

Russo, Antonio; Smith, Ian

Conference Paper

Attractive regions: for whom? And how does that matter?

52nd Congress of the European Regional Science Association: "Regions in Motion - Breaking the Path", 21-25 August 2012, Bratislava, Slovakia

Provided in Cooperation with:

European Regional Science Association (ERSA)

Suggested Citation: Russo, Antonio; Smith, Ian (2012) : Attractive regions: for whom? And how does that matter?, 52nd Congress of the European Regional Science Association: "Regions in Motion - Breaking the Path", 21-25 August 2012, Bratislava, Slovakia, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at:

<https://hdl.handle.net/10419/120547>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Attractive regions: for whom? And how does that matter?

Antonio Russo (1); Ian Smith (2)

PAPER PRESENTED AT THE ERSA CONFERENCE 2012 - 21-25 AUGUST 2012, BRATISLAVA, SLOVAKIA. Special Session ZF. SS- Regional attractiveness, mobility and attraction policies

Abstract

This paper investigates regional attractiveness and questions performances in terms of populations mobilised in places within the broad range of spatial development objectives in the European Union. We first introduce an interpretative framework that situates place populations within a continuum of transiencies and intensities: according to this, short- and long-term mobilities, generally associated with a binary of work-related migration and tourism, can be revisioned as a spectrum of fluid situations by which the permanence of people into places results from an articulated range of factors of attraction or place characteristics, and dynamically modifies this context.

Indeed we postulate that different attraction factors attract different flows that could be characterised in this way as ‘regional audiences’; the fact that the same factors could be attractive to different audiences means that regions have to ‘tune’ to an accommodate different users and uses, and as foreseen by Martinotti (1992) in his ‘four populations’ urbanisation model, the success in doing that is a fundamental aspect of sustainable development

We then use results from the ESPON 2013 Program (ATTREG project) to classify regions according to the populations that they were able to attract in the 2001-2008 period, and reflect upon the complex process of embedding different ‘audiences’ into places in terms of attraction strategies and issues of resiliency.

Our findings challenge the conventional wisdom that migrants are attracted by economic buoyancy and tight labour markets for highly skilled workers, and cast an interesting light about the synergetic effects of different population groups. We show for instance that ‘tourist regions’, or regions that are particularly endowed for (and have been able to) attracting short-term mobilities, have had a good score in attracting longer-term forms of mobility, but only until economic conditions were favourable and some upper threshold have been reached; whereas regions with lower attractiveness scores have been better able to face the direct effects of the global crisis.

Key words: Migration, attraction, territorial capital, tourism

JEL codes: J61, R58

(1) University Rovira i Virgili, Tarragona. Department of Geography

(2) Centre for Sustainable Planning and Environment, Department of Planning and Architecture, University of the West of England, Bristol

1. INTRODUCTION

This paper addresses the issue of spatial patterns and impacts of inter-regional human mobility in Europe, an issue that is steadily gaining relevance in the EU policy environment as, simultaneously, a fundamental component of the European project – the unhindered mobility of labour – and the result of persisting regional disequilibria which, especially in the current times of economic turmoil, represent a major obstacle towards its full achievement.

In this respect, the way in which mobility is conceptualised and operationalised as a ‘dimension’ of policy presents a certain degree of ambiguity (Servillo *et al.*, 2012). The policy discourse has been dwindling between an imagery by which Europe’s full competitive potential is in its diversity (nuancing a space of flows, in which every place has a chance to attract a certain ‘audience’) and thus low levels of mobility may impede the construction of a wider European identity, but also assuming OECD’s (2010?) and Barca’s (2009) claims that low inter-regional migration within the Single Economic Market of Europe hinders regional productivity in comparison, for instance, with that of the US ; and one by which the European development strategy should be focusing on territorial cohesion, which hints at a situation in which people don’t have to move anymore. In this context, human mobility is still often dealt with in demagogic terms, and what is worse, hardly out of a shared set of objectives and policy tools among European countries and regions.

The expansion of the EU space, which has coincided with a period of strong economic growth in the early 2000 decade, had an impact of increasing the inter-regional flows of people but also their complexity and spatial stratification, while more recently the global economic crisis has caused to some extent a return to basics – people move from where there’s less work to where there’s more (Bräuninger and Majowski, 2011) and new barriers – if not anymore legal, then political and cultural – are again erected. Thus, now more than ever, the European policy institutions need new knowledge in order to mould a human mobility policy framework that may be consistent with the overarching objectives of sustainable growth and regional cohesion. This means going back to reflect on such basic questions as what moves human mobility, under what circumstances, with what effects, and how can mobility be steered so as to achieve the desired global effects beyond the legitimate attraction strategies by individual regions and cities.

In the ESPON 2013 / ATTREG project¹ (on whose results most of this paper is based and whose core research team included the present authors) this challenge has been taken on, developing an operational concept of regional attractiveness which bridges various literatures and develops into an analytic framework used both to understand the performance of regions in terms of flows attracted, and to derive indications for the future in terms of policy strings and harmonisation strategies that could be leveraged for a more cohesive ‘Europe of flows’.

¹ The ATTREG project (ESPO 2013/2/7) is a collaborative project on “attractiveness of European cities and regions for residents and visitors that was carried out in 2010-2012 by a consortium of nine universities under the leadership of University Rovira i Virgili, which also funded the participation of these authors to the ERSA 2012 congress. The main objectives and research reports from this project can be accessed at http://www.espon.eu/main/Menu_Projects/Menu_AppliedResearch/attreg.html.

Without the pretension of illustrating all the work produced in ATTREG, this paper focuses on introducing a typology of regions that could be characterised by different forms of attractiveness in relation to different audiences, discuss how regions classified differently in this typology ‘performed’ in the study period (and also beyond it, peeking at the post-2007 crisis years) and propose a framework that suggests different policy responses which should derive from this ‘positioning’.

The paper is so structured: the next section presents the main theoretical streams on which this research is based, and concludes formulating a number of research questions. Section three includes a methodological subsection, the results of the geo-statistical analysis focusing on mobility flows in European NUTS2 regions throughout the first part of the 2000s decade, and an exploration of the implication in terms of regional performance also looking at the more recent developments. Section four presents a ‘policy analysis’ framework and discusses the potential value of different policies in regions characterised by diverging situations in terms of their attractiveness for different mobility ranges in the light of. Section five concludes with some final reflections.

2. THEORETICAL BACKGROUND

Our approach positions the research on regional attractiveness between two emerging literature fields. The first conceives contemporary societies as ‘on the move’, breaking away from an epistemological paradigm in social science which sees sedentarity as the norm and migration and travel as the exception (Sheller and Urry, 2006; Büscher *et al.*, 2011). People move around for a variety of reasons, which add up to the classical work- and freedom-related motives behind traditional accounts of migrations, and associate in complex ways, and for very different time spans. Under these assumptions, the established binaries of ‘at home’ and ‘away’, work- and leisure-related transits, or the very meaning of ‘resident’ and ‘tourist’ blur, and with them, the statistical definitions that have been traditionally used to capture and measure these dimensions. Also, people on the move do very different things (Elliott and Urry, 2010) especially when their cultural background and intermissions (albeit very short) with localised cultures is taken into account, making the effects of mobility on places unpredictable and disrupting established narratives of certain types of attraction as ‘good’ to places and others ‘bad’.

