an extraordinary fact, mostly produced by need, and tourism is characterised as an event in contrast with normal life "at home", in the last 15-20 years we have moved – and we embed this notion in our project – towards a multiplication of forms of mobility, in working life, social relations, as well as leisure, which so becomes a normal condition of individuals and so requires a new epistemological paradigm for the study of human activity and societies (Sheller and Urry, 2006). Acknowledging that everybody is (more or less) on the move, for many different reasons, brings us to reformulate the "audiences" of attraction strategies evoked by the project title (residents and visitors) as positioned on a continuum rather than a binary opposite of long-term/short-term mobility and work/leisure motivations, with strong areas of interrelation as well as "osmosis" between them.
2. ***"Territorial capital" as a multi-dimensional set of place features that is at the base of processes of attraction***. This notion, already introduced in a number of ESPON projects (i.e. Camagni and Capello, 2009), recognises that human mobility – in its different

wavelengths – does not depend only on "neoclassical" economic variables, as the characteristics of the job market or the tax climate, or even on other measurable features, such as accessibility and the availability of services of general interest, but on a much wider range of soft factors determining the "quality of place", sometimes difficult to measure, and in any case subject to strong non-linear (the more a place manages to attract, the more or less these assets are present) and lock-in effects. All together, these factors determine an "idiosyncrasy" of places: all regions and cities are differently endowed and so differently able to attract certain audiences, moving away from a notion by which the territory is basically divided into regions that are well-endowed economically, and so attract, while others are lagging behind and so lose population.

3. ***The "management" of attractiveness*** as the process by which (part of the) territorial capital assets are *mobilised* and exploited by the actions of individual and collective agencies (as well as through more nebulous "market forces"), at different scales, but also by the way in which a territory is governed, in order to be more attractive (Trip, 2007). The opportunities to manage attractiveness are remarkably variable in the extent by which territorial capital factors can be considered exogenous attributes of places (like, for instance, climate), policy instruments under the control of regional governments (e.g. infrastructure and educational provision, landscape protection), or intermediate "place conditions" which could be altered in the medium-long term as a consequence of specific policy decisions or governance styles (e.g. cultural openness, social satisfaction). This process also needs to recognise that there are a range of "different place users" who do not have a uniform set of needs, calling for the ability to both recognise and find a way of reconciling differing needs in the context of an inclusive governance system. It is thus necessary to consider the concept of attractiveness from a governance point of view, particularly in two aspects: firstly, *governance can be a factor of attractiveness*; a well established and reliable governance system can be a factor of localisation. Second, *attractiveness is a concept that shapes the territorial governance process itself*, most notably the "mobilization process" through which territorial assets are activated. Moreover, it also draws attention to the "production" (i.e. as an active process) of attractiveness rather than simply to its "consumption" by users.

Attractiveness can thus be conceived as the complex result of interactions between geographical attributes and a set of factors (themselves, possibly, the result of dynamic processes) that are set in a historic (path dependent) trajectory. It has four important characteristics, which determine to a large extent the various dimensions that need to be analysed for the full comprehension of its effects:

1. History matters: attractiveness may accumulate to its territory over time (as a path-dependent process/set of processes) that can be plausibly associated with the "viscous" character of human mobility.

2. Attractiveness is likely to produce spatial externalities (or overspill effects – both positive and negative) where the attractiveness of any given territory is likely to impact on those that surround it.

3. Attractiveness is a dynamic concept, albeit bounded by path dependency and spatial inter-dependence. Thus whereas attractiveness of a place is influenced by history and by the attractiveness of neighbouring areas, regions that are attractive at a given moment and under a set of given exogenous or endogenous circumstances to a particular group (such as short term visitors), may not be such when these conditions change. Attractiveness can change as a result of policy choices taken either within the territory or at a wider spatial scale – there is the possibility of institutional agency.

4. Finally, attractiveness is not an "absolute" quality of territories, but rather a relative factor of spatial differentiation. Thus a given territory can become more attractive not only because it has acquired more endowment factors but because other territories have lost some of their endowment factors.

This conceptualisation takes into account the broad perspective elaborated in the theoretical debate (cf. Ch. 1 of the Scientific Report), including the role of hard and soft assets, social aspects of attractiveness and intangible elements. Moreover, it moves beyond static milieu factors, including dynamic process of mobilization of assets through more or less institutionalised governance processes, giving a normative dimension to the concept: attractiveness is a concept that should be specified in relation to certain categories of possible users, to attract whom assets are mobilized. This makes it possible to link our analysis with the potential implications for EU policy.

In accordance with this conceptual framework, we also specified variables/indicators in terms of content (what does the variable tell us), in terms of time (at what time periods is the variable measured) and in terms of scale (at what scale is data available to construct robust variables). In addition this process has reviewed whether there were sufficient data available within the three European Candidate countries (Turkey, Croatia and FYR of Macedonia) to include them in the analysis.

In a *second* block, in the conventional way of the ESPON projects, this statistical information – organised at the NUTS2 territorial level, which we found to be a good compromised between the availability of data and the level of detail at which we analyse the spatial effects of attractiveness – was manipulated to derive meaningful information about the main territorial trends characterising Europe according to these research dimensions, and specifically a number of "European maps" describing key territorial trends, the most important of which are analysed and commented upon in this report. Concretely, we have:

1. **Selected and calculated a number of indicators describing the realised attraction of different "audiences", mapped them, and combined them through clustering statistical techniques to derive a typology of regions according to "flows attracted"[2].** Specifically, we included the following measures of mobility[3]:
    a. **Global net migration** into NUTS2 regions, distinguishing between the **three working age groups** mentioned above (early working age 15-24 y.o., mid-career 25-49 y.o., pre-retirement workers 50-64 y.o.)
    - **Visitor arrivals** (per 1,000 head of population) distinguish arrivals of visitors from the same country ("domestic") from those of residents abroad ("foreign").
    - Incoming **ERASMUS students** in local universities within NUTS2 regions.

2. **Selected and calculated a number of indicators ascribed to dimensions or classes of territorial capital, mapped them, and combined them through clustering statistical techniques to derive a typology of regions according to "potential attractiveness" (for different audiences).** After a lengthy process of data mining and verification, a long list of more than 100 indicators, broadly relating with mobility drivers for specific groups, has been brought down to an "efficient" short list of 18 indicators, subdivided into 5 classes of territorial capital.

[2] See caveats on the use of these data in Scientific Report, Ch. 3

[3] In the analysis, we have also considered migration flows between NUTS2 regions within countries (using data collected by DEMIFER for the period 2001-06 and included in the ESPON 2013 DB) and the EUROSTAT statistics on air passengers embarking and disembarking at airports within NUTS2 regions.

- ***Environmental capital*** including assets that are in part exogenous features of territories (climate) and in part the result of territorial management or specific policy initiatives (landscape protection).
- ***Economic and human capital***. This "traditional" set of migration drivers is mostly linked with the mobility of workers especially at initial stages of work careers, plus indicators of labour market structure and components.
- ***Antropic capital***. For this mainly "urban" capital we looked into measures of the intensity and quality of the built environment and accessibility.
- ***Social and cultural capital***. This set of territorial capital relates to "soft" features of places and their societies. We used some proxies as socio-attitudinal data, a social composition variable and the dimension of the student community.
- ***Institutional capital***. This category expresses potential attractiveness due to specific political structures or policy regimes as well as an efficiency of services. Only one indicator was selected for this category: social satisfaction with a key public provision that is health services.

While not all such indicators are significant explanatory instruments of the flows of all the audience considered over the study period, as will be shown in the next section, some of them are at least related to one. We collected these data over the early part of the 2000s (depending on the availability of data, mostly by averaging annual values over the 2001-04 period, so as to smooth down yearly variations) in order to relate them with flows activated over the next period in the mid 2000s (2004-07 of preference) and so allowing for a time gap which could capture an effect of "reputation building" for potential destinations.

3. Related "audiences" to "assets" through multivariate regression in order to:

- Develop a series of equations that the project team will subsequently use in generating a model for considering the potential impact of "policy experiments" (see 3.6);
- Explore the statistical relationship between outcomes and territorial assets in a way to generate insights about actual processes within regions that link territorial assets to mobility outcomes about which sets of territorial assets may be more important than others;
- Identify regions where the data on territorial anticipate different outcomes in terms of migrating and visiting than what actually observed ("outlier regions").

The "ATTREG static model" block in Fig. 3 illustrates the logical structure of this block, by which we related flows (the "mobility" measure), endowment factors (characteristics of territorial areas that together are labelled as "territorial capital") and their of mobilisation (the force of place-based agency), also taking into account the territorial and spatial effects that mobility of different types could produce on original attraction factors, thus making our model dynamic.

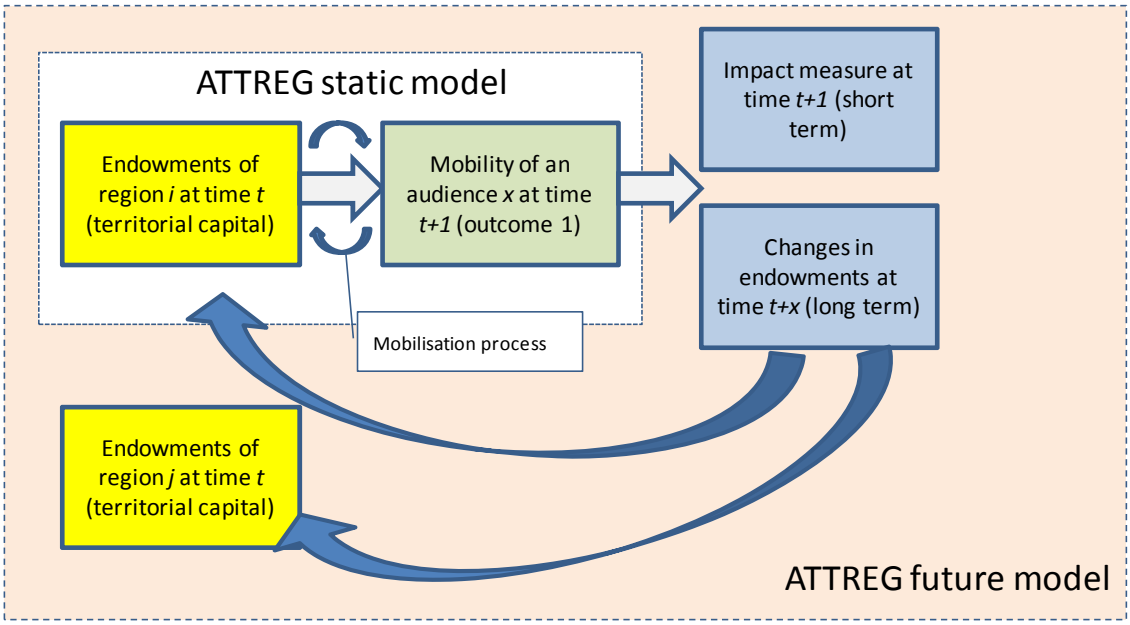

Figure 3 - Conceptual model relating mobility to endowment factors and change

In a *third* block, we conducted an in-depth, case-study based research of *eight* regions and cities that have been characterised as "exemplary" of a certain relationship between assets and audiences (either because they are "outliers", or because they present the expected "sign" but in a specific geographical setting), combining quantitative and qualitative techniques. These case studies are directed on one hand at explaining cause-effect relationships that are only described statistically in the previous analytic block, and on the other, at exploring aspects of this analysis that for the sake of generality have not been addressed there – for instance, varying the scale of the analysis from country-wide to the finest possible level; or including indicators that were not available Europe-wide. This stage of the research allowed us to wrap up the modelling of the relationship between territorial assets and flows attracted, presenting a broad picture of how the process of attraction works, what are its main drivers and context-specific elements, what main spatial trends are observed, and what are the most important elements of complexity that policy should take into account when "operationalising" these relationships into the regional policy toolbox.

The *fourth* block expanded the general model, projecting it into the future. Going back to the logical scheme of Fig. 3, we have assumed that the impacts of attraction (in terms of population, employment, wealth, etc.) feed back into territorial endowments, thus determining a long-term dynamics of attraction for the same regions - but also for other regions, as there is an obvious linkage between them in terms of population mobility: immigration in a region means a relative decrease of population in some other place, which alters its position. We have modelled this through a more complete set of relationships (identified through the case study research) between attraction factors, flows attracted and their effect; that is, bringing into the model the endogenous processes of restructuring of place which spring from attraction. In a sense, this goes in the direction of relating attractiveness with competitiveness, if only to factor in the net effect of the mobilisation of flows across Europe. We used this expanded model (called *ATTREG Future*) to generate scenarios for the future as impacts of a set of "policy experiments" over a baseline model, which we assumed to be the predictions of the DEMIFER project (ESPON, 2010).

4.2. Realised attraction – human mobilities in the ESPON space

The main point of departure of our project is given by the global net migration rates for the period 2001-07, mapped in Fig. 4. This map reveals a prevailing trend for net out-migration from northern and eastern Europe (Poland, northern Finland, Bulgaria), but also including regions from within the European "Pentagon" in Northern France and parts of (mainly Eastern) Germany, towards southern and western Europe and in particular the Mediterranean arc of Spain, southern France and northern Italy. A more articulate analysis shows that net migration rates (positive or negative) are generally low in regions to the east and north, while they are consistently high (and pending to positive) in the west and south.