In this sense, Martinotti’s (1993) work on urbanisation as determined by successive waves of different mobilities, connects research on mobilities with a prescriptive approach emphasising the value of conviviality and integration: sustainable places are those who are able to accommodate users with different impacts, strategies, and use patterns in space and time. Building on this approach, Russo and Quagliari (2012) propose an interpretative framework for urban populations organised along two dimensions, the intensity of interaction with destination places (as opposed with origins) and the range of mobilities that characterises them, or transience in place. It is exactly the intersection of these mobilities, involving ‘encounters’ of different groups, which, according to these authors, may make places attractive (or repulsive).

Thus, the ATTREG project opened up the investigation on human mobility to different populations, also including tourists of different types as an extreme case of short or medium term migration with enduring local (and spatial) effects, and investigated not only how they

move but also how they have interacted and with what effects both at destination and at origin level.

The second angle we bring in this paper focuses on place characteristics that are likely to attract. There is a range of literatures that offer insight into the drivers of mobility. The migration literatures tend to focus on the utility maximising logic of workers moving to take advantage of economic opportunity (see a comprehensive review of these approaches in Borjas, 1989). This approach on mobility stresses the weight of neoclassical economic variables, tying together mobility mainly seen as ‘labour’ and economic success. Buoyant local and regional economies offer higher chances of – and a higher range of opportunities for – employment and better salaries, thus influencing the decisions of individual workers to move about.

A second family of literatures on the drivers of migration stress the importance of pre-existing systems of movement whereby migrants from a given ethnic or national community are more likely to migrate to regions where there are already members of that ethnic or national community for a variety of reasons that are well summarised by De Graaff and De Groot (2004). In particular, we have been looking at a more specialist literature that explored the characteristics of amenity migration for migrants who are either retired or who are approaching retirement. Authors such as Williams and Hall (2000) and Hall (2005) have started to conceptualise potential linkages between tourism and migration by stressing theories of either production-led migration (migration resulting by the attraction of employment in tourism-related economic sectors) or consumption-led migration (migration flows resulting from having been a tourist or finding in an area a certain set of consumption opportunities built through ‘tourismification’)

More recently a breakthrough insight in migration and place performance was the consideration of the value of quality of life as a prime influence of migration patterns for specific mobile populations with distinct ‘impacts’ on places (see for instance Dziembowska-Kowalska and Funck, 2000). This approach has been taken up (and brought to global awareness) in various works of Richard Florida (a.o. 2002a, 2002b), which stressed the importance of quality of life, amenities and place cultures for the attraction and the retention of creative workers who are at the centre of social innovation and competitiveness.

Thus, from the perspective of individuals or specific population groups, regions are attractive because they are economically successful and/or because they offer a good quality of life. This insight is certainly valuable in order to focus research on different mobility drivers but to some extent it overlooks the processes by which places are also ‘constructed’ through mobilities and endogenously respond to changes in their population mix in complex ways that range from a synergetic strengthening of labour and consumption markets and well as social networks that are conducive to further innovation and growth, to the emergence of diseconomies and conflicts which spring from competition and changing economic conditions.

A more integral approach tying together the concern for place characteristics and the notion of dynamic regional systems is due to Camagni (2008), who built on a body of work that ranges from post-Marshallian district theorists (e.g. Aydalot, 1988), to social theories of innovation and growth in the global world (i.e. Castells and Hall, 1994). ‘Territorial capital’

(OECD, 2001) is conceptualised by this author as a set of relatively place-bound features (assets or place characteristics) subject to lock-in effects and influenced by agency. Different endowments with territorial capital may explain the differential performance of places in terms of their economic competitiveness, resilience to external shocks, and capacity to innovate. Camagni's approach emphasises the role of governance – which processes and policies attract talent in a sustainable way and root creativity in place – (see for instance Camagni, 2003) and in this way it reconnects with Martinotti's work seen above.

ATTREG has integrated this broad range of insights from migration and mobility literatures searching for a 'thread' that brings together (different forms of) territorial capital with mobile populations and attraction and regional development policies, both at place level and within a European policy framework.

Thus, potential regional attractiveness as a feature of places is calculated through the measurement of the spatial distribution of territorial assets (22 indicators of endowments with environmental, antropic, economic, human, social, cultural and institutional forms of capital in the early 2000 decade); while 'realised' attractiveness is evidenced through the observed inter-regional flows of people (or different mobility/consumer groups) arriving at/flowing between places (outcome). Other key assumptions of the ATTREG project (mostly verified through geo-statistical analysis and case study research) are that attractiveness is:

- Path dependent. Mobility flows are subject to partial lock in effects: working populations are more likely to migrate into regions that have already attracted similar groups or cohorts, visitors are more likely to flow into regions that are equipped to receive tourists, etc.
- Likely to 'overspill' territorial boundaries and generate negative externalities locally and across territories (between attracted population in one regions, towards bordering regions).
- A relative concept (gravity like): people generally move from 'less to more'.
- Can be manipulated/needs to be mobilised by policymakers and planners in order to increase territorial performance

This paper explores the degree to which patterns of mobility appear to be inter-related, leaving out or only referring to other key issues treated in the ATTREG project². As indicated in the introduction our interest is particularly focused on the degree to which mobility is a matter for regional policy-makers both in terms of influencing patterns of mobility but also in terms of dealing with the implications of mobility at the regional scale. Clearly the ATTREG project as a whole dealt with a range of different issues and called on different bodies of evidence. However in the scope of this paper we will deal with four questions:

² These include: the general patterns of mobility of specific groups including those are not easily framed into the "working population-tourist" dichotomy (e.g. ERASMUS students, second home owners, medium-term expatriate professionals, etc.), the spatial distribution of determinants of regional attractiveness, the issues of different regional performances face to similar endowments with territorial capital factors and future scenarios.

- What are the spatial patterns of statistical association between different measures of inter-regional mobility across Europe?
- What are the economic characteristics of these different types of region (defined in terms of inter-regional mobility characteristics)?
- What are the regional policy implications of these patterns and characteristics?

3. THE ATTRACTIVENESS OF EUROPEAN REGIONS 2001-2007

3.1 Methodology

The methodology of the paper is quite simple. The ATTREG project generated a data-set at the NUTS2 regional level across 27 EU member-states and where possible it also generated comparable data for four EFTA countries and four candidate countries for membership of the European Union. Given problematic data coverage for the Candidate countries this paper will be based on the 27 member-states of the European Union and EFTA member-states. Using the NUTS2 regional geography (as defined by Eurostat and that came into force in 2006) this created a data-set for 287 regions although the project team was not always able to generate a data-value for all regions and all variables. The ATTREG project focused on the mapping and analysis of interregional mobility patterns throughout Europe.

The aim of the project was to describe and inter-relate the complex set of geographies encompassed by different inter-regional flows of people within and from without the European Union. The inter-regional flows we are interested in are measured at the point of arrival (or destination) of the people who are moving and since NUTS2 regions vary considerably in physical and population size across Europe we measured these as flow rates per 1,000 inhabitants.