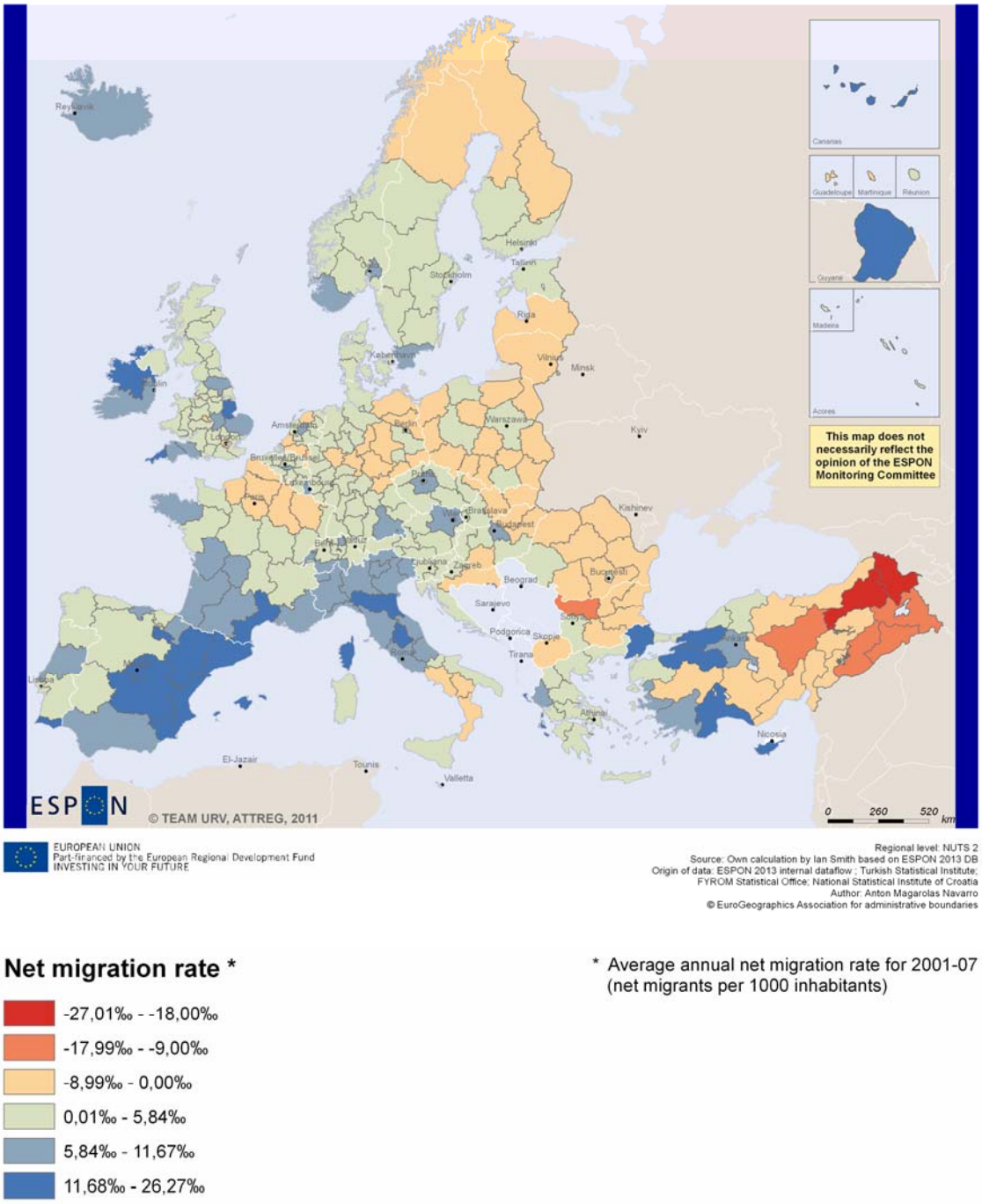

Figure 4 – Net migration rates, 2001-07

Main MEGAs areas, like Madrid, Amsterdam, Prague, also attract population, as do some "intermediate" urbanised regions like Southern Sweden, Western Ireland, parts of Central Italy and of England. The coastal regions of the Mediterranean that are popular tourist resorts, like the Spanish coasts, Algarve, Central-Eastern Italy, Cyprus are particularly dynamic, showing a trend for which tourism can be an agent of urbanisation attracting workers and new "lifestyle" residents. The strongest economic core regions of Europe have a moderate attraction capacity with the negative exception of Paris, London and Berlin, which have probably started to suffer from dimension (and congestion) diseconomies produced by their large attractiveness in the earlier period of the late 1990s-late 2000s.

The general trend however is of a relative increase of population in more densely populated areas also within national systems, and of a severe population loss in Eastern countries and peripheral regions, while Eastern European capital cities reinforce their position (Prague standing out as the most attractive place of the 2004 enlargement area). Even within the de-populating north and east generally we observe on-going processes of centralisation around the capital cities within countries.

How does this picture break down with age? Flows by age groups (shown in the three maps of Fig. 5) show some distinctive characteristics with regards to where they are occurring. Capital cities remain attractive in terms of having the average net effect of pulling in large numbers of younger and middle-aged adults but having a net outflow of older aged adults. In contrast non-capital city regions, on average, have a net inward attraction for all these three age groups.

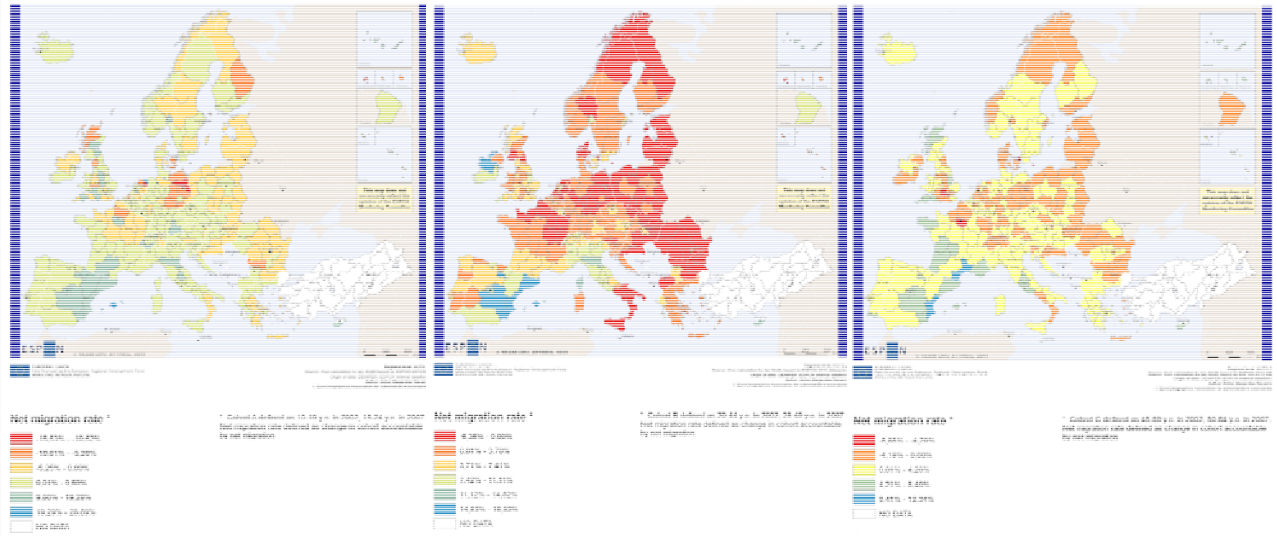

Figure 5a-b-c - Net migration rates by age group 2002-07 (*a*: 15-24 y.o.; *b*: 25-49 y.o.; *c*: 50-64 y.o.)

The 25 to 49 year old group (Fig. 5a) is the single largest cohort of the three we have considered. The countries that make up the ESPON space gained around 4.8 million adults in this age band over the period 2002-07; the UK (with a net in-migration or around 530,000), Spain (around 1.7 million) and Italy (around 1.2 million) were the main destinations. For this group – that we relate with a "career-driven" mobility – economically stronger regions tended to score better, and in general all the strongest MEGA with Madrid, Barcelona, Milan, Dublin, Amsterdam, Brussels at the front, while in London, Paris, Berlin growth was

more moderate. Again, Western Mediterranean coastal areas seem to have strengthened their position using their natural and cultural features, rather than economic assets, as an attractor of this mobility flows. In the dim eastern-European panorama, cities like Bucharest, Sofia, Warsaw exhibited positive attraction rates consolidating their position and widening the population and skills breach in their national systems. Rural and intermediate regions in southern Scandinavia, central France, Spain, and Italy, central England, Scotland, Ireland, also scored particularly well indicating a trend for skilled workers to be interested in medium sized cities and more sparsely populated regions.

Fig. 5b maps net migration rates for the age group who were 15 to 24 years old in 2007. Globally ESPON countries combined (excluding Turkey) gained 2.2 million adults in this age cohort over this period. Again the UK, Italy and Spain account for the largest numeric components to this increase (around 1.3 million net increase). Across Europe the average net migration rate for capital cities is around 8% increase in contrast to the mean of 2% for all other NUTS2 regions. Net migration rates for this age group correlate with net migration rates for adults aged 25-49, suggesting that these two age cohorts are finding similar types of regions to be attractive.

Finally, Map 5c provides an insight into "silver migration", proxied by the net migration rates of the 50-64 age cohort over the 2001-07 period. Whereas the ESPON countries gained around 500,000 people over this period in this age cohort from outside of the ESPON area, we observed that the types of areas that attract this age group of migrants do not consistently attract younger migrants. The "silver age drain" seems to be working from the north-east to the south west of Europe, also at the level of individual countries, towards regions offering higher place amenities, a better climate, and convenient properties, or inland regions known for their amenities, like Dordogne.

In numeric terms Spain, Italy and France are net gainers in this age cohort, posing important questions in terms of social security systems in some of their regions, which increased as much as 6 to 10% of population in this age cohort as a result of net migration. Both the UK and capital cities become net losers of population in this age cohort, while periurban regions of large metropolitan areas also score very well to this respect (Flevoland in relation to Amsterdam, the Cornwall area, and the suburban rings of Prague, Vienna, and Castilla-La-Mancha in relation to Madrid). Paris and London, conversely, seem to be places from where many workers are more likely to flee from when they retire.

Next we took into consideration the "short mobilities". The first is that of tourists. We then used an index of "tourism intensity" (visitors per 1,000 head of population), which represents the size of the "floating" tourist population in relation to that of the "stable" population in a region. The picture of tourism activity calculated separately for domestic and international tourists, and mapped in Fig. 6, reveals somewhat differentiated patterns. While domestic tourism (Fig. 6a) privileges rural and coastal areas within each country, international tourism (Fig. 6b) clearly favours the Mediterranean arc, with coasts, islands and mountain regions at the forefront. France is the only country where tourism activity is mostly evenly spread in inland regions. Sparsely populated peripheral regions like Iceland, the north of Norway and the north of Scotland also get a high share of tourism activity. Among capital city regions, Prague, Vienna, Budapest, Amsterdam, Bratislava and Budapest seem to be the only ones that stand out even after the "urban smoothing" effect. Some regions are clearly under-performing given their location and endowments (e.g. Calabria, Sardinia). The Tallinn-Helsinki cross-border region area offers an interesting insight of an intense flow.

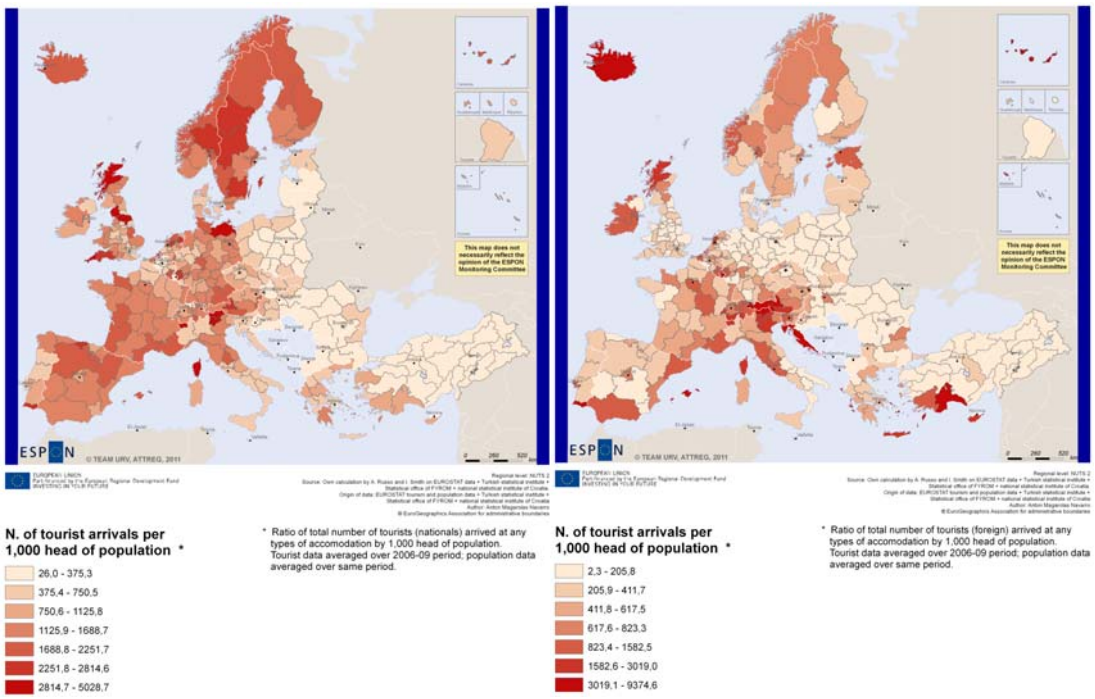

Figure 6a-b **– National (*a*) and foreign (*b*) tourists per 1,000 head of population, 2006-09**

In general, the countries with the largest number of yearly visitor arrivals in 2006-09 were Germany (128 million over the three years), France (124 million), Spain (100 million) and Italy (94 million), with hotspots in southern Spain and Catalonia, Paris and the lower Rhone valley, northern to central Italy. Classic destination regions in the Mediterranean Arc, including coastal resort areas, islands, as well as large urban regions like Istanbul and Barcelona, some metropolitan areas, with Paris, London, Amsterdam, Berlin, and Madrid on top, and a number of rural areas in Scotland, eastern France, central Italy, Sweden, receive the largest share of tourist flows. The "blue banana" regions on the whole score very well, confirming the hypothesis that within mobility flows it is increasingly difficult to distinguish between a purely leisure-driven mobility (traditional tourism), driven by climate and natural and cultural attractions, and other forms of temporary mobility, like congress and business tourism, health tourism, educational tourism, which seem to follow the logic of "GDP plus accessibility".

Finally, we considered the attraction of a non-conventional form of mobility which is statistically included in the category of tourism but obviously is removed from the organisational models and drivers of traditional tourism, that of Erasmus students (incoming students in the academic year 2008/09 for the "top 500" universities in the ESPON space, normalised by the number of university students in regional universities in that same year). Clearly the ability of a NUTS2 region to attract ERASMUS students is somewhat dependent upon a university being located within it. Yet with few exceptions (Paris, Lyon, the south of Sweden and Finland, Copenhagen) the general trend seem to favour exchanges in "amenable areas" rather than in places with the most famous and established universities; for instance the UK and Germany do not score particularly well (maybe due to language barriers), while the Mediterranean coasts and urban areas are very popular. Prague, Berlin, Budapest, Vienna also do very well in attracting Erasmus students.

In order to facilitate a policy "reading" of these data, we built regional typologies. Fig. 7 illustrates a first regional typology based on two mobility variables: the annual average net

migration rate for the period 2001-07; and the average annual visitor arrival rate (for visitors both domiciled within the country and domiciled abroad) for 2001-04.

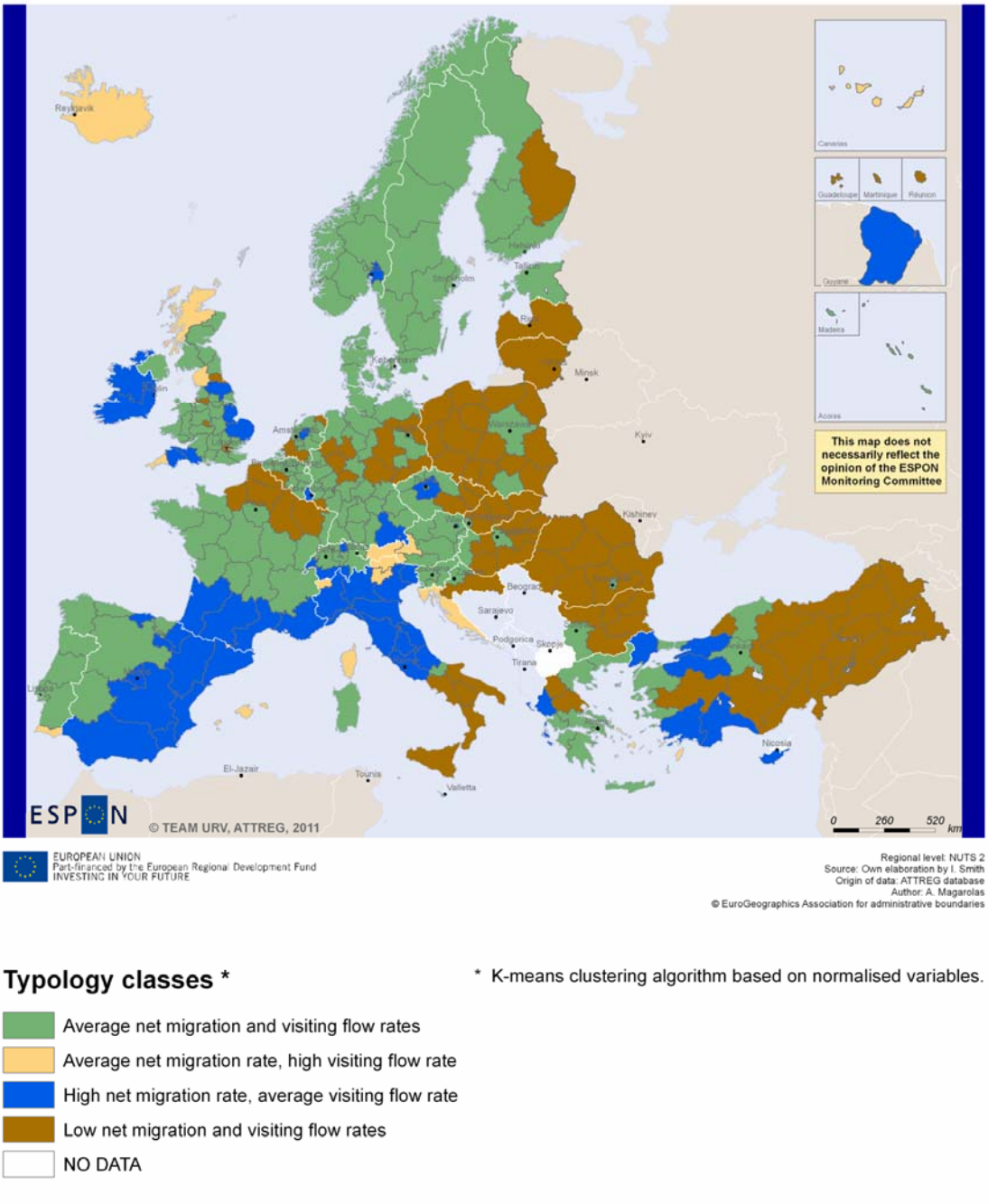

Figure 7 - Regional typology by net migration rates and total visitor arrival rates, 2001-07

The statistical technique of clustering used allowed us to identify four classes of regions in this typology:

- Class 1 is made up of 93 NUTS2 regions (coloured brown in the map) where the average net migration rates over the period are either negative (there is net out-migration) or very small and positive combined with very low visitor arrival rates;

- Class 2 is made up of 157 regions (in green in the map) where net migration rates are positive but small, and where net visitor arrival rates are greater than for Class 1 but smaller than the other classes;
- Class 3 is a small group of 16 regions (in pink in the map) where the net migration rates are markedly greater than for Class 2 regions, but with distinctively very high levels of visitor arrival rates;
- Class 4 is a group of 50 regions (in blue in the map) with a range of net migration rates similar to that of Class 3 but a range of visitor arrival rates similar to that of Class 2.

This typology suggests that there is a broad correlation between receiving visitors and net migration, although the regions in Class 3 are playing a more specialised role in attracting a high volume of visitors relative to their population. These regions are located in the Austrian Alps, along the Adriatic (Croatian), on Mediterranean Islands and along the Atlantic seaboard from the Algarve to Iceland. These are regional locations where special thought may be required to manage the pressure of tourism on their regional economies and societies.

The conventional wisdom is that migrants are attracted by economic buoyancy and tight labour markets. However comparing labour market statistics and economic performances for these 4 groups of regions, the most attractive region types do not have the highest average GDP per capita nor the tightest labour market for highly skilled workers, although regions with the lowest net migration rates and low visitor arrival rates consistently do exhibit lower GDP per capita and employment rates for workers with all forms of qualification.

In terms of unemployment, Class 1 regions demonstrated higher rates of unemployment (measured as a percentage of all working age adults) at the end of our period (2007-09). For the more attractive Class 3 and 4 regions, data show that economies are very exposed to extra-regional labour migration into the regional labour market. By contrast Class 2 regions have a lower dependence on extra-regional labour conditions. It is therefore plausible to suggest that the extremely attractive regions have benefited (on average) from a visiting-migrating inter-relation that has particularly depends on contact with foreign born potential migrants in combination with local labour markets that have been relatively tight for relatively low skilled labour. Thus, in broad terms, there appears to be a set of regions that have a great capacity to attract and retain migrants and to attract visitors. The data also suggest that much of East-Central Europe extending deep into northern and eastern Germany, the peripheral north of Scandinavia and the north-eastern France and southern Italy are relatively unable to attract either migrants or visitors. These are areas that appear to be relatively lagging in economic terms but equally appeared to have benefited from the re-balancing offered by migration patterns during this period.

A second regional typology was developed looking at net migration rates by age group. This was a typology for which we were unable to generate data for Turkey but it does cover all EU27 member-states plus EFTA countries. Again we generated 4 classes (mapped in Fig. 8):

- Class 1 is made up of 152 regions (coloured green in the map) that demonstrate net migration rates around zero (a mix of net out and in migration rates) for the younger adults and older adult groups;
- Class 2 is made up of 82 regions (in pink in the map) that demonstrate broadly positive net in-migration rates for both younger and older adult groups (greater than Class 1);
- Class 3 is a group of 36 regions (in brown) that demonstrate relatively high net migration rate for younger adults but net out-migration rates for older adults (lower than Classes 1 and 2);

- Class 4 (age related) is a small group of 21 regions (in blue) that demonstrate net positive migration rates for younger adults (similar to the range of Class 3) but net migration rates for older adults higher than for all the other clusters.

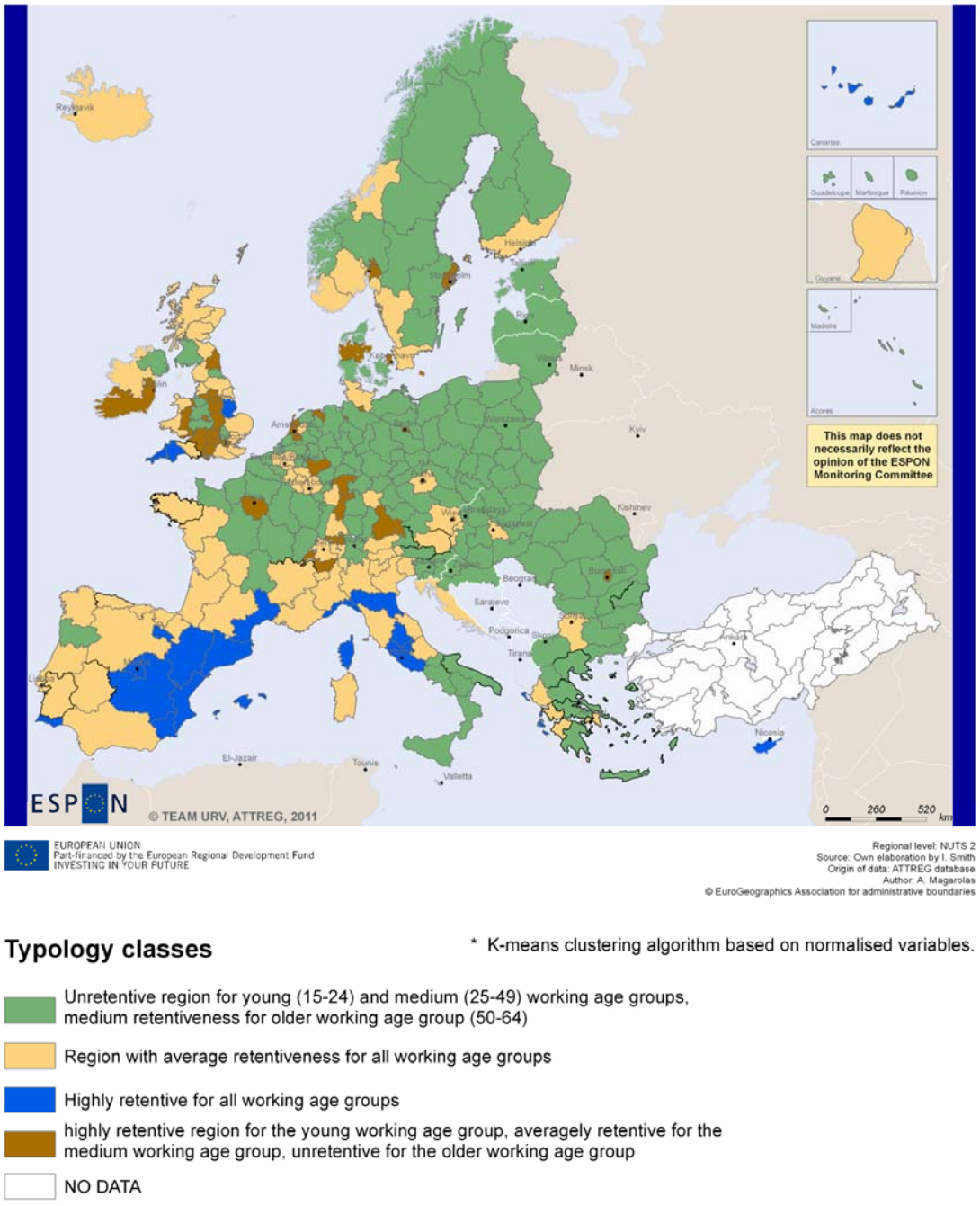

Figure 8 – Regional typology by mobility of age cohorts, 2001-07

The regions in Class 3 appear to be the most interesting in this typology in terms of policy messages. This group includes many regions of capital cities such as Inner London, Paris, Berlin, Stockholm, and some other major economic hubs of Europe like Bavaria and the region of Frankfurt. These regions may have been so attractive to the point of having reached some sort of threshold by which, even if they continue being very attractive for

starting workers, they experience problems retaining the older age groups possibly due to declining urban quality and high prices.

Finally, we have looked into the association of these typologies with specific geographic features, as incorporated in the ESPON 2013 Database. Data suggest that mountainous regions are in general more likely to attract higher net migration flows across all age groups with a higher membership of age-related (that of Fig. 8) Classes 2 and 4. However membership of age-related Class 3 is higher for non-mountainous regions suggesting that the absence of mountainous environments (and the associated environmental amenity) may make regions less attractive to older adults (who subsequently out-migrate). The distinction between the preferences of older and younger adults is reinforced when we look into the attractiveness of capital city-regions, which tend to experience net out-migration by older working age adults whilst experiencing high level of net in-migration by younger adults.

4.3. Territorial Capital – attraction potentials in the ESPON space

Regional typology by territorial capital endowment

To simplify the general interpretation of the trends in territorial capital we created five synthetic indicators by classes of territorial capital, obtained as weighed averages of the normalised values of basic indicators considered in each group, and a global synthetic typology illustrating the different specialisations of regions in terms of their "endowment" mix with different forms of territorial capital. Following, we provide a detail of the main trends exhibited by the spatial distribution of the values of these indicators and their role as potential drivers of human mobility.

Environmental capital

As far as climate is concerned, we used a Tourist Climatic Index (based on a methodology developed by Mieczkowski, 1985) based on a complex set of climatic properties that include temperatures, humidity, sun radiation, rainfall, etc. Climate is an important explanation of the choices of tourists, but increasingly it also affects the mobility of immigrants, and especially of mid-career workers in our study, and even more of the "pre-retirement" cohort. Our data show that while in the winter "warmer" regions are clearly preferred as holiday locations, other regions that are currently underperforming as tourist destination have good chances to reinforce their tourist position in the summer and shoulder months. However human mobility is affected to a larger extent by the average climate throughout the year and is sensible to the variability of the weather at destinations: stable conditions are generally preferred (and offer more convenient residential opportunities) over regions with hot summers and cold winters. From this point of view, there are more favourable conditions in the classic Mediterranean arc as well as in some eastern European regions. Regarding the quality of the natural landscape, the share of classified "Natura 2000" sites emphasises the potential attractiveness of many rural and peripheral regions, although important urban regions (Madrid, Marseille, Rome), and intensely developed tourist region (the Venice province, the Canary Islands, the southern French coast) also score very well. This could be an interesting criterion to lower down the critical threshold of migration policies.

Globally, environmental capital is richer in regions that are comparatively warmer and more stable in terms of climate, but also by regions characterised by high standards of landscape management; the overall distribution does not show a clear spatial pattern but it does highlight that most Mediterranean coasts, though attractive in terms of climate, may have been "overdoing" in terms of construction and landscape change (e.g. the southern and

eastern coast of Spain and southern and insular Italy) and that peripheral regions at the eastern edge of Europe may offer an advantage to this respect, counterbalancing population loss with a high potential as destinations for tourism and retirement migration.

Economic and human capital assets

Thus one first indicator that we considered in this group – which turned out to be a good proxy for almost anything else related with economic conditions driving the migration of workers in any age group – is per capita GDP, whose distribution returns the usual "pentagon" figure with a higher attractiveness of regions in the centre of Europe and in large metropolitan areas and national capitals. Yet one of the key assumptions of our study is that the causal relation between economic and social capital has become more complex and bi-directional in an era of accelerated mobility. These aspects are captured by the potential quality of human capital in our NUTS2 regions by educational attainment amongst working age adults aged 15 years or more. The general distribution of people with a tertiary education is one that is biased towards Western Europe and Scandinavia and towards capital cities, and is on the rise throughout Europe. We also calculated an index of creative and cultural professions as a share of the active population, that highlights the importance of cultural employment in large cities, especially in Central-Northern Europe (but also in Madrid, Vienna, Rome), and in countries characterised by a remarkable capacity to elaborate cultural values into knowledge-based industries, like Finland (telecom), Sweden (design, electronics), the Netherlands (media, publishing), Switzerland (design, architecture).

We also considered the labour market structure in terms of the percentage of residents working in three broad "service" sectors of the economy: consumption-related, private-marketed and public sector employment. Thus England emerges as a nation of shop-keepers, while also coastal regions in Spain and western Italy are high in this type of employment probably because of tourism-related activities. The Tyrol in Austria, the Algarve in Portugal and the Balearic Island of Mallorca record the highest levels of employment in consumption-related services for the period 2001-03. By contrast, private marketed services might be thought of as being associated with the command and control functions of the global economy. Thus the London and Paris regions (along with Brussels, Madrid and Scandinavian capitals) demonstrate high levels of employment in this part of the service sector economy. These are forms of employment that are probably the most "footloose" of the service sector and most responsive to the differential geography of available and high quality labour. Employment in the public administration in high in very peripheral areas such as Nord-Norge (Norway) and Northern Sweden as well as deprived and peripheral areas such as Northern Ireland and Merseyside in the UK (all these areas had more than 39% of employment in public administration in 2007-08). The lowest levels of employment in public administration were recorded in Turkey and Romania (around 11%).

Thus on the whole economic and human capital offers a comparatively opposite picture from environmental capital, being richer in the core of Europe and especially in metropolitan areas, as well as in some of the tigers of the European economy of the early 2000s and in mature tourism destinations, while it underplays peripheral and rural regions of Europe and CECs.

Antropic assets

Our first indicator in this class returns the spatial density of important cultural heritage sites and other cultural attractions (as rated by a tourism guide collection), a good measure of how attractive a place is for tourists but also for specific groups of immigrants whose choice of destinations is driven to some extent by the "status" of locations. An elaborated index assigning more value to individual sites than to individual monuments and objects in relation

to size assigns high values to German, French, Belgian, and Polish regions, though Brussels, Inner London, Prague, Vienna lead the list.