We have concentrated on three basic measures of inter-regional mobility based on a review of data availability and relevance to the themes of the project:

- Rates of net migration calculated on the basis of annual residual population change (taking into account recorded natural changes in population);
- Rates of net migration for three age groups (15-24, 25-49 and 50-64 years old) also calculated on the basis of residual population change models. These age groups were selected for their differing propensities to migrate (see Plane, 1993) and on the basis that these age groups may be migrating for different reasons (see Niedomsyl, 2008, and King *et al.*, 1998);
- Visitor arrival rates as the number of recorded ‘visitors’ staying in registered commercial establishments per 1,000 head of resident population.

The measurement of inter-regional mobility across Europe is problematic because:

- Individual countries do not consistently record migratory flows and although many states have systems for recording internal inter-regional migratory flows, systems for recording inter-regional flows across national borders are not consistently in place (either in terms of recording who is a migrant and the point of origin of migratory

moves). Hence the project has depended upon residual demographic models for generating net migration data for regions;

- Migratory flows recorded in ‘official’ statistics do not capture all aspects of migration (e.g. informal or illegal forms of people movement). Thus the project has concentrated on the forms of movement that are registered (or detectable) in official statistics only;
- Migratory flows tend to vary over a business cycle (see Milne, 1993) but the project team has only had access to data for a short period (2001-07) of relative prosperity and thus its observations will be limited to saying something about only part of the business cycle.

The method of analysis is based initially upon the use of hierarchical clustering³. The research team accepts however that clustering is a method of generating groups of regions that share ‘similar’ characteristics and that given the ‘messiness’ of the data used to generate the clustering there is likely to be a degree of inaccuracy at the peripheral edges of the clustering classification.

However the aim of the exercise in this case is to generate ‘districts in the multi-dimensional variables space’ in order to assess the nature of the policy problematic for regions. Hence some inaccuracy in the classification of individual regions located at the edge of clusters does not invalidate the discussion of the mobility issues faced by groups of regions as a whole. Having generated the clusters, their validity in terms of being able to distinguish between different economic and social characteristics will be tested using ANOVA tests on regional characteristics.

3.2 Regional typologies of attractiveness and territorial performances

The basic analysis produced by the ATTREG project introduced the main mobility patterns throughout the 2000s. Thus, the main trends picked by the ‘descriptive’ exercise of mapping such indicators presented us with a number of key pointers (see ESPON 2012, pp. 50-56, for a detailed description of these trends):

- The main trends for different mobile population have been roughly 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-term mobilities (various forms of tourism). Also within national systems at the core of Europe there is a north-south drift and toward the wealthiest urbanised regions (e.g. Sweden).

³ Anderberg (1973 cited in Mangiameli et al. 1996: 402) notes that the objective of cluster analysis is to group elements (regions in this case) into “clusters such that elements within a cluster has a high degree of ‘natural association’ among themselves while the clusters are ‘relatively distinct’ from one another”. However it must be remembered that clustering methods work well when there are compact, isolated clusters in the data-set being worked with, they are more problematic when the data might be described either as “messy” (Mangiameli et al. 1996, 402) or as having few of the ideal characteristics. The team has used the Ward’s method of hierarchical clustering based on the squared Euclidian distance between variable points calculated from standardised variable values. In the work of Mangiameli et al. (1996) who compare the performance of different forms of hierarchical clustering, Ward’s method performs well in relation to seven methods of hierarchical clustering based on accuracy across a range of different data-set characteristics (1996: 411).

- There are macro-regional trends that can be recognised, within which it is important to frame the singular regional trajectories. The attraction capacity of the Mediterranean Arc stands out, albeit with a counter trend in the southern EU regions (southern Italy and Greece) affected by structural (economic and institutional) deficits, as well as the role of sending-population regions in the new EU States of central and eastern Europe.
- Flows by age groups 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.
- A ‘silver(ing) age drain’ seems to be occurring 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 leave when they retire. The mobility drivers for this group are 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.
- 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.
- More peripheral regions (whether capital cities or not) as well as rural regions in the proximity of the largest metropolitan areas have managed to attract large numbers of people throughout the period 2001-07.

The main focus of this paper, however, is on the study of the combination and possible intermeshing of different forms of mobilities at regional level. To do this and bring it to an operational level in terms of policy, we outline regional typologies that form the basis for arguing that there are differing opportunity spaces for regional policy-makers facing up to the challenges of inter-regional movement of people. These findings are then measured against the economic performance of these different ‘inter-regional mobility contexts’ within the period of economic growth (2001-07) but also looking at the economic performance of these regions since 2008.

The ATTREG project generated a series of different regional typologies that dealt with age-related net migration and the interaction of visiting and net migration separately (for full details see ESPON, 2012).

Figure 1: Scatter plot of net migration rate against visitor rate

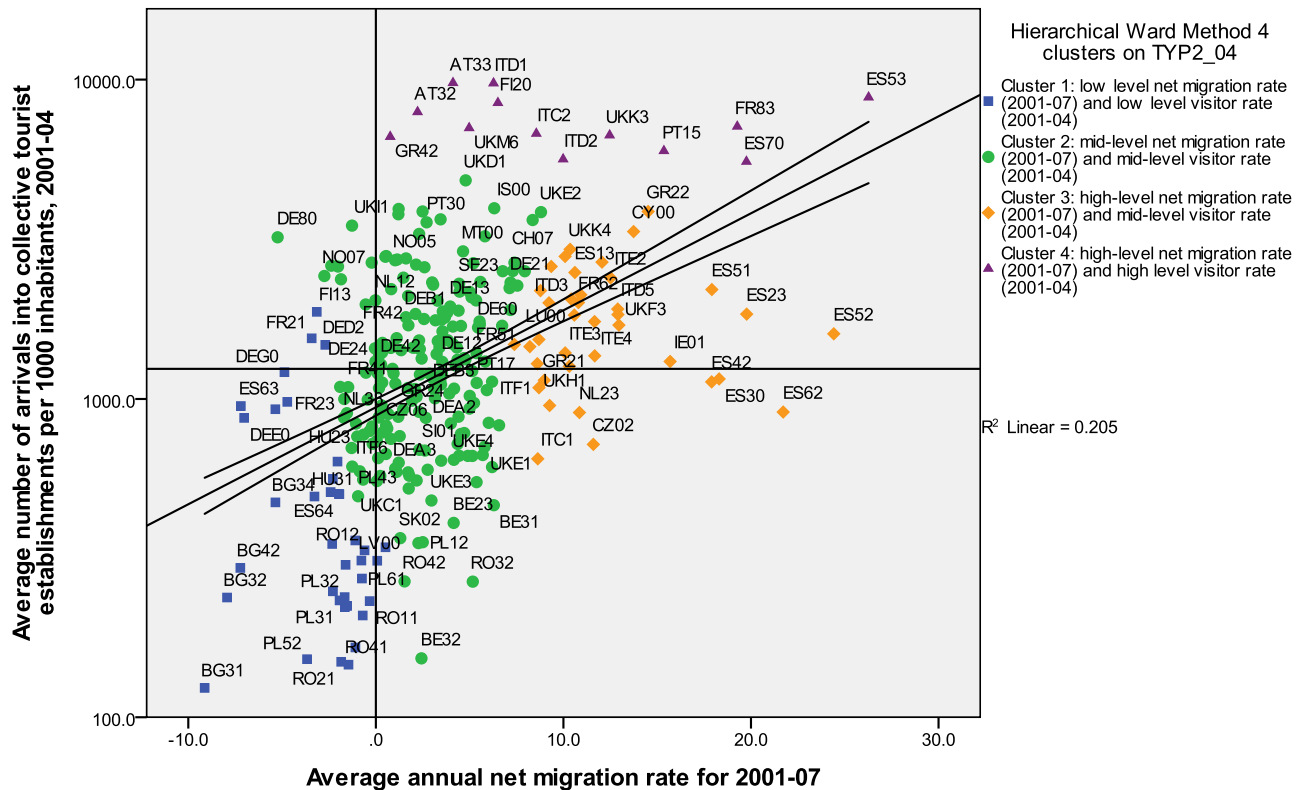


Figure 1 shows the standardised annual net migration rate against the number of visitors in commercial tourist accommodation (on a logarithmic scale). The plot shows the general trend for regions who experience higher net migration rates tend to also receive higher numbers of visitors. The plot sets a vertical axis demarcating regions with net out-migration to the left of the axis and regions with net in-migration to the right of the axis. The horizontal axis is set at the median level of tourist visiting (1,100 annual visitors per 1,000 residents). In terms of the general distribution regions experiencing net out-migration tend not to receive a large number of visitors although regions receiving above the median rate of visitor attraction demonstrate a wide variation in net in-migration (only a handful experience average net out-migration over this period).

Based on a hierarchical clustering of the two dimensions in Figure 1, we arrive at a ‘wavelength’ typology grouping regions on the basis of overall net migration and visitor (receiving) rates. The clustering algorithm on these measures of mobility over shorter and longer terms generates these four categories of regions:

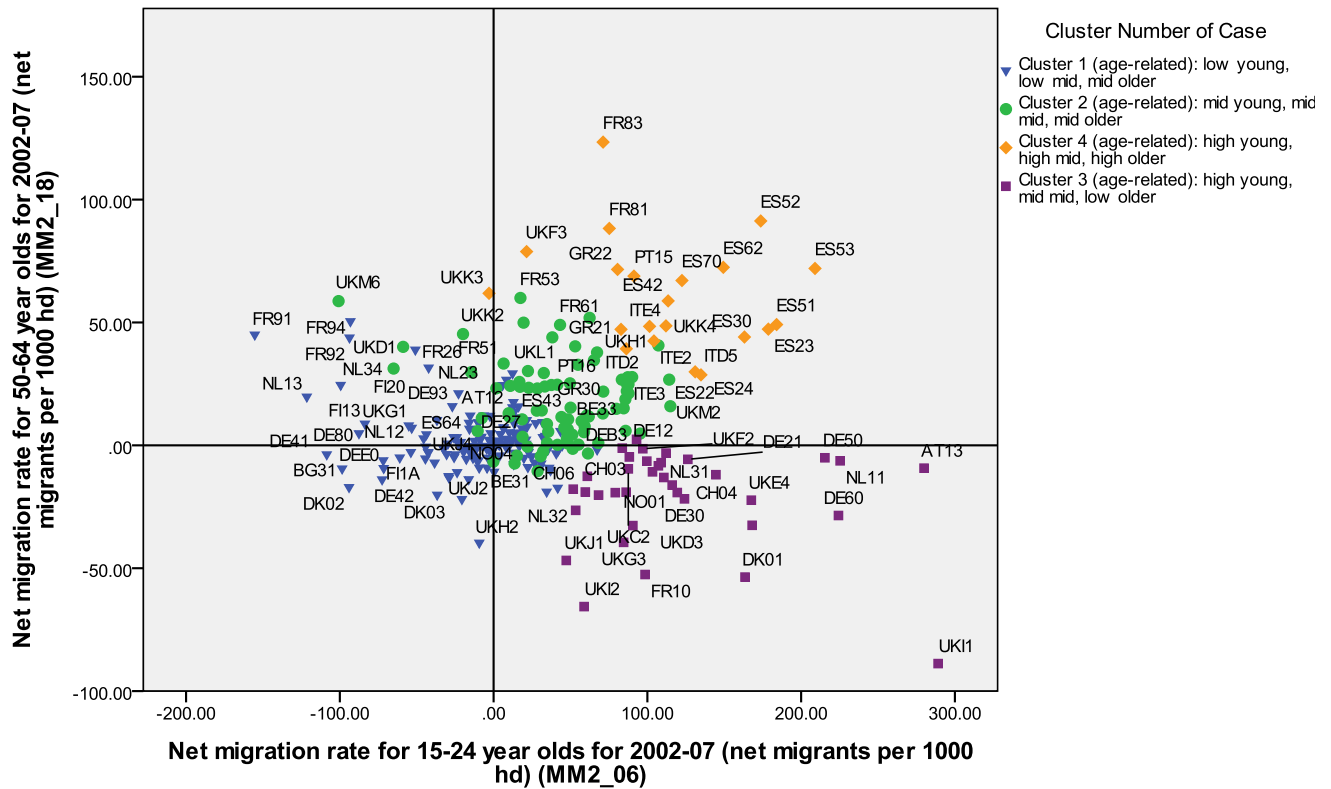
- Cluster 1 (2001-07) is made up of 38 NUTS2 regions where the average net migration rates over the period are either negative (there is net out-migration) or very small and positive combined with very low visitor arrival rates;
- Cluster 2 (2001-07) is made up of 197 NUTS2 regions where net migration rates are positive (ie there is net in-migration) but small and where net visitor arrival rates are greater than for Cluster 1 but smaller than the other classes;

- Cluster 3 (2001-07) is a group of 38 regions that have a range of net migration rates similar to that of Cluster 4 but a range of visitor arrival rates similar to that of Cluster 2.
- Cluster 4 (2001-07) is a small group of 13 regions where the net migration rates are markedly greater than for cluster 2 regions but this group have distinctively very high levels of visitor arrival rates.

Whereas this typology exercise starts to generate some interesting groups, we are still left with markedly different sized clusters. Thus there is a need to explore additional dimensions in order to create a more nuanced typology.