The provision of accommodation has become an additional explanatory variable of the performance in attracting flows, and as a consequence, certain places have adopted a supply-side strategy, strongly relying on scale returns, to develop as tourist destinations generating a sort of "artificial" attractiveness which is mostly popular among seaside resorts. By this criterion south-western European regions and coastal regions as well as metropolitan areas lead in offering this infrastructure, even when confronted with a more distributed "attraction potential" from cultural and natural assets as in the previous maps.

As a measure of infrastructure that facilitates accessibility we have considered airports, and specifically their ranking in terms of passenger traffic. Airports ranking higher have a greater capacity to attract visitors and other migrants by offering easy (and cheap) access to destination regions, this also suggests that investments in airport infrastructure and the development of routes is likely to make a difference in the attractiveness of regions. Our analysis of this indicator suggests that not all "potentially attractive" places offer a good level of access while others (as in the case of southern Turkey and Scandinavia) have boosted their accessibility in this way. To capture other forms of accessibility (and the enabling infrastructure) we also calculated an index for the road and ferry network, returning a familiar picture of the greater advantage enjoyed by regions at the European core compared with the periphery.

Finally, we considered urbanisation measures, captured by gross population density and by including at least one MEGA. Globally, antropic capital is richer in the European core and in more accessible regions and metropolitan areas, though the Mediterranean coasts, including some backwards regions in Italy and Croatia, are also very well endowed due to their extraordinary offer of cultural assets. Catalonia stands out as one of the regions with the richest endowment in this respect.

Social and cultural assets

Regions that score high in terms of residents who were "satisfied with life as a whole" (from the ESS survey) relative to the EU median score are those who are less likely to generate "lifestyle" migration – people from these areas could decide to move away for economic or health reasons but it is unlikelier that they would move purely to find a better socio-cultural environment. On the other hands the indicator reveals a "dissatisfaction" which is clustered in Eastern and North-Eastern European regions, as well as in Southern Italian regions.

The presence of a relatively large pool of young educated people is a form of socio-cultural asset, attracting other groups, and capturing the "cultural vivacity" of areas that host a large student population. High percentages of students are found in Central Italy, Northern Spain, Northern Greece, Poland and Scandinavia, and - surprisingly - lower rates in core regions, possibly indicating that areas with higher unemployment are those that push a larger share of young people to pursue higher qualifications. The opposite picture is represented by ageing. We included a measure of the dependency rate of the resident population which shows the demographic problem of Europe's periphery but also of some core areas like north-central Italy and France.

Socio-cultural capital definitely puts a prize on "welfare" regions in Northern and North-western countries, like Scandinavia, the Netherlands, and Ireland, as well as some Alpine regions, though capital cities all over Europe seem to enjoy an advantage, and the position of Turkish regions also returns as very favourable to this respect.

Institutional assets

The index of "satisfaction with health services" (with respect to the EU median score) from the European Social Survey shows the higher perceived institutional capability of regions in the North and West of Europe, with a special mention of Belgium, Finland, Iceland, the Copenhagen region, and the Italian autonomous region in Val d'Aosta, while surprisingly also central Eastern Turkish regions score well to this respect.

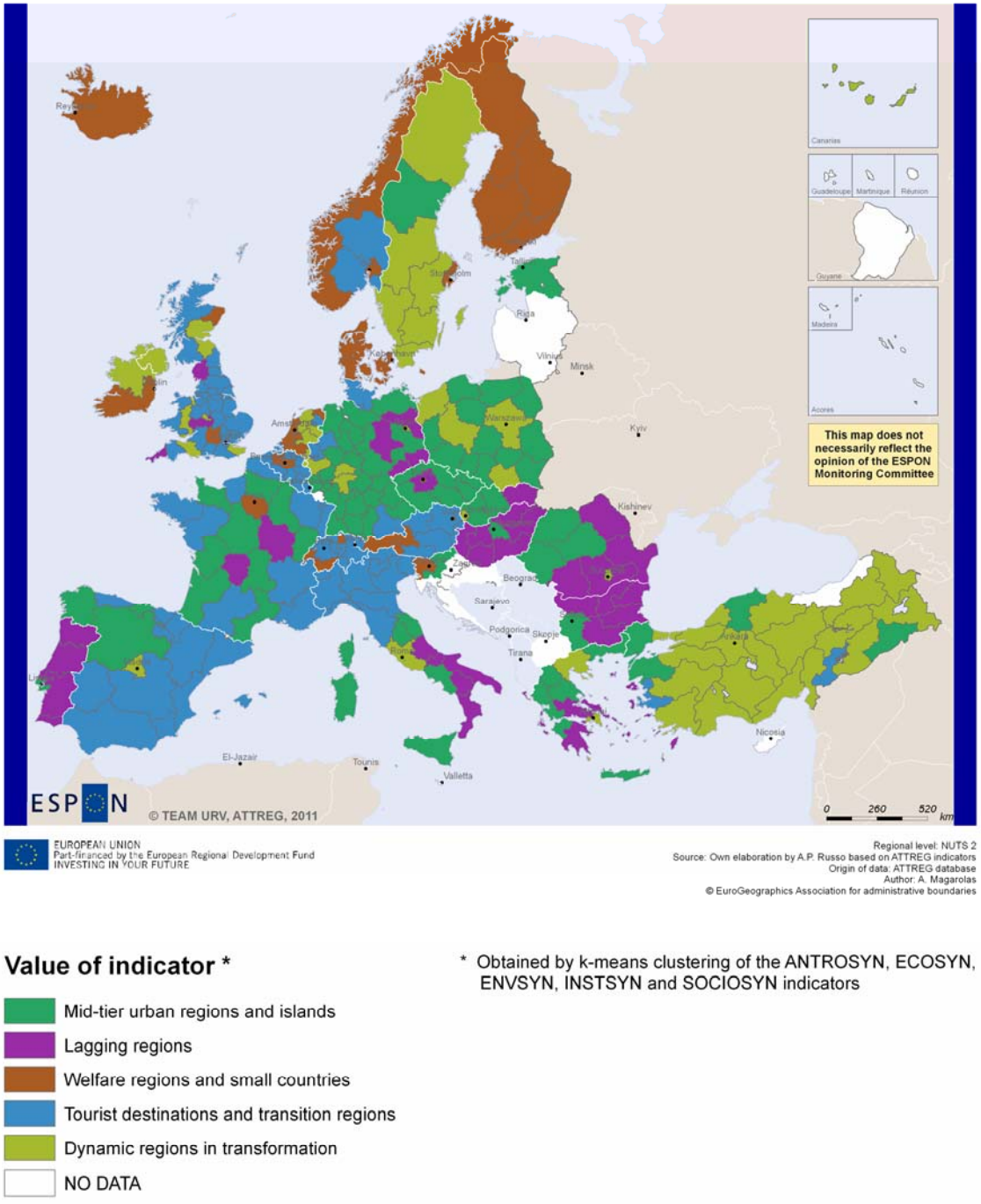

Figure 9 – Regional typology by endowments of territorial capital

The synthetic typology illustrated next provides an insight of what the most attractive regions for specific audiences could be. The five clusters we obtained, mapped in Fig. 9, could be characterised in the following general terms:

- **Cluster 1** includes mostly regions that could be characterised as "Mid-tier urban regions and islands", whose potential attractiveness is mostly due to a high provision of environmental capital and have a high potential to attract a certain type of mobility that is mostly appreciative of good environmental conditions
- **Cluster 2** includes lagging and mostly rural regions, again characterised by generous endowment of environmental capital but low levels of all the other forms of territorial capital, which underplays their general attractiveness for any audience
- **Cluster 3** includes mostly regions characterised by a welfare state in predominantly small size countries, as well as some of the economic powerhouses of Europe, whose only low point is the environmental capital provision; they are likely to result as the best endowed regions to attract work-motivated migrants and especially young starters
- **Cluster 4** includes mostly tourist destinations and regions in economic transition that do not score too well in terms of their environmental and socio-cultural capital, but offer adequate level of infrastructure and economic stability

  Cluster 5 includes mostly dynamic regions in transformation, whose main source of territorial capital is the socio-cultural one but also enjoy high levels of environmental capital, resulting potentially attractive for a certain type of lifestyle migration

4.4. Relating Assets and Flows: Patterns of Attractiveness of Territorial Capital

The attractiveness of specific factors to different audiences

We now look at the most interesting results that we obtained in terms of the flows that can be explained through the territorial capital endowments. Table 2 below summarises these relationships, which are analysed in greater detail in our Scientific Report (Ch. 5).

Given that the relationships we are dealing with are very complex, the predictive power that we obtained is rather high, indicating that our analysis does capture some important aspects of this statistical relationship. Five measures of territorial assets were consistently identified as having a statistically significant relationship with net inter-regional migration rates over the different time periods:

- the *number of bedplaces in tourist accommodation*, where the more bed spaces there are, the higher is the net migration flow;
- the *seasonal difference in climate index* whereas regions with a smaller difference between warm and cold are associated with higher net migration flows;
- the *proportion of resident working age adults employed in public services* - the greater their proportion the lower the net migration flow;
- the number of *registered students in higher education* (as a share of 1,000 residents aged between 15 and 24 years old), whereas the higher the ratio, the higher the net migration flow;
- the level of *general satisfaction with life* such that the greater the proportion of satisfied residents the higher the net migration flow.

However the existing literature on migration would suggest that migrants of different ages might be driven by different attracting factors. The three measures of net migration by age cohort (cf. 4.2) were regressed against the measures of territorial capital. The results in this case are slightly more complex to interpret, as different territorial assets are important for different age groups and could be interpreted as attractive for one age group but not for others. Overall the regression analysis is better placed to explain the territorial assets that might attract higher net migration flows of younger adults than for older adults. This might be the result either of older net migration patterns being more complex (for example older people dividing into "lifestyle" and "ongoing career" migrants) or because the territorial asset variables are less able to capture the things that attract older working age people.

Table 2 - Summary of significant regression associations

		Outcome measure for regression analysis						
		Net migration rates 2001-07				Visitor arrival rates 2001-04		
		Total annual flow	Flow of 15-24 year olds	Flow of 25 to 49 year olds	Flow of 50 to 64 year olds	All visitors	'Foreign " visitors	Domes-tic visitors
an1	Monuments index		(+) *	(+) ***	(-) **	(+) ***	(+) ***	(+) ***
an2	Gross population density		(+) ***		(-) ***			
an3	Airport rank	(-) **	(-) ***	(-) **		(-) **		(-) **
an4	Bedplaces in collective establishments	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***	(+) ***
an5	Accessibility							(-) *
an6	Metropolitan areas			(+) *				
ec1	GDP per capita		(+) *		(-) ***	(+) **	(+) *	
ec2	Highly educated residents	(+) ***	(+) **	(+) ***		(+) ***	(+) **	(+) ***
ec3	Employment in consumption sectors						(+) ***	(-) ***
env1	Climate stability	(-) ***	(-) ***	(-) ***	(-) ***			
env2	Share of Natura 2000 landscape designation							
env3	Coastal regions		(-) ***			(-) **	(-) **	
env4	Island regions	(-) *	(-) *	(-) **				(-) **
in1	Satisfaction with health services							
in2	Employment in public sector	(-) ***	(-) ***	(-) ***		(-) **	(-) **	
in3	N. of NUTS2 regions in country					(+) **		(+) ***
soc1	Share of university students registered in local universities on young age cohort	(+) ***	(+) ***					
soc2	Satisfaction with life	(+) ***		(+) **				
soc3	Dependency rate	(+) *			(+) ***	(-) **	(-) ***	

Significant at 10%: *, Significant at 5%: **, Significant at 1%: ***

For the younger age group, we found an association between higher net migration flows and more "urban" regions or regions with busier airports, whereas for the mid-age group the association was with culture-rich regions (as captured by the monuments index) and again regions with busier airports. By contrast, higher net migration flows for older working age adults were associated with regions with a lower population density and, interestingly, fewer monuments.

For economic-human, environmental and institutional assets, there was a high degree of similarity in the territorial assets associated with higher net migration flows for both the younger and the mid-aged group. Thus higher net migration flows for both groups were associated, among other, with higher levels of higher-educated people in the workforce and

smaller differences in the warm and cold season tourism climate indices; lower proportions of people employed in public services. With the exception of the climate indicator the three other variables were not associated in any statistically significant sense to net migration flows for older working age adults. Instead higher net migration flows for the older group with associated with regions that recorded lower levels of economic production (p.c. GDP).

In the category of social capital assets the regression analysis suggests that each of the age groups is associated with different indicators. These associations indicate a tendency for people within the younger and older age groups to move where there are already relatively larger populations of people in similar age groups.

We also observed differences in the association of visitors by origin (domestic vs. foreign) with the various measures of territorial asset. It is not surprising that higher levels of visitor arrivals are associated with regions with a greater accommodation capacity and with more monuments to see. It is perhaps a little strange that higher levels of visiting are associated with a busier airport only in the case of domestic visitors. Climate does not appear to be a significant attractor whilst island regions appear to have a negative effect on domestic visits. Equally regions located in larger countries (with more NUTS2 regions) attract a higher number of domestic visitors. Foreign visitor numbers appear to be associated with regions with higher wealth, a lower proportion of public sector jobs and a smaller proportion of residents of retirement age. The regional proportion of employment accounted for in shopping and tourism has a contrary impact, since increases in this proportion are positively associated with more migration and visiting by foreign visitors but is negatively associated with domestic visitor numbers.

Thus different mobile groups appear to be associated with different types of territorial assets. The question arises as to whether these territorial assets are found in the same region or generate different types of geography. It is clear from the regional typologies of mobility that the "overheating" regions attract high net migration flows across all three age groups and also attract high levels of visitors although it was also notable that the geography of net migration amongst younger adults showed some significant differences in relation to metropolitan regions (higher net migration flows for younger adults and lower net migration flows for the other age groups).

Outliers: the regions that perform "extraordinarily"

Outlier regions in our analysis are those where there appears to be a mismatch between the territorial assets of the region and the levels of net migration into and visiting to the region; these are classified in terms of the type of mismatch with reference to membership to the first of the regional typology of mobility based on net migration rates and visitor attraction rates, and mapped in Fig. 10. In the context of this research it is amongst these outlier cases we are most likely to appreciate the impacts of policy issues either as a consequence of governance networks failing to mobilise assets (and thus appearing to attract fewer net migrants or visitors than one might have expected) or a result of governance networks making much of the assets they do have (and thus appearing to attract a lot more net migrants or visitors than might have been predicted).

In terms of the simple identification of outlier regions, the region that is most commonly identified as unusual is the region of Paris (Île de France) where the regression analysis under-estimates the visitor numbers that are actually recorded and where the net migration flows across all age groups with exception of the mid-aged group are "over-predicted" by the regression analysis. Andalusia is also predicted as receiving more Spanish visitors than might be predicted and higher net migration flows (for 2004-07 overall and for 25-49 years for 2002-07 in particular) than what might be expected based on its territorial assets. With

the exception of the Paris region (for most net migration measures) and the Greater London region (for net migration for the 50-64 are cohort), the underestimation of net migration rates appears to be an issue for a group of Spanish and Italian regions.