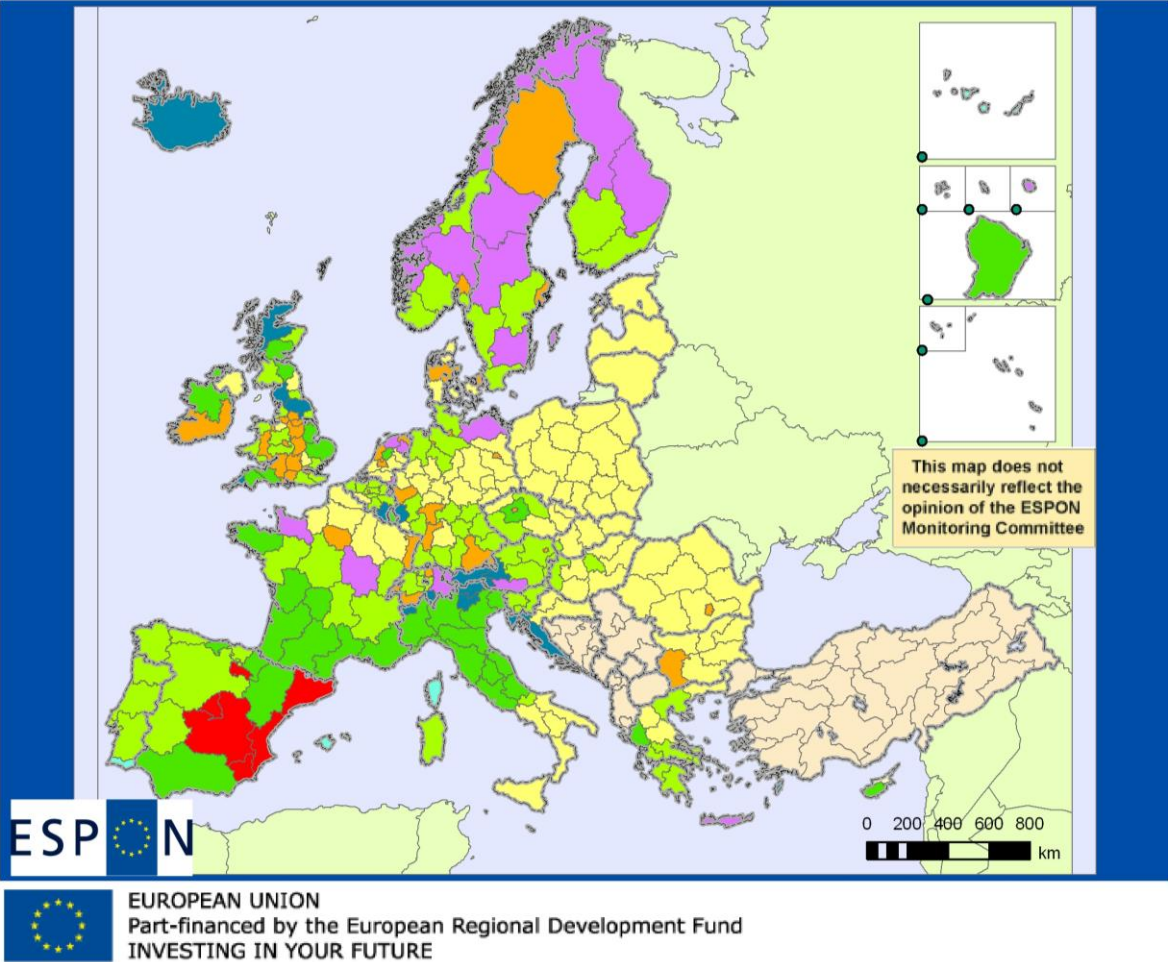
Figure 2 plots the five year net migration rates for the younger age cohort (15-24 years old) and for the older age cohort (50-64 years old) using the cluster membership described above. This scatterplot demonstrates that there is no clear statistical association between the net migration rates of these two age cohorts but that the clustering start to pick out an unusual group of regions that experience both net out-migration in the older age cohort and net in-migration in the younger age cohort. This is a group of 36 regions that are experiencing demographic rejuvenation. Taking out this cluster of rejuvenating regions allows some kind of statistical association to be re-asserting between the net migration rates of the two age cohorts. Thus within a combination of clusters 1, 2 and 4 there is a broad correlation between the net migration rates of the older and younger age cohorts although this relationship is less strong than for the migration-visiting relationship.

Figure 2: Scatter plot of age-related net migration rates



In terms of the policy issues faced by regional policy-makers it is the combination of these characteristics that are most interesting, and it will be picked up in the next section. Thus a hierarchical clustering exercise combining overall net migration rate, net migration rates for the younger (15-24 years old) and older (50 to 64 years old) and for total recorded visiting rates produces a new eight category typology that picks out important combinations of mobility outcome for regions for the period 2001-07.

Figure 3: Regional typology by wavelengths and age groups of mobilities attracted



Regional typology of inter-regional mobility rates

- NUTS2 regions (2006)**
- <all other values>
- Typology**
- Cluster 1 (low level net mobility)
 - Cluster 2 (mid level mobility)
 - Cluster 3 (mid to high level net mobility)
 - Cluster 4 (high level net mobility)
 - Cluster 5 (young net in-migration)
 - Cluster 6 (older net in-migration)
 - Cluster 7 (tourism specialist)
 - Cluster 8 (high migrant low visitor)

Figure 3 maps out the eight regional types. Within the categorisation there are four regional types that demonstrate the general principles of growing/decreasing attractiveness (in terms of mobility outcome) both for migrants and for visitors. These four clusters constitute the main axis of regions that appear to combine similar levels of attraction for migrants across all ages and attraction for visitors.

These clusters are:

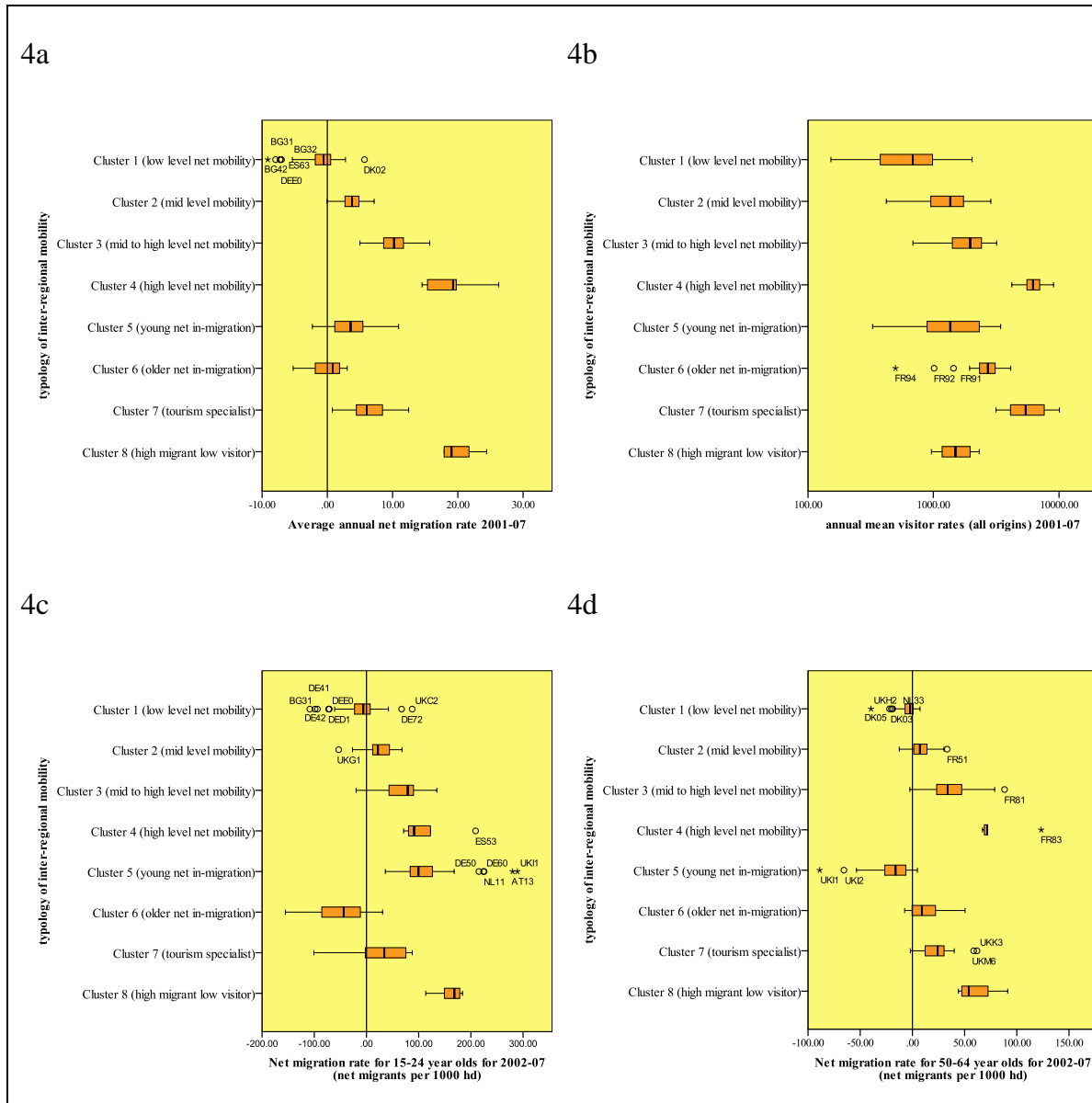
- Cluster 1 (light yellow) is made up of 90 regions, half of which are in the member-states that have acceded to the European Union since 2004 but that also include areas of Germany, the Netherlands and Northern France. As a group these have an average annual net out-migration of resident population across all age groups and experience relatively low rates of visiting;
- Cluster 2 (light green) is made up of 79 regions mainly in the older member-states of the EU15 with (on average) net in-migration rates and a mid-level visitor rate;
- Cluster 3 (darker green) is made up of 34 regions located in a mainly western Mediterranean Arc from Catalonia through to Lazio, the Italian Adriatic coast as well as the Atlantic seaboard where there are generally high levels of both net migration and visitor rates;
- Cluster 4 (light blue) is a group of 5 regions made up mainly of Mediterranean regions where the data suggests that there have been generally high levels of net migration combined with high levels of visiting.