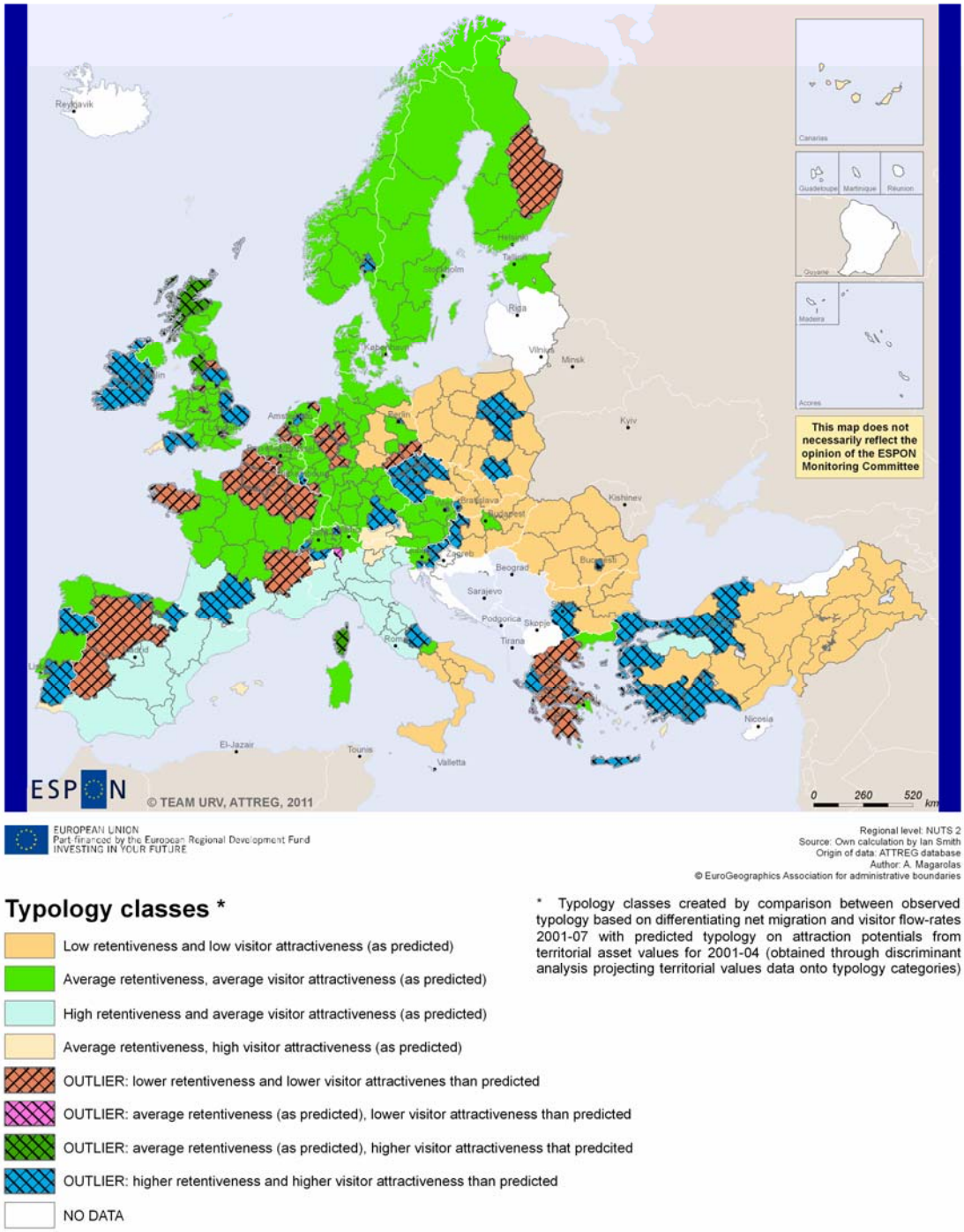

Figure 10 - Differences between predicted and observed membership of visiting-migration typology

Thus the Madrid, Barcelona (Catalonia), Valencia regions are identified as having significantly higher levels of net migration both for the different time periods and for the three different age groups. In Italy, Lombardia (the region of Milan) is identified as an outlier in both time periods for overall net migration and in relation to the 25-49 year old age group whilst Lazio (region of Rome) is identified a couple of times. Thus the data suggest that some Spanish

and Italian metropolitan regions may be attracting globally a lot more migrants than might have been expected given their territorial assets.

It is the "high flying" regions that are the most problematic. For the most part there are regions of Greece, France and Spain where territorial assets would suggest membership of the "overheating" regions, but on the basis of observed net migration and visitor rates these regions have attracted fewer people per inhabitant than might have been expected. Equally there are regions in Ireland, the United Kingdom, Greece and Turkey as well as a range of capital city regions that have attracted observed flows of migrants and visitors over and above what might have been expected given their level of territorial assets.

Considering the class of "overheating" regions, 22 regions were predicted as being in this cluster based on their territorial assets and were also assigned to this class due to their mobility rates. On top of this there were 26 regions who were assigned to the class on the basis of their mobility rates but who were classified in a regional type where lower net migration and visiting might have been expected on the basis of their territorial assets. A further 9 regions were predicted as belonging to Class 4 on the basis of their territorial assets but were assigned to a lower mobility region based on observed flow rates. Comparing the territorial assets of the three types of Class 4 region it is clear that the regions who were predicted as having lower migration and visitor rates than was observed had fewer monuments, bigger seasonal differences in their climate, fewer hotel beds and a small ratio of people of retirement age to working age population than the regions that were both predicted and observed as Class 4 members. The 9 regions that had markedly lower mobility rates than might have been predicted had noticeably lower "satisfaction with life in general" amongst their residents. Being a capital city-region in a broader regional context of low net migration appears to be associated with a higher level of net migration and visiting than might be expected based on the 19 measures of territorial asset alone.

4.5. The Mobilisation Process

Objectives and methodology of the case study research

In the previous section we related the attraction audiences with territorial assets, and we showed how it is possible to predict a fair amount of the attractiveness of regions and cities over the 2000s decade considering the endowment of different types of territorial capital.

However, this is analysis is neither exhaustive nor sufficient to understand the full picture of the way in which territorial assets are mobilised in order to function as attraction factors. To cover in an exhaustive way this objective, we have used a mix of case study methodologies, from qualitative research to quantitative techniques, and a rather broad range of case study regions, from cities to whole countries.

Although we provided a protocol for the case studies, there are some important differences in research methods between the eight studies that have been carried out. The cases of Denmark and Slovenia are more quantitative in their approach and oriented to the development of scenarios, with a more limited number of interviews but the development of a richer database both in term of scale (which is municipal and addresses mobility between LAU areas in the country), and in terms of indicators used. The other six case studies combine data analysis (quantitative) with a more qualitative policy review based on interviews with representatives of governments, businesses, knowledge institutions and other stakeholders. However all case studies follow the same "script" in terms of research questions.

It should also be mentioned that further insights into the case studies have been gained during the Second ATTREG International Workshop, held in Tarragona on October 27, 2011. In this workshop representatives from six of the eight case study regions have been invited to discuss the intermediate project results and the comparative "reading" of the findings from the case study research.

In this section we present the most relevant findings from the eight case studies, without claiming to give a complete overview of all eight cases. For more information we advise to consult Chapter 6 of the Scientific Report and the individual case study reports that are annexed to it.

Characterisation of the case studies

The case studies dealt with eight regions that have their own unique characteristics. First of all the regions are located in different parts of Europe (see Fig. 11), from the northwest (Cornwall and the Isles of Scilly[4], Lille-Kortrijk-Tournai[5]) to the southeast (Istanbul) and the southwest (Algarve) to the northeast (Denmark/Bornholm, Lubelskie). Slovenia and the Province of Trento represent the geographic centre of Europe. Our sample includes one island (Bornholm) and one region that can be characterised as mountainous (Trento). Furthermore some case study areas can be labelled as "urban" or "metropolitan" while others are decidedly more "rural". The most densely populated region in our sample is Istanbul, with almost 2,500 inhabitants per sq.km, followed by the cross-border region of LKT (500 inh. per sq.km). The other six case study areas are significantly less densely populated, though some are polarised in that they include medium-sized cities such as Trento, Lublin, Ljubljana and Maribor.

The case studies deal with different units of analysis. While our model looks at attractiveness on the level of NUTS2 regions, some cases have purposively been selected to analyse relations on a smaller and/or larger spatial levels. In the case of Denmark, for example, we look at flows between 98 municipalities (LAU), paying specific attention to the implications of policies for the island of Bornholm. A similar approach has been used in the case of Slovenia analysing flows between 192 municipalities. The Autonomous Province of Trento is a NUTS2 region that corresponds with the NUTS3 region, as does Istanbul, which is also one of the 12 NUTS1 regions in which Turkey is divided. The most complicated case in our sample, when it comes to defining the borders, is the "Euro Metropole" LKT: this cross-border region covers parts of three NUTS2 areas on both sides of the border between France and Belgium. For the other three case studies (Algarve, Cornwall and Lubelskie) we used the NUTS2 region as primary unit of analysis, although we also paid attention to internal variation.

The eight regions we analysed differ in their ability to attract and retain people. Using the analysis carried out in the previous stage of the project we can characterize the eight regions as follows (further information is provided in Table 3):

- Algarve is an averagely retentitive (for all age groups) and highly attractive region for visitors, being an important international tourist destination. The region attracts more foreign tourists and 50-64 year old migrants than predicted by its territorial capital assets, and scores low in terms of internal migration.
- Bornholm's region Hovestaden (NUTS2) has a low retention rate and a high level of internal out-migration, and has been qualified as a region that is generally unretentive

[4] Hereafter abbreviated as Cornwall.

[5] Hereafter LKT.

except for the young age cohort (including ERASMUS students). However this classification regards the whole region that includes the national capital Copenhagen; data on NUTS3 level for Bornholm are not available.

Figure 11 – Location and characteristics of the 8 case study regions

- Cornwall combines a high retention rate (for all age groups) with a mid-level visitor attraction, being especially attractive in terms of internal migration. The region has been qualified as a major domestic destination. Interestingly, this region is stickier than predicted by its territorial capital.
- Istanbul has not been included in the data analysis of retentiveness by age groups, but it is classified as a region with average global retentiveness and a mid-level visitor attraction, that is particularly attractive for internal migration. Both retentiveness and

visitor attractiveness have been increasing throughout the study period from the early to the mid-2000 decade.

- LKT shows a low retention rate except for a moderate retentiveness for the older age group, and some ability to attract to visitors in the Belgian part, while the French side has a low score on both factors. Overall, however, the region has been qualified as unretentive for all age groups, though the balance between internal and external migration rates varies a lot internally. The Flemish part is also particularly attractive for ERASMUS students.
- Lubelskie scores low on retentiveness and attractiveness to visitors, and has a high rate of out-migration.
- Slovenia has been categorized as a region with average visitor attraction and a relatively low ability to retain people of all ages, though its retentiveness has increased slightly throughout the study period from the early to the mid-2000 decade in the capital region (one of the two NUTS2 regions that compose the country).
- Trento can be characterised as a region with a average retention rate (for all age groups) and high-level visitor attraction. It is a major domestic destination that is also very attractive for internal migration.

Comparing the typologies for the eight case studies we can see that many, but not all types of regions are represented in our small sample.

Regarding the way in which case studies addressed the issue of attractiveness and retention of specific user groups in the different regions, some cases only discuss migration (Denmark and Slovenia) or mainly focus on the attractiveness for residents (Lubelskie and LKT). Cornwall pays attention to both tourism and migration and the respective synergies, while Trento and Algarve are the more tourism-oriented case studies in our sample as you would expect from these important tourism destinations. In the case of Istanbul we look at tourism flows but also at the attraction of FDI.

In conclusion, the case studies have helped us to analyse phenomena on smaller spatial levels (NUTS3, LAU) but also on larger spatial levels: the relation with neighbouring and sometimes competing regions (e.g. Algarve, LKT and Lubelskie), the position in national systems (e.g. Cornwall, Istanbul and Trento) and the interaction with other European regions (e.g. Algarve, Istanbul, Lubelskie, Slovenia). Secondly, we analysed flows from origin to destination. This has been the main challenge for Denmark and Slovenia, but also in other case studies we collected some relevant data about the origin of visitors and migrants. Third, we found more specific information on the mobility of particular age and education groups, as in the case of Denmark and Cornwall. Case studies also allowed us to gain better understanding of trends in territorial assets and changes in flows, providing some information about what happened after 2006.

Table 3 - Case study regions as ATTREG typologies

	Typology based on 5 year net migration rates by working age group (2002-07)	Regional typology based on differentiating net migration and visitor flow-rates 2001-07	Regional typology based on differentiating net migration and visitor flow-rates 2001-04	Regional typology based on differentiating net migration and visitor flow-rates 2004-07	Regional typology based on different types of flows, 2001-07	Typology based on overall net migration and internal net migration rate, 2001-07
LKT	**all "1" regions**	**Includes a "1" and two "4" regions**	**Include two "3" and a "1" region**	**Includes two "1" and a "2" region**	**Includes a "6" and 2 "4" regions**	**Includes a "1", a "6" and a "8" region**
Hovedstaden (Bornholm NUTS 2 region)	**4**	**1**	**1**	**1**	**6**	**8**
Provincia Autonoma Trento	**2**	**2**	**4**	**4**	**3**	**6**
Lubelskie	**1**	**4**	**1**	**2**	**4**	**8**
Algarve	**3**	**2**	**4**	**4**	**3**	**7**
SLOVENIA	**all "1" regions**	**all "1" regions**	**Includes a "1" and a "3" region**	**all "1" regions**	**all "4" regions**	**Includes a "6" and a "8" region**
Istanbul		**1**	**1**	**1**	**1**	**6**
Cornwall and Isles of Scilly	**3**	**2**	**4**	**4**	**1**	**5**
	Typology classes 1 = unretentive region for young (15-24) and medium (25-49) working age groups, medium retentiveness for older working age grpup (50-64); 2 = region with average retentiveness for all working age groups; 3 = highly retentive for all working age groups; 4 = highly retentive region for the young working age gropup, averagely retentive for the medium working age group, unretentive for the older working age group	Typology classes 1 = average net migration and visiting flow rates; 2 = average net migration rate, high visiting flow rate; 3 = high net migration rate, average visiting flow rate; 4 = low net migration and visiting flow rates	Typology classes 1 = low net migration and visiting flow rates; 2 = high net migration rate, low visiting flow rate; 3 = average net migration and visiting flow rates; 4 = average net migration rate, high visiting flow rate	Typology classes 1 = average net migration and visiting flow rates; 2 = low net migration and visiting flow rates; 3 = high net migration rate, average visiting flow rate; 4 = average net migration rate, high visiting flow rate	Typology classes 1 = high internal migration; 2 = Vestlandet (outlier); 3 = high arrivals of visitors; 4 = low level flows of all types; 5 = high flow of air passengers; 6 = high flow of ERASMUS students	Typology classes 1 = mid level out-migration rates; 2 = Reunion (outlier); 3 = Braunschweig (outlier); 4 = 3 Turkish outliers; 5 = high net migration rates; 6 = high net in-migration; 7 = high net migration rate but low internal migration rate; 8 = high internal out-migration rate

Territorial capital and regional attractiveness

In the first part of this report we introduced a conceptual framework to help us understand how different types of territorial capital determine the ability of regions to attract particular audiences, which has then been operationalised into a multiple regression analysis. The case study research first addressed the issue of whether policy makers recognise the relevance of the variables used in the model, and if a fine-grained analysis of data supports their relevance for the attraction and retention of people. The case studies may also provide insight in influential independent variables not included in the model. Stakeholders could, for example, refer to variables that are less tangible and more difficult to quantify.

Globally, our conclusion is that the case studies and the discussion with the stakeholders support the relevance of the endowment factors used in the global statistical analysis. As we will argue in the policy section, most cases offer insights on the effectiveness of policies to improve these factors. Clearly the most important factor not included in the model is the price of land and real estate: or to be more precise the price-quality ratio for various types of land and real estate. Stakeholders indicate that land and real estate prices explain migration, especially internal, and the sophisticated Slovenian model proves this argument. Another conclusion is that stakeholders seem to attach more weight to "hard" economic factors such as the supply and demand of labour and business opportunities. A possible explanation is that economic factors have gained importance after the credit crunch of 2008. The exception is the case of the Algarve which explicitly deals with more soft and intangible factors such as the perception of safety, hospitality and a good atmosphere in which people feel at home.

The case studies have also helped us to gain better understanding of relations between assets and attractiveness on smaller spatial scales. Is the ATTREG statistical model also applicable to the level of municipalities (LAU)? The quantitative cases of Denmark and Slovenia have explicitly addressed this question, showing that the model we developed can also be applied to smaller spatial units such as municipalities. Both case studies, however, emphasize the importance of making a distinction between push and pull factors, using data on origin-destination flows instead of net migration metrics. The gravity models also support the expectation that attractiveness depends on (critical) mass: densely populated areas generate more flows than sparsely populated areas.

In five of the six other regions we analysed relations on smaller spatial levels by trying to identify determinants of spatial diversity in the ability to attract particular audiences. These cases clarified that urban economic phenomena influence the attractiveness of places: economies and diseconomies of agglomeration, gentrification and urban sprawl, and changing commuting patterns because of improvements in infrastructure and congestion. Real estate prices appear to give important information about a regions' ability to attract.

Our detailed analysis of regional attractiveness not only considers relations on smaller spatial scales but also on larger spatial scales, i.e. the national and international context. To this regard, it was possible to identify and address relationships between neighbouring regions: not only flows of specific user groups between these regions (as in the case of Lubelskie and LKT) but also competition and complementarities between regions (the Algarve and Costa de la Luz, for example), affecting their ability to attract user groups from elsewhere. Furthermore the cases show that also non-neighbouring regions interact with each other: there are flows from the east to the west (e.g. from Poland to Ireland), from the west to the east (e.g. return migrants to Istanbul) and from the north to the south (e.g. from the UK to Portugal). Explanations for these flows are to be found in (changing) coefficients regarding factors such as the access to jobs and the availability of (affordable) real estate. In

general, improvements in infrastructure – such as high-speed train and flight connections – lead to more interaction between the connected regions (as we observed for example in the cases of LKT and Istanbul).

Another issue that has been addressed by three of the eight case studies concerns the diversity of drivers for the attraction of different audiences (that in some cases are the target of specific attraction policies).

While the case studies of Algarve and Istanbul only give some indications that the preferences of migrants and visitors depend on factors such as age, education, income and country of origin, the case of Denmark presents strong evidence that age and education explain flows between communities. An interesting finding is that young people often leave rural areas (such as the island of Bornholm), but that they are willing to return when they get older.

The mobilisation of territorial capital

In this last part of our case study research we took a closer look at the way the factors that constitute elements of attractiveness in the regions considered have been mobilised (or not).

First we must mote that the eight case studies we analysed illustrate the great diversity in institutional contexts among European regions. Some regions are able to take control of their own development (e.g. Trento and Bornholm) while other regions are much more dependent on state-led policies (e.g. Algarve). In general the mobilisation of regional attractiveness is a combination of top-down EU and state policies and bottom-up initiatives of local and regional stakeholders such as municipalities, universities and businesses. Organisations that operate on the level of the region we selected are not necessarily leading in the development of the region. A good example is the cross-border partnership for LKT, which is only one of the many institutions that can mobilise attractiveness in this French-Belgian region. Another conclusion is that EU policies play an important role in making regions attractive for particular audiences; this is mentioned explicitly in the cases of Denmark/Bornholm, Cornwall, LKT and Lubelskie. Within these institutional contexts, regions have tried to improve their ability to attract and retain audiences in various ways.

- In the case of the Algarve we analysed the (intended) impact of regional and state policies on different forms of territorial capital. We conclude that investments in environmental protection, healthcare and sanitation, education and culture have presumably enhanced the attractiveness of the Algarve for foreign tourists and buyers of second homes. The Regional Tourism Entity is clearly targeting specific markets and user groups, following the national tourism plan which identifies several strategic tourism products. The ambition is to make the region more attractive for visitors who share specific preferences. A good example is the development of a Golf Academy and the organization of an annual Golf Cup to promote the region as a destination for golf players. Apart from the five core tourism products (Sun and Sea, Gold, Nautical, Residential and MICE), the regional tourism policy also defines some secondary tourism products to be developed: Culture, Nature, Gastronomy and Health & Wellness.
- In Bornholm, the Rural Development Programme aims to make rural areas more attractive and economically vital by combining investments in the regional economy with the preservation of environmental capital. Many of the national policies also have a regional perspective, e.g. on research and innovation, business development, education and taxation. Therefore it is often a complicated task for local authorities to develop their own attraction policy and to adapt to the national strategy simultaneously. Many municipalities do not have sufficient administrative resources to ensure a rigorous

attraction policy. In the Bornholm case local officials are seeing job creation as the most important element of a mobilisation strategy. In addition they try to sell and brand the island as a "nice place to live" thus aiming to attract new residents and commuters. While many acknowledge that Bornholm will face depopulation in the coming years (like many peripheral areas), a proactive adaptation strategy seems to be lacking.

- In the case of Cornwall we tried to assess the impact of investments in higher education provision, and more specifically of the Combined Universities in Cornwall (CUC) project. This project not only aims to attract and retain students, but also to stimulate the development of a regional knowledge-based economy (e.g. through a Research Knowledge Transfer Team and the establishment of Innovation Centres). Looking at the results so far we conclude that CUC has helped the region to attract more students, or – to formulate it more accurately – to retain students and prevent a "brain drain'. Between 2001 and 2010 the number of students in Cornwall increased from 3,000 to 7,700. It is, however, too early to measure the impact on the regional economy. Cornwall's economic performance is still below the UK average, not only in terms of GVA but also considering the share of knowledge workers in the labour force. The peripheral location and poor access to other parts of the UK (and Europe) are still significant factors explaining the underperformance of the Cornish economy. It will probably take many years before we can actually measure the full impact of CUC.
- The strategy of Istanbul is to make the city more competitive while securing the quality of the living and built-up environment (historical, cultural and natural heritage). Although it contains elements of sustainability, it is clearly a "pro-growth strategy" that aims to attract more skilled workers, more visitors and more investors to the city. As part of this strategy the city aims to present itself as an international Finance Center, thus trying to attract business visitors who are potential investors at the same time. Various public and private stakeholders such as the Greater Municipality of Istanbul and the Chamber of Commerce cooperate to this end. Events and place promotion – such as the European Capital of Culture event in 2010 – also help to make the city known among various audiences.
- Analysing the vision and strategy for the cross border region of LKT we come to the conclusion that the principles and actions proposed cover the different types of capital. Actors from both sides of the border are willing to take advantage of possibilities to build on common assets and complementarities between assets: diversity as strength. Essentially the aim is to make the area as a whole more attractive, taking advantage of synergies and critical mass. As we see more often in cross-border cooperation, actions focus on "win-win solutions" not on solutions that involve a redistribution of functions ('win-lose solutions'). Important themes of cooperation are joint territorial marketing, coordination in planning for infrastructure and the environment, cultural events and the exchange of students. The vision and strategy have resulted in various actions, though not necessarily as part of the cross-border cooperation. Interviewees refer to various successful projects (e.g. the creation of platforms and cross-border institutions), often funded by the EU and evolving around economic issues as well as around cultural events (e.g. the European Capital of Culture event in Lille).
- In Lubelskie local authorities and universities try to attract students in a proactive way: by introducing curricula in English and helping students to find their way (in Lublin). Apart from the national policies (Charter of a Pole), there are no explicit policies (yet) to attract foreign workers, although this might change in the near future with an increasing inflow of registered workers. The question is not how to attract foreign workers (they will come anyway), but how to make sure they pay taxes and social insurance premiums.

- In the case of Slovenia we present the model as a tool to analyse the impact of different mobilisation strategies on migration and commuter flows. Although the parameters of this model change in space and in time, the model may also be useful for policy makers in other countries.
- In Trento the marketing organisation promotes the region as a tourist destination, but at the same time stakeholders indicate that there are limits to growth in tourism. More attention is paid to the quality of flows, possibly explaining the "underperformance" in the attraction of visitors. As the region has entered the stage of maturity in the destination life cycle, a more selective policy targeting specific tourists, is preferred above a pro-growth strategy.

In general, policy makers and other stakeholders in these case studies have had various opportunities to invest in the attractiveness of regions and cities for residents and visitors. In view of the transition to a global knowledge-based economy it has become particularly important for regions to invest in the access to (higher) educational institutions as we could see, for example, in Cornwall. Another frequently used tool to attract audiences is place marketing. While some regions are more selective, targeting specific groups, other regions have no explicit policies to attract particular audiences. When the costs of agglomeration (diseconomies) become higher than the benefits (economies) regions tend to become choosier: paying more attention to quality and the contribution of migration and tourism to the prosperity and wellbeing of the current citizens.

4.6. Attractiveness as a policy dimension

A policy framework for attractiveness as a key dimension in EU territorial policy

The territorial policy focus of ATTREG is based on the exploration – by way of formulation of scenarios – of the long-term impact of the application of specific policy bundles in different regions that are the target of European policy. In relation to normative policy discourses this entails the definition of a set of variables and *alternative policy bundles* related to the three dimensions identified in the EU 2020 Strategy (i.e. smart, cohesive and sustainable growth). The aim is to define a set of key drivers within each normative policy discourse and their implications for attractiveness-enhancing policies.

Although the three dimensions are not mutually exclusive alternatives, we have decided to emphasize the three policy approaches (smart growth, inclusive growth and sustainable growth) mentioned in the EU2020 strategy, drawing out their territorial consequences. The idea is to extrapolate each of them (through the scenario model developed as part of RA5) to their logical conclusion thereby emphasising the different potential trajectories and their implications.

The **smart-growth policy approach** thus entails a concentration of resources and efforts in hi-tech investments, and particularly the NBIC sectors (Nanotechnology, biotechnology, information technology and cognitive science). The enhancement of Europe's research and enterprise networks and their connections to global networks, together with strong investments in higher education institutions and private high-tech companies, strengthening the role of big metropolitan areas and specific centres of specializations. This trend is enhanced by investments in infrastructure networks and accessibility among European metropolitan places (highways and high-speed train connections). Metropolitan areas are the main drivers of territorial attractiveness. In addition close links in rural areas to territorial hubs are facilitated by ICT systems and network relationships favour advanced productive

agriculture systems, and clusters of excellence in smaller towns are supported in order to achieve the critical mass necessary to operate in the global market. Moreover, related characteristics of different rural areas are promoted to be used as tourist attraction factors, enhancing rural regions as consumption regions with a strong role for private sector services.

The **inclusive-growth policy approach** is characterized by major investments in social capital with a particular focus on deprived areas, on overcoming internal and external borders building cross-border metropolitan regions, and on balancing development capacities between the EU core area and peripheral areas. The demographic structure of Europe and its challenges (aging, labour force, etc), together external immigration trends represent a crucial issue for a cohesive-growth policy approach. We suggest that accessibility to the nearest urban centre, good secondary networks and levels of service provision (stronger focus on local accessibility than to the European scale) will be enhanced in this perspective, reinforcing (or creating) a polycentric structure based on small and medium-sized towns. At the same time attention will be paid to policies on immigration and to increasing accessibility to services of general interests in small towns for rural residents, and increased accessibility to job opportunities and services, this will also include enhancing local public transport systems and public networks among small and medium-sized towns. Efforts to sustain services of general interest in risk-of-deprivation areas (accessibility to the nearest urban centre, good secondary networks and levels of service provision) will be key factors for maintaining population in difficult areas. Policies supporting the localization, or re-localization, of traditional firms in lagging-behind regions in order to gain from the competitive labour-force costs will be a way to boost economic growth and employment strategies in peripheral areas.

The **sustainable-growth policy approach** will be characterized by a strong emphasis on improving the resource efficiency of Europe, especially in peripheral locations, through a proactive push of regions and cities toward greener economic development strategies, and supporting measures of adaptation to climate change and regional resilience. Here policy is directed to the diversification of an area's economic resources with an emphasis on the utilisation of environmental capital (mass tourism along coastal areas, or mountain areas with snow-based winter tourism), and the promotion of a region's natural and ecological assets. As there is a strong urban dimension to climate vulnerability, major investments will be focused on a drastic reduction in traditional polluting economic sectors, and more resources focussed on the green economy involving support for innovative ecological approaches. Large-scale investment will be directed to public infrastructures, together with policy and increased taxation aiming to reduce private forms of transportation. Traditional economic sectors such as intensive agriculture, forestry and mass tourism will be penalized, while the protection of existing landscapes and natural resources will favour selective forms of tourism and integrated local communities" approaches.

For our scenario models, we have decided to use the variables listed in Table 4 as proxies representing the different policy levers available in relation to the three different policy scenarios. Policy bundles are then applied in specific regions in our set of policy experiments:

- Convergence (Objective 1) regions as defined in EU policy with less than 75% of the EU average GDP.
- "Overheating" regions as classified in Cluster 4 from our regional typology on retentiveness and visitors attractiveness (see above).

Table 4 – Policy bundles for scenario analysis and selected policy instruments in each bundle

Smart policy bundle

- Investments in accessibility of places and transport connections, in order to increase spatial factors of economic development
  proxies: 1) ranking of airports; 2) accessibility through road and ferry network
- Boosting tourism performances and investments in tourist facilities and infrastructures
  proxies: 3) tourism accommodation (bedplaces); 4) accessibility through road and ferry network
- Investments in R&D and higher education, attraction of high-skilled migrants
  proxies: 5) tertiary educated workforce; 6) higher education provision

Inclusive policy bundle

- Investments in social capital, supporting residential economy and the quality of place
  proxies: 1) NACE G-I employment; 2) life satisfaction
- Investments in accessibility of services of general interest and employment of teachers, doctors, etc.
  proxies: 3) public sector employment; 4) satisfaction with health services
- Investments in education and in services to younger population
  proxies: 5) enhance provision in higher education; 6) dependency rate

Sustainable policy bundle

- Protection of cultural and natural environments, protection and valorisation of cultural heritage and other visitor attractions
  proxies: 1) monument index; 2) Natura 2000 protected area
- Limitation of polluting factors (particularly those related to transport, such as cost of fuel, taxation, etc.)
  proxies: 3) ranking of airports; 4) accessibility through road and ferry network
- Policies related to quality of life and capacity of retention, in particular for the younger population
  proxies: 5) life satisfaction; 6) dependency rate

The "ATTREG future" model

The *ATTREG future* model puts together the state of the art in European demographic scenario modelling (as represented by the DEMIFER ESPON 2013 project) and the findings of the ATTREG statistical analysis on the relation between territorial assets and flow outcomes, as presented in Section 4.4, which involves the *direct effects of changes in attractions/attraction policies* and *the derived effects*.

The structure of the ATTREG model presented in Chapter 5 is summarized in the left side of Fig. 13 where it can be seen that the various flows analysed in this study are mobilised by 19 different attraction variables, subdivided into 5 groups corresponding to classes of territorial capital, according to "signs" that were discussed in 4.4.