The remaining 80 regions are those that cluster off the main axes of Figures 1 and 2. These clusters can be thought of as having a particular combination of characteristics that remove them from the main axis of increasing attractiveness across all categories of migrants. In this regard they are in effect either regions that are actively specialising in attracting particular types of audience or that have become specialist by accident. These four clusters are:

- Cluster 5 (orange) where net migration rates for the younger age cohort (15-24 years old) are associated with net out-migration by those in the older age cohort (50-64 years old). This is a group of 37 regions that are experiencing demographic rejuvenation through migration and among which metropolitan areas are strongly represented.
- Cluster 6 (lilac) is a group of 23 regions where net in-migration by the older cohort is combined with net out-migration by those in the younger age cohort. This is a group of regions most often located in northern Europe (a strong cluster around the Baltic in Sweden, Finland and northern Germany).
- Cluster 7 is a group of 16 regions (darker blue) that are most notable for their relatively high rates of tourist stays. This is a group of regions that experience relatively modest rates of net migration in comparison to the rate of visitor arrivals.
- Cluster 8 (red) is a group of 6 regions that seem to combine high levels of migration with only moderate levels of attracting visitors (in terms of visitors per head of population). This group of regions are all located within Spain.

Figures 4a to 4d outline the relative values of our mobility measures for the eight clusters of regions. The four figures demonstrate the general rise in mobility outcomes for the regions in Clusters 1 to 4. As noted above these four clusters represent regions that lie close to the axis of visitor receiving rate and net migration outlined in Figure 1. The steady rise in attractiveness as measured by mobility outcome is seen in all four measures. However the figures also demonstrate the reasons by which the remaining 80 regions come to be identified as ‘specialist’.

Figure 4 a-d: Measures of attractiveness in different clusters



Thus Cluster 5 regions experience net in-migration rates similar to Cluster 4 regions for the younger age group (Figure 4c) but experience net out migration rates for the older age

group (Figure 4d) that are higher than Cluster 1 regions. Cluster 7 regions experience visitor receiving rates on a par with Cluster 4 regions (see Figure 4b) but experience net migration rates that are similar to those experienced by Clusters 2 and 3 (see Figure 4a).

Tables 1 and 2 explore cluster membership in relation to two particular regional characteristics: whether NUTS2 region is located either within one of the fifteen member-states prior to January 2004 or within an EFTA member-state or whether it is located in one of the newer accession states (post 2004); and whether the region might be identified as metropolitan or not. Table 1 illustrates that with the exception of three regions (the capital city regions of Prague, Bucharest, Sofia and the Adriatic Coast of Croatia), all the ‘specialist’ regions are located within the older member-states of the European Union. In terms of odds ratio, regions in the older member-states and EFTA area were seven times more likely to be amongst one of the specialising clusters than the regions from the accession member-states. Thus 55 out of 59 regions in the new accession states are classified in one of the clusters close to the axis of overall attractiveness (albeit at the lower end of the axis).

Table 1: Cluster membership and situation within the European Union

	NUTS region outside EU15-EFTA area		NUTS regions within EU15-EFTA area	
	Count	%	Count	%
Cluster 1 (low level net mobility)	45	76.3%	45	19.5%
Cluster 2 (mid level mobility)	8	13.6%	71	30.7%
Cluster 3 (mid to high level net mobility)	2	3.4%	32	13.9%
Cluster 4 (high level net mobility)	0	0.0%	5	2.2%
Cluster 5 (young net in-migration)	3	5.1%	34	14.7%
Cluster 6 (older net in-migration)	0	0.0%	23	10.0%
Cluster 7 (tourism specialist)	1	1.7%	15	6.5%
Cluster 8 (high migrant low visitor)	0	0.0%	6	2.6%
totals	59		231	

Table 2: Cluster membership and metropolitan areas

	NUTS2 region not a metropolitan area		NUTS2 defined as metropolitan urban area	
	Count	%	Count	%
Cluster 1 (low level net mobility)	57	35.2%	33	25.8%
Cluster 2 (mid level mobility)	38	23.5%	41	32.0%
Cluster 3 (mid to high level net mobility)	21	13.0%	13	10.2%
Cluster 4 (high level net mobility)	4	2.5%	1	0.8%
Cluster 5 (young net in-migration)	4	2.5%	33	25.8%
Cluster 6 (older net in-migration)	21	13.0%	2	1.6%
Cluster 7 (tourism specialist)	15	9.3%	1	0.8%
Cluster 8 (high migrant low visitor)	2	1.2%	4	3.1%
	162		128	

Table 2 considers cluster membership cross-tabulated with the degree to which a region is classified as metropolitan. Here it is notable that a greater percentage of non-metropolitan regions are classified in Cluster 1 than is the case for metropolitan areas. Here the metropolitan characteristic is particular striking in terms of the ‘specialist’ clusters. Thus metropolitan areas were 14 times more likely to be classified as a cluster 5 region (high net migration amongst the younger cohort) than non-metropolitan regions. Equally non-metropolitan regions were nine times more likely to be classified as a cluster 6 region (older net-migration) or thirteen times more likely to be classified as a tourism specialist region (cluster 7) than a metropolitan region.