From a policy point of view, not all exogenous variables can be used as instruments for attraction policies. Some variables such as the "coastal" and "island" variables are exogenously given by definition and cannot be manipulated in an attraction policy. In Fig. 13 this type of variables is marked with an "N". Other variables (marked with a "P") may be targeted or influenced by specific policies. Thus,

- The four (exogenous or non-cumulative) *antropic capital* variables all have a direct impact on migration and tourism flows: the higher the number of monuments and other

tourist sight, the higher the rank of airport etc. the higher the in-migration and the higher the tourism flows. Higher population density leads to higher in-migration of young and lower in-migration of old population and lower accessibility to lower the in-migration.

- The *Economic and human capital* also matters: the higher the share of working age adults with tertiary education and the higher the relative consumption related employment are in general the higher the in-migration rates etc. For the GDP per capita attraction variable, the multivariate model analysis show positive signs for the young and middle age cohort migration and negative of the old age cohort migration. The higher the share of working age adults with tertiary education and the higher the relative consumption related employment are in general the higher the in-migration rates.

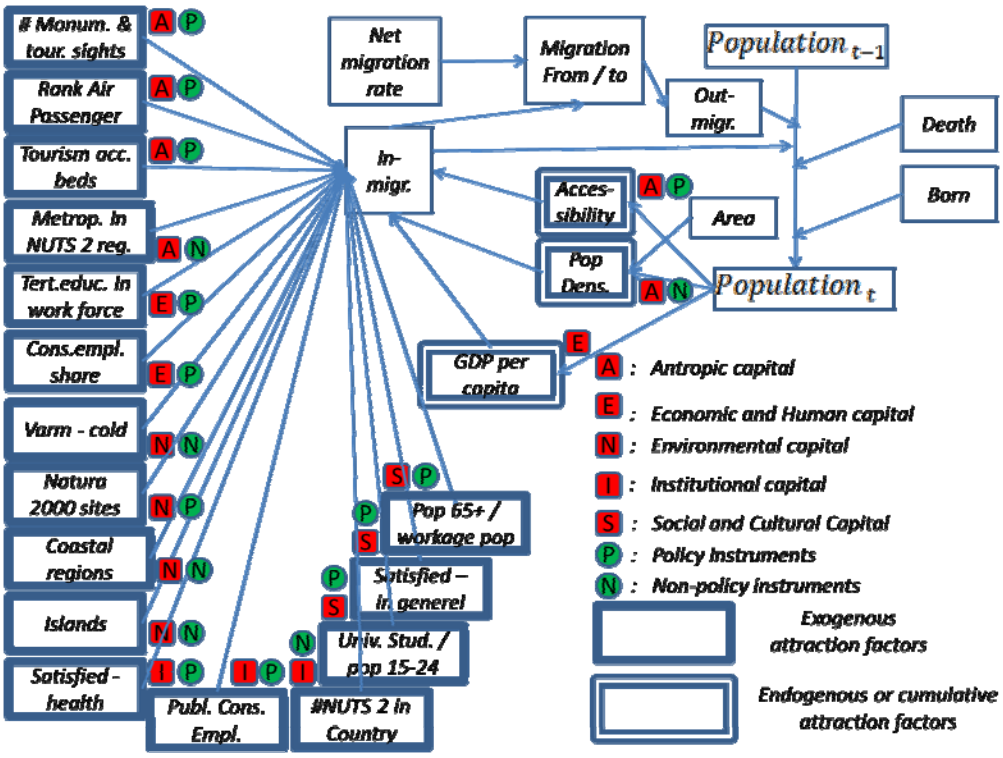

Figure 13: Logical structure of the ATTREG model

- Following the figure three other types of territorial capital – *Environmental capital, Institutional and socio- and cultural capital* – are included in the explanation of mobility flows. Institutional capital reflects the fact that people seek "good institutions" and "freedom and openness". Socio-cultural capital involves the effects of sharing with other people of varying ages and educational backgrounds. The university student-population ratio can be decided directly (through capacity increases at universities), whereas the state of health services satisfaction rate only can be manipulated indirectly (though improvements in level of service within health services).

The outcomes represent the cumulative/endogenous effects of territorial capital: If population increases, so does by definition population density, which leads to higher in-migration flows, which leads to higher population and population density etc. Similarly,

higher population leads to lower population accessibility scores, which reduces immigration potentials.

In the *ATTREG future* model attraction is assumed to influence gross immigration. But following the right side of Fig. 13, the immigration must "come from somewhere", which might be from other European regions and from "rest of the world". In other words: migration patterns are assumed to be "path dependent" where the origin of the migration flows follows the historic or average pattern of migration. This means that net migration is a function of the gross in-migration driven by changes in attraction and path-dependent patterns of out-migration: migration takes place when attraction increases and migrants come from regions which have a tradition to migrate to the region in study. Population is determined by historical population patterns, where immigration is added and out-migration is subtracted (moreover new-born are added and deaths are subtracted to determine the final population).

A number of "rounds" in Fig. 13 are needed to find the net effects from changes in attractions. From this it can be concluded, that the results (Russo et al. 2011 based upon analyses with multivariate models of the relations between mobility and outcomes) have to be adjusted with the cumulative effects from changes in population density and accessibility to capture the total impacts of changes in regional attractions.

The exact structure of the "ATTREG-future" model is discussed in great depth in the Scientific Report (Ch. 8). For the purposes of this Draft Final Report we need to point out that model has been formulated on attractions and outcomes, which reflect our understanding of the derived effects within the region and on other regions in the EU as well as the possible feedback on the region itself. The model is both a conceptual model, which extends our description of regional development from a mainly demographic (as in DEMIFER) to a broader social and economic understanding of regional development, and an applied model (called the ATTREG-future model), which can be used to model the broader and dynamic effects of attractions policies.

Scenarios of future development in relation to territorial attractiveness

We now present the results of the scenario experiments for each policy bundle (the results are discussed in greater detail in the Scientific Report). Every experiment produces a scenario which is determined by the type of policy applied (inclusive – smart – sustainable), the territorial target of policy (in our experiment, convergence and "overheating" regions), and the resulting predicted variable: we have focused on the three key variables for territorial cohesion, that is population, per capita GDP, and jobs by place of production or "expert jobs".

As a necessary word of warning with respect to our scenario analysis, we do not have the ambition to "predict" future developments, but only to present European policymakers with a certain sense of the different impacts of given policy courses, which can be broadly described as relating to the "inclusive", "smart" and "sustainable" storylines of the Territorial Agenda 2020, and possibly to help devise superior solutions (in terms of spatial strategies) that may bring to a more cohesive and integrated European territory at every scale. This is the way we decided to present our findings to the key target group of European policymakers, within a broader illustration of the value of attraction strategies as part of place policies. Scenarios are a point for (attraction) policy development; their role is to set the scene, they are intellectual devices for thinking about possible alternative futures (ESPON, 2006). Scenarios are rarely used as predictions of likely futures because there are so many uncertainties involved in their construction.

All scenarios are formulated in terms of percentage changes of these variables in 2025 from a baseline scenario which is the DEMIFER's "status quo" prediction for 2025. The maps in Fig. 14-16 illustrate the results in a comparative way, highlighting the territorial effects of the application of policy bundles over the "target" regions and illustrate how flows mobilised by such policies produce a leakage of such effects to other regions. These predictions are merely indicative and have obvious limitations in the way that "policy bundles" have been constructed. Their value is to show that, apart from what could be expected in the future on the basis of pure demographic development, and all other factors being equal, the explicit consideration of human mobilities, and the proactive mobilisation of territorial capital to attract flows, is bound to produce effects that alter those predictions according to territorial patterns that are captured by the following maps. Moreover these experiments demonstrate the use of an analytic methodology, grounded in the ATTREG model framework (both the static and dynamic parts), which could be extended to a more complex prediction model and replicated for different "policy experiment" combinations.

Fig. 14 documents the application of the "inclusive" policy bundle in convergence and overheating regions. In general, we observe a decrease in population loss from peripheral regions towards the core and the most attractive areas of Europe. A "rebalancing effect" takes place concerning the main trends; however, the inability to attract that characterises convergence regions tends to persist. This scenario shows a diffuse growth of GDP in all regions; but it appears to make a contribution to counterbalancing the concentration of GDP in the core of Europe. In terms of urban/rural divide, it also produces a decrease in the role of big metropolitan areas as attractive hubs (especially in the wealthiest regions) in favour of a better territorial balance with less urbanised regions. In terms of employment, the increase in job opportunities is not particularly significant, and it tends to even out with the concentration of jobs in the coastal tourist regions. This is the only policy bundle that does not involve a direct correlation between new job opportunities and the mobility of populations, probably due to the redistributive capacity and welfare effect of the policy bundle.

In general terms, this policy bundle also appears to "cool down" overheating regions, where we also see that metropolitan areas tend to lose population to neighbouring regions. The pattern of job availability coincides with population trends and indicates a straightforward relation between the two variables, which is not the case in its application to convergence regions. In general, this policy bundle tends to stabilise population mobility and to reduce the fragility of overheating regions.

The application of the "smart" policy bundle to convergence regions, illustrated in Fig. 15, yields more varied scenarios in comparison to the other bundles. What emerges is a lower capacity to attract population from other regions; at the same time, coastal areas generally perform positively, probably due to the presence of airports and the attraction of a younger population. The distribution of population and job availability tends to have the same spatial patterns, and indicates a straightforward relation between these two factors. In general, this policy bundle appears to be able to correlate population mobility, job opportunity and GDP, but within limits. With reference to metropolitan areas, it seems that the urban nodes are characterized by a stronger attraction capacity.

When applied to the overheating regions, the effects of the smart bundle on the attraction of population do not express a clear spatial logic. This policy bundle does not seem to be particularly effective in the regions to which it is applied, the performance of which mainly follows existing trends. In terms of employment, however, the policy bundle seems capable of increasing job availability, while the effects on GDP are less pronounced.

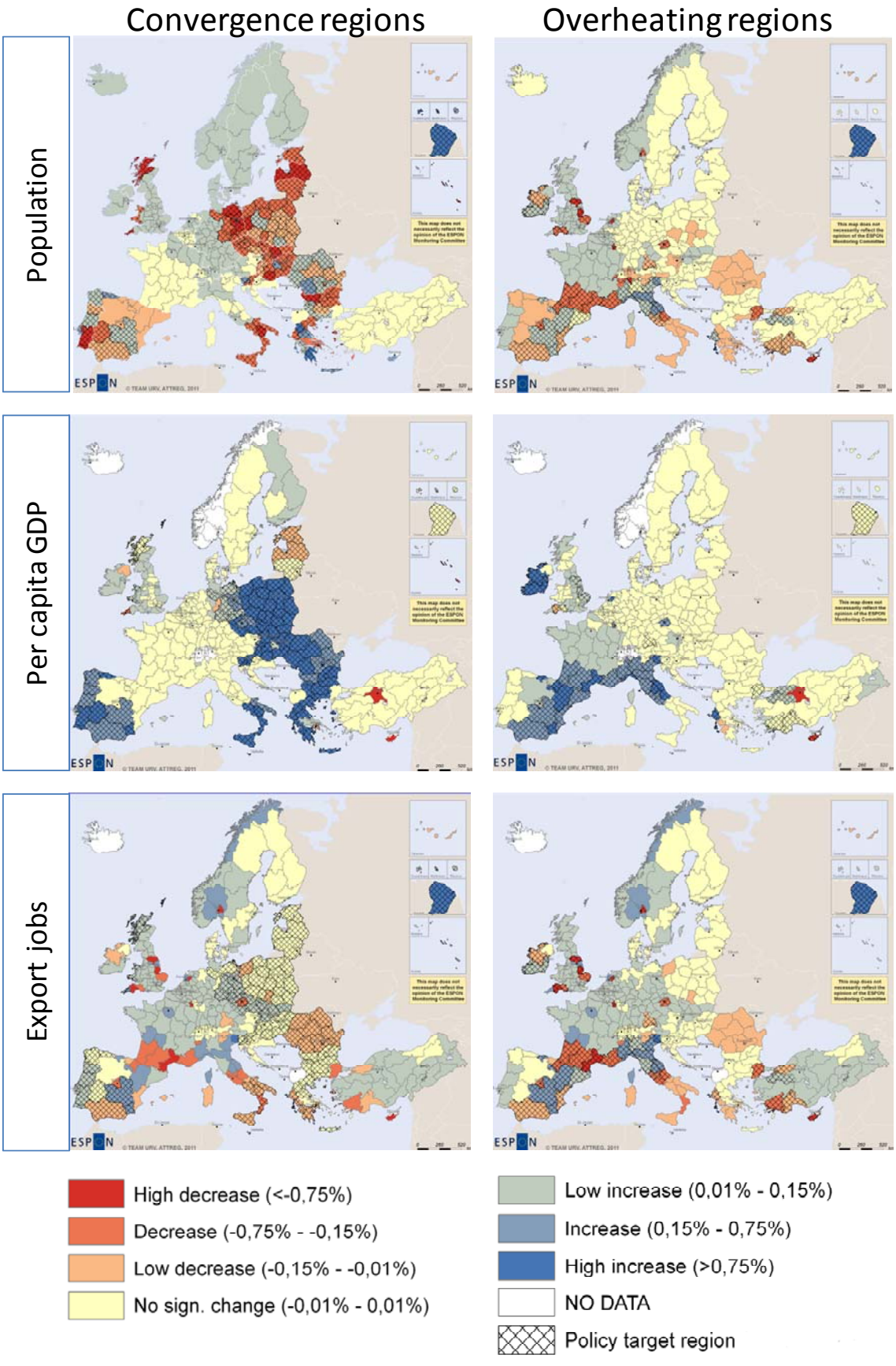

Figure 14 – "Inclusive" policy bundle – projections for 2025 with respect to the baseline scenario

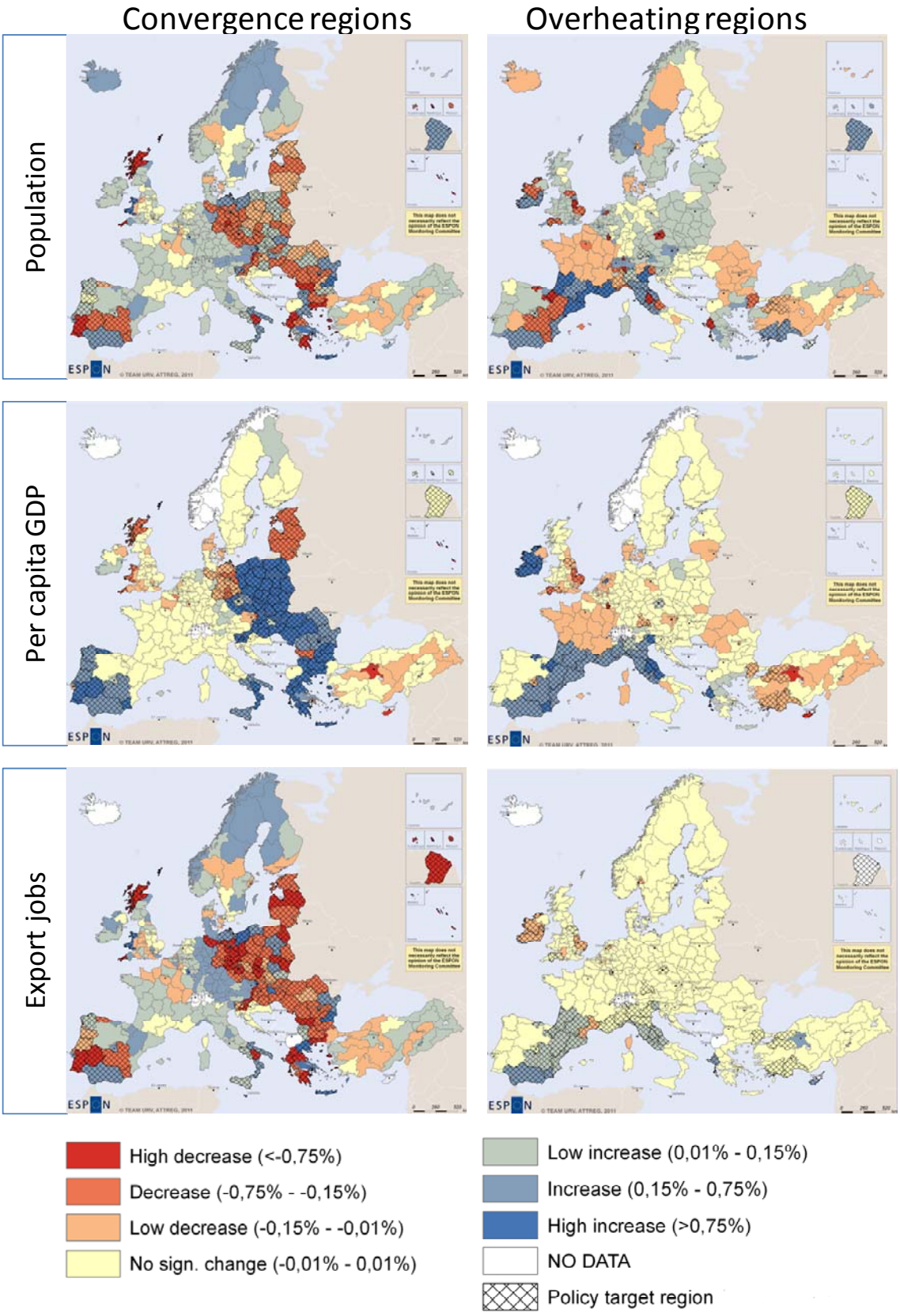

Fig. 15 – Smart policy bundle – projections for 2025 with respect to the baseline

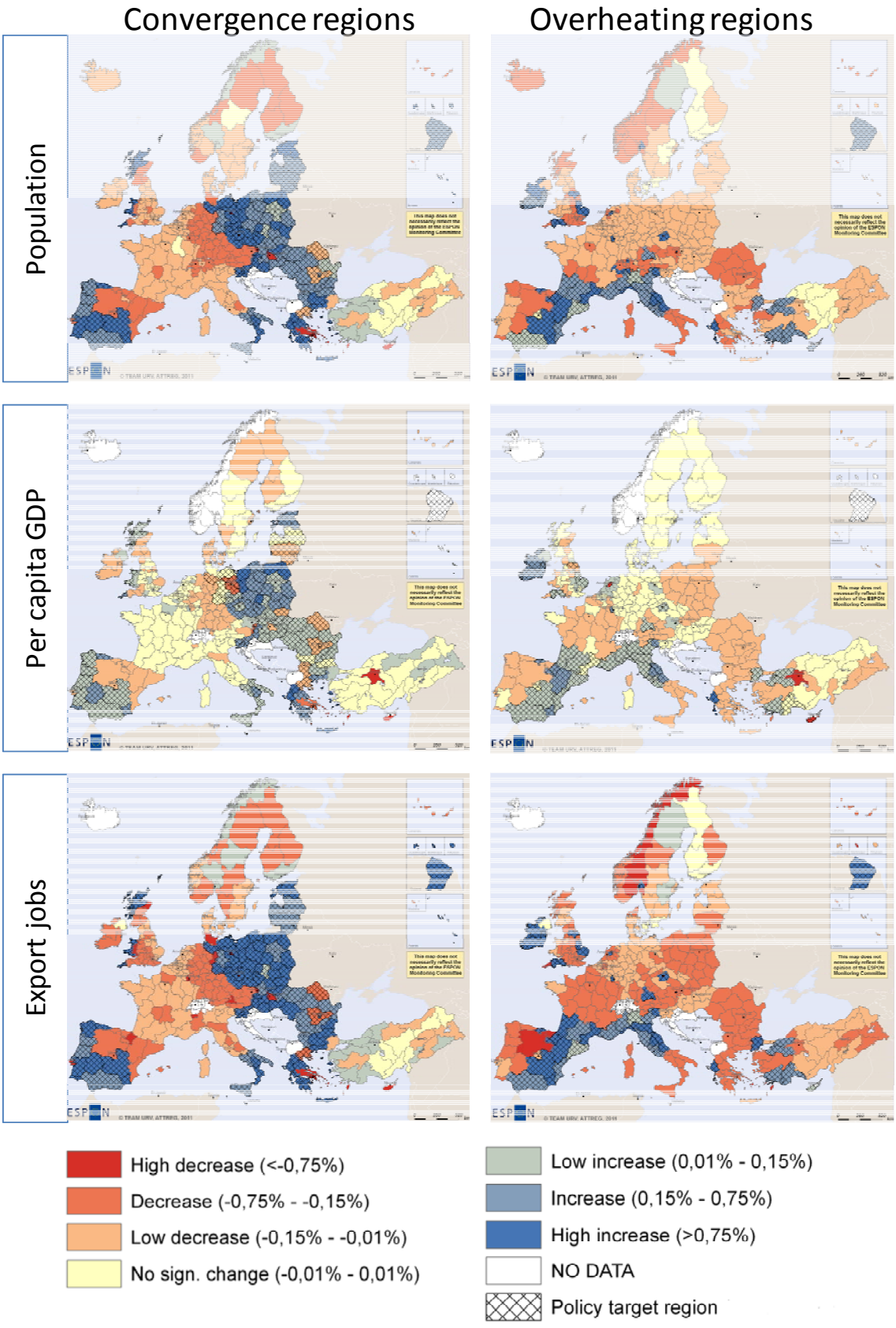

Fig. 16 – Sustainable policy bundle – projections for 2025 with respect to the baseline scenario

In general, it seems that this policy bundle is most effective in regions that already exhibit a growing trend or large and clustered regions. Concerning GDP, the general figure tends to indicate a certain effectiveness of the policy bundle especially in the Mediterranean regions and in Ireland. On the other hand, the application of this policy bundle to averagely performing regions does not seem to be particularly effective.

Finally, the effects of the "sustainable" policy bundle are illustrated in Fig. 16, signalling a certain capacity to generate attractiveness in almost all target convergence regions, and especially those that are less attractive in absolute terms. This general picture is counterbalanced by a decrease of population in neighbouring regions. The level of job availability goes along with population and GDP distribution. This is the least effective policy bundle in terms of increasing GDP, but it has the greatest impacts on the regions that in absolute terms have less job opportunities and lower GDP, thus representing an important cohesion tool. In terms of geographical characterization, the strongest attraction capacity is found in rural regions with small and medium towns, while metropolitan areas experience a decrease in attractiveness.

The application of this policy bundle to overheating regions tends to increase the attraction of population in almost all the target regions, in particular those of the Mediterranean area, but also some metropolitan regions in the north of Europe. When these regions form a cluster (as in the case of the Western Mediterranean arc) they tend to attract population from neighbouring regions. The general picture of employment coincides with population trends (both in general and in the difference with the baseline scenario) and exhibits a straightforward relation between the two variables. However, this policy bundle indicates a lower effectiveness in increasing GDP.

5. GENERAL CONCLUSIONS

This project focused on the characterisation and measurement of territorial attraction, and on the operationalisation of attraction strategies within the usual multi-scale framework of ESPON. In this sense, it is arguably a key addition to the scientific knowledge developed in the ESPON 2006 and 2013 programmes, most projects of which assume a "sedentary", static human capital, or they do not care to model explicitly mobility as en endogenous force which may offset the main development trends and spatial effects.

Specifically, the explicit consideration of attractiveness as a multidimensional policy dimension and of human mobility as a "variable" activating (and responding to, in complex non-linear ways) place development processes led us to modify the predictions of DEMIFER in terms of "status quo" developments. Simplified as they may be, these scenarios disclose that sometimes the impact of policy measures bring about unwanted side effects as they have the effects of changing place potentials and the relations between them, thus producing population shifts. This is something that arguably provides new insights in the evaluation of policy impacts from a variety of ATTREG projects.

Going back to the key policy question of this project and the various research questions in which that has been articulated, we can say that our analysis confirms that regional policymakers can indeed improve the attractiveness of their city or region and reconcile the interests of visitors with those of their residents if they touch the right "strings" (that were illustrated especially in Section 4 of this report), according to a set of objectives that is best specified by the regional typology (and connected policy prescriptions) illustrated in Section 3.2, and that European policymakers can "steer" local attraction strategies ensuring a certain degree of coherence and channelling efforts towards the overarching goal of territorial

cohesion according to the logical framework of Section 3.3, with the effects illustrated in an exploratory way in Section 4.6.

We have ascertained that in the period 2001-2007 different groups distinguished in terms of demographic profiles and motivations reacted to different territorial asset endowments according to definite spatial patterns, and that some territorial assets were more important than others to explain the mobility of specific groups, though in general all the indicators selected as determinants had some effect.

Territorial attractiveness has not varied greatly between periods, indicating a certain stability of these relationships, but we did observe that the attraction of different groups into places, especially distinguishing a stable younger working population, a pre-retirement type of migration, and tourism attractiveness, may include synergetic effects and also incompatibilities, which in the longer period (as measured tentatively in the "critical" period of 2007-2009 following our research period) may not be sustainable. In this light it was observed that the great metropolitan hubs in the economic core of Europe may have gone through a phase of "dimension diseconomies" in the mid-2000s when their attractiveness for young skilled workers and other short-term mobilities may have been offsetting the retention capacity for other groups. Conversely, the attraction of new workforce has gone hand in hand with the attraction of tourists in the southern resort regions, especially in the Western Mediterranean arc, and also in some of the economic "tigers" of the early 2000s, but that may have been a factor of fragility of these regions in sustaining this pattern in the subsequent years. On the other hand, peripheral and rural regions may have been gaining from these trends, attracting an audience which is more responsive to the high level of place amenities that these places offer.

We also saw that different "economic orientations" throughout the 2000 decade did have an effect on flows attracted and that some place endowments that may be strengthened by place development policies, such as the quality of services of general interest (but more in general by investments in social cohesion and balance) had an effect on regional attractiveness.

These indicative conclusions must be taken with more than a grain of salt in the next context of economic crisis, which in the shorter term is probably bound to "re-centralise" population and jobs out of the regions more exposed to the economic downturn: this is actually happening as demonstrated by recent ESPON evidence as shown by the "map of the month" of September 2011 on European Regions 2010: Economic Welfare and Unemployment (www.espon.eu/main/Menu_Publications/Menu_MapsOfTheMonth/map1103.html). Yet they indicate that in the longer term places that will be able to mobilise their territorial capital assets in a coherent way could be more resilient to external shocks anchoring place advantages in terms of working population and tourism.

Obviously there is a need for further research to confirm and further operationalise these indications.

A first area of study is related to following on this line of research for a longer time horizon. In this project we were constrained by data availability on migration to a two-period analytic framework (endowments and changes in endowments in the early part of the 2000 decade being assumed to produce effects on flows in the mid-late 2000s); it will be especially important to analyse the post-crisis effects re-doing this analytic exercise in a couple of years' time when the data on migration in the latest part of the 2000s will be available.

Secondly, it would important to dispose or more disaggregated data on migration and tourism, not only at a regional scale (NUTS3 and LAU level) but also in terms of matches between origins and destinations, both within and outside the ESPON space, and

motivations for mobility. These data are not available now, but they may become available in the future if an "European Migration Observatory" will be given this type of mandate for regional evidence.

Thirdly, focused case study research may gather further insights on place processes and policies that have a bearing on attractiveness for different groups. This issue was addressed through a necessarily limited number of case studies in ATTREG but in our opinion it could become a topic for targeted analysis in specific regions and cities characterised by different place profiles and endowments, like for instance coastal tourist regions, large cities at the centre of knowledge and innovation networks, and transition regions in the north and east of Europe.

Fourthly, there is a need for further development of extended interregional demographic models (such as the ATTREG future model) for scenario evaluation. This involves scenario modelling of future development within alternative baseline scenarios as well as for the impact assessment of policy packages. Especially the inclusion in the modelling framework of the interaction between demography, human mobility and the regional economic system seems to be of special importance to capture and project into the future the effects of policy initiatives and external shocks.

REFERENCES

Barca, F. (2009). *An Agenda for a Reformed Cohesion Policy, A place-based approach to meeting European Union challenges and expectations*. Independent Report prepared at the request of Danuta Hübner, Commissioner for Regional Policy.

Camagni, R., and Capello R. (2009). Territorial Capital and Regional Competitiveness: Theory and Evidence. *Studies in Regional Science* 39(1): 19-40.

CEC - Commission of the European Communities (2004). *A new partnership for cohesion. Convergence, Competitiveness, Cooperation, Third Report on Economic and Social Cohesion*. Commission of the European Communities, Brussels.

CEC - Commission of the European Communities (2007). *Growing Regions, growing Europe. Fourth Report on Economic and Social Cohesion, Directorate General Regional Policy, Brussels*.

CEC - Commission of the European Communities (2008). *Turning Territorial Diversity into Strength. Green Paper on Territorial Cohesion*. Luxembourg, Office for Official Publications of the European Communities.

CEC - Commission of the European Communities (2009). *Sixth report on economic, social and territorial cohesion*. Directorate General Regional Policy, Brussels.

CEC - Commission of the European Communities (2010). Europe 2020. A strategy for smart, sustainable and inclusive growth, COM(2010) 2020 final, Luxembourg, Office for Official Publications of the European Communities.

Dutch Presidency (2004). *Exploiting Europe's territorial diversity for sustainable economic growth – Discussion paper for the EU Informal Ministerial Meeting on Territorial Cohesion*. Rotterdam, 29 November 2004.

ESDP (1999). *European Spatial Development Perspective. Towards Balanced and Sustainable Development of the Territory of the EU*. Committee on Spatial Development, Brussels.

ESPON (2006). Spatial Scenarios and Orientations in relation to the ESDP and Cohesion Policy, project 3.2, Final Report.

ESPON (2010). DEMIFER - Demographic and Migratory Flows affecting European Regions and Cities. Final report.

Florida, R. (2002). *The rise of the creative class, and how it's transforming work, leisure, community and everyday life*. New York: Basic Books.

Florida, R. (2003). Cities and the Creative Class. *Cities & Community* 2(1): 3-19.

Hungarian Presidency (2011). *Territorial Agenda 2020 - Towards an Inclusive, Smart and Sustainable Europe of Diverse Regions*.

Mieczkowski, Z. (1985). The tourism climatic index: a method of evaluating world climates for tourism. *The Canadian Geographer* 29: 220-33.

RWI (2010). *Second State of European Cities Report. Research Project for the European Commission, DG Regional Policy*.

Sheller, M., and Urry J. (2006). The new mobilities paradigm. *Environment and Planning A* 38(2): 207-226.

Trip, J.J. (2007). Assessing Quality of Place: a Comparative Analysis of Amsterdam and Rotterdam. *Journal of Urban Affairs* 29(5): 501–517.

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The ESPON 2013 Programme is part-financed by the European Regional Development Fund, the EU Member States and the Partner States Iceland, Liechtenstein, Norway and Switzerland. It shall support policy development in relation to the aim of territorial cohesion and a harmonious development of the European territory.

ISBN