Table 3 compares this combination typology of eight categories with the ‘wavelength’ typology outlined on the basis of Figure 1. This illustrates some of the problems of assigning typology membership when dealing with ‘messy’ data. However 71% of ‘standard’ regions cross tabulate between the two. In the case of the specialising regions it is clear that Clusters 5 and 6 are effectively sub-groups of the very large Cluster 2 in the wavelength typology.

Table 3: comparison of regional membership by typology

		Wavelength typology (long-short term)				Total
		Cluster 1: low level net migration rate (2001- 07) and low level visitor rate (2001-04)	Cluster 2: mid-level net migration rate (2001- 07) and mid-level visitor rate (2001-04)	Cluster 3: high-level net migration rate (2001- 07) and mid-level visitor rate (2001-04)	Cluster 4: high-level net migration rate (2001- 07) and high level visitor rate (2001-04)	
Combined typology: wavelength and age- related	Cluster 1 (low level net mobility)	36	54	0	0	90
	Cluster 2 (mid level mobility)	0	79	0	0	79
	Cluster 3 (mid to high level net mobility)	0	5	28	0	33
	Cluster 4 (high level net mobility)	0	0	1	4	5
	Cluster 5 (young net in-migration)	1	33	3	0	37
	Cluster 6 (older net in-migration)	1	19	0	0	20
	Cluster 7 (tourism specialist)	0	7	0	9	16
	Cluster 8 (high migrant low visitor)	0	0	6	0	6
Total		38	197	38	13	286

Table 4 outlines some of the classic labour market and economic condition characteristics that underpin much theory on predicting migration flows. Calculating regional averages for the period 2001-03 over each of the regional categories reveals that the Cluster 1 regions generally had significantly different measures of labour market and economic performance in comparison with the other clusters of regions. Thus Cluster 1 regions had a lower average income per capita, a low GDP measures per capita and lower levels of employment in the population aged 25 to 64 years. This difference was most marked in relation to employment rates of residents aged 25 to 64 years with only primary level qualifications.

Table 4: Economic and labour market characteristics of cluster types

	average GDP per capita 2001-03 (Euros)	average primary income per inhabitant 2001-03 (Euros)	average employment rate for workers (25-64) 2001-03	average employment rate for workers (25-64) with primary education 2001-03	average % of unemployed (as % all adults) for adults aged 25 to 64 years, 2001-03
Cluster 1 (low level net mobility)	12,714.34	9,933.78	63.8%	45.0%	7.8%
Cluster 2 (mid level mobility)	21,829.87	14,992.95	71.3%	57.3%	4.1%
Cluster 3 (mid to high level net mobility)	22,326.47	15,405.72	68.9%	58.3%	4.3%
Cluster 4 (high level net mobility)	17,120.00	13,186.85	65.4%	59.9%	5.5%
Cluster 5 (young net in-migration)	33,042.48	17,414.51	73.4%	59.8%	3.9%
Cluster 6 (older net in-migration)	24,100.86	13,209.75	70.4%	58.7%	5.7%
Cluster 7 (tourism specialist)	24,245.19	16,590.27	72.7%	63.3%	3.4%
Cluster 8 (high migrant low visitor)	18,372.22	14,390.84	66.8%	58.7%	5.5%

* Source: average (mean) calculated by ATTREG based on data from Eurostat

Thus there are clear economic incentives for working age adults to move away from these regions to other regional economies. However there is not a clear and distinct upgrade on these economic and labour market characteristics through Clusters 2, 3 and 4 that are significantly better performing than Cluster 1 but are indistinguishable between these cluster averages except on the grounds of their mobility outcomes. The location of Cluster 4 regions in the Mediterranean Arc leads this group to have a slightly lower level of income per capita (but that is statistically not significantly different from Clusters 2 and 3).

In terms of the four ‘specialist’ groups of regions Cluster 5 regions are most notable in terms of primary income, GDP per capita and the overall employment rate (all generally higher) and lower levels of unemployment. Equally the Cluster 7 regions that appear to record high levels of visitor rates recorded higher levels of employment and lower levels of unemployment amongst the 25 to 64 year olds at the beginning of the period we are interested in. Thus overall these labour market and economic characteristics make it clear why there may be incentive for working age adults in Cluster 1 regions to migrate somewhere else. However they do not seem to indicate that any of the other clusters are score consistently higher across these indicators. Thus the motives for the recorded patterns of interregional mobility may be more complicated.

In order to give some flavour to the regions contained within each clusters, Table 5 outlines the degree to which regions have the infrastructure to receive certain types of flows. As might be expected given the general relationship between net migration rate and visitor receiving rate from Clusters 1 to 4, regions in the ‘higher’ clusters have more tourist accommodation beds per capita than regions with lower levels of inward mobility. It is equally not surprising that regions in Cluster 7 (tourism specialists) also have a larger number of beds per capita. Regions in Cluster 5 have particularly low levels of beds per capita suggesting that movement into these regions may be accommodated by other means than ‘collective establishments’ of tourism (such as hotels).

Table 5: Regional characteristics (assets) of cluster types

	Number of beds in tourism-related accommodation per 1,000 population, 2006-09	Average number of registered university students per 1,000 residents aged 15 to 24 years, 2001-03	Average number of arrivals by foreign nationals into collective tourist establishments per 1,000 residents, 2001-04	Average proportion of net migrants to the average number of inhabitants in a 1 year age cohort aged between 20 and 24 years, 2004-07
Cluster 1 (low level net mobility)	33.2	207.69	171.4	-0.049
Cluster 2 (mid level mobility)	56.6	248.02	389.6	0.299
Cluster 3 (mid to high level net mobility)	101.1	274.19	629.0	0.896
Cluster 4 (high level net mobility)	405.5	168.78	4129.1	1.482
Cluster 5 (young net in-migration)	39.9	389.02	630.5	0.298
Cluster 6 (older net in-migration)	139.9	194.93	1029.7	0.001
Cluster 7 (tourism specialist)	305.6	144.93	2960.8	0.602
Cluster 8 (high migrant low visitor)	56.1	279.80	470.6	1.456

The second column indicates the number of registered students in higher and further education per capita (in the 15-24 year old age cohort). We now observe that amongst Cluster 5 regions nearly 4 in 10 (equivalent) residents in the 15-24 year age cohort are registered as students in higher and further education. Tourism specialist regions (Cluster 7) record the lowest average number of registered students per 1,000 of student age residents but record relatively high levels of visitor rate from visitors registered as resident outside their country of sojourn. Cluster 6 regions (net in-migration from older working age adults) despite registering only a moderate level of tourist beds, record a marked level of foreign-resident visitors although this masks that most regions in Cluster 6 demonstrate a wide variance in performance on this measure although they consistently record relatively high visitor rates from citizens within their country of sojourn. This would suggest that older working-age net migration, when dissociated from younger age net migration, is associated strongly with ‘domestic’ tourism (although not exclusively).

The final column in this table gives an indication of the relative importance of migration to the working of the regional labour market, returning the ratio of net migration flow against the average size of a year cohort aged between 20 and 24 years in the region. The size of a year cohort in their early 20s is indicative of the importance of young people living in the region who are moving into the regional labour market. The OECD has used a similar indicator to measure the importance of migration to territorial labour market dynamics drawing a comparison to the ratio of foreign inward investment to indigenous investment within a regional economy as an indicator of foreign exposure. In this case it is clear that for Cluster 1 regions, gross net out migration is, on average, equivalent to losing 5% of an age cohort in their early 20s. However, for Cluster 3 and 4 regions, net migration is equivalent to 90-150% (on average) of a single year cohort. This would indicate that these regional labour markets are very exposed to extra-regional labour migration. By contrast

Cluster 2 regions are only exposed to 30% indicating a lower dependence on extra-regional labour conditions.

Clearly these figures focus on gross flows of migrants and not actual flows. Internal inter-regional migration flow data would suggest that Cluster 5 regions may also be highly exposed to in-flows of labour but that this is hidden in the net migration figures. These mainly metropolitan regions are operating as a form of escalator where in-flows of younger working age adults are balanced by outflows of older working age adults. However even with this caveat, it might be argued (as is done in OECD, 2010) that regions need to be mindful of their exposure to external inputs in their regional economies in order to benefit from the advantages that spring from the mobility of labour.

3.3 Mobility and regional performance

The labour market conditions revealed in Table 3 are consistent with the idea that poor labour market conditions result in regions being unable to retain residents but it does not mean that competitive labour market conditions necessarily makes a region attractive. Considering labour market conditions alone it is clearly most advantageous for workers with fewer qualifications to consider economic migration since the differences in employment rates are greatest for this category of worker. However we also want to consider the performance of these clusters of regions through the 2000s.

Table 6: Change in key economic indicators 2001-07

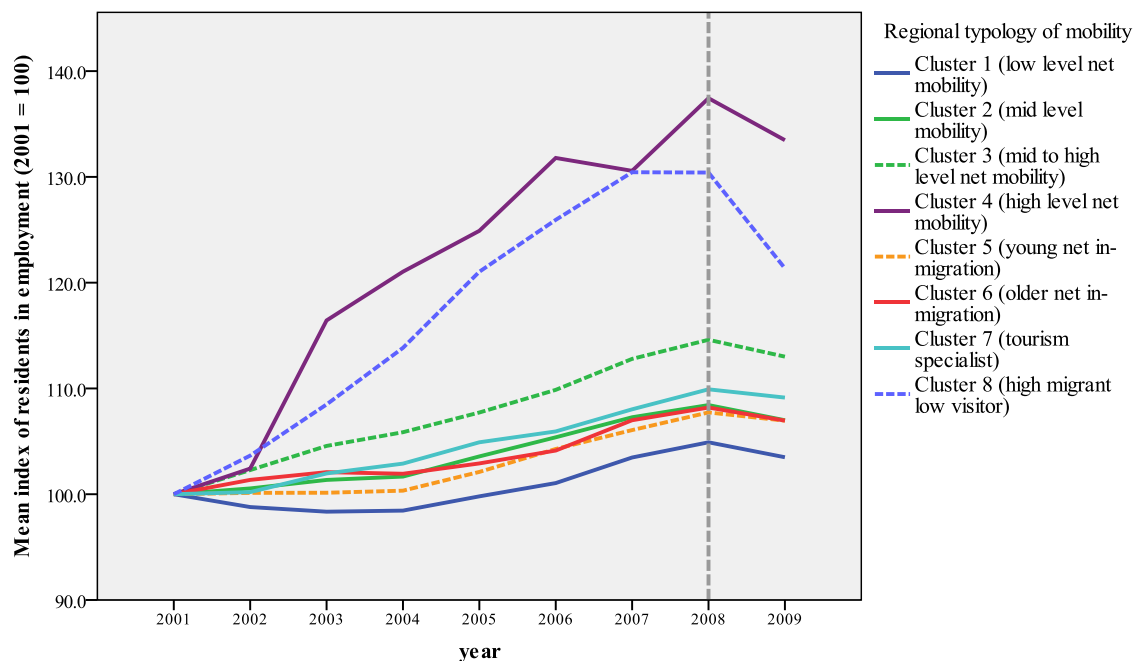
	Change in GDP per capita 2001-07	Percentage change in employment rate for residents 2001-07
Cluster 1 (low level net mobility)	34.2%	8.1%
Cluster 2 (mid level mobility)	18.5%	4.4%
Cluster 3 (mid to high level net mobility)	17.2%	4.3%
Cluster 4 (high level net mobility)	17.5%	5.7%
Cluster 5 (young net in-migration)	19.5%	4.4%
Cluster 6 (older net in-migration)	16.2%	5.3%
Cluster 7 (tourism specialist)	16.6%	4.2%
Cluster 8 (high migrant low visitor)	22.9%	5.6%

Table 6 outlines the overall economic development trajectories by this regional typology over the period 2001-07. It is notable that on average regions in these clusters generated fairly similar changes in GDP per capita over the period 2001-06 with the exception of Cluster 1 regions. Cluster 1 regions generated nearly twice the growth in GDP per capita over this period. Equally changes in employment rate for the same period suggest that the growth of working age adults resident in Cluster 1 regions in employment increased in such a way that a greater proportion of working age adults in these regions were in employment in 2007 relative to other clusters of regions.

The chart in Figure 5 indicates that these changes in GDP per capita and in employment rate have not necessarily been generated by the creation of employment in Cluster 1

regions. The figure plots the average index of employment in each cluster for the period 2001-10. Thus the clusters with the greatest levels of inward mobility (both in terms of migrants and visitors) are the ones with the highest creation of employment. In particular it is the handful of regions in Clusters 4 and 8 (of which 8 out of 11 are in Spain) are those with the greatest creation of employment (although the confidence limits associated with calculating the average for these small groups are high). Amongst the more populated clusters, the clusters with higher net migration rates are the ones in which more employment has been generated. Thus overall it is a reasonable assertion that out migration from Cluster 1 regions has contributed to strengthening basic economic indicators for those regions.

Figure 5: Changes in employment (residents in employment) 2001-09 by cluster



The number of patents registered is often used as a proxy for innovativeness and that innovativeness is associated with high levels of mobility and mixing. Thus Figure 6 plots the number of patents registered per million members of the regional workforce through the 2000s. This suggests that innovativeness is not clearly associated with regional clusters showing higher levels of inter-regional mobility. The regions with the highest levels of net migration (Clusters 4 and 8) are in fact associated with very low levels of patent registration whilst Cluster 5 regions (higher net migration for the younger age cohort) are associated with high levels of patent registration (in line with the presence of universities).

Figure 7 plots changes in unemployment amongst the 25 to 64 year old working age population for the regional clusters. Again the pattern of decreasing unemployment for Cluster 1 regions between 2001 and 2007 suggests (in combination with Figure 5) that out migration has taken the pressure off the regional labour markets in this cluster. Thus for Cluster 1 unemployment amongst the 25 to 64 year old population declined to the point where it is statistically not very different from unemployment in Cluster 6 regions (ones experiencing migration enhanced aging). What is particularly notable is that the regions

with the highest levels of net in-migration (Clusters 4 and 8) experience dramatic increases in unemployment post 2008.

Figure 6: Patents registered per million workforce 2001-09 by cluster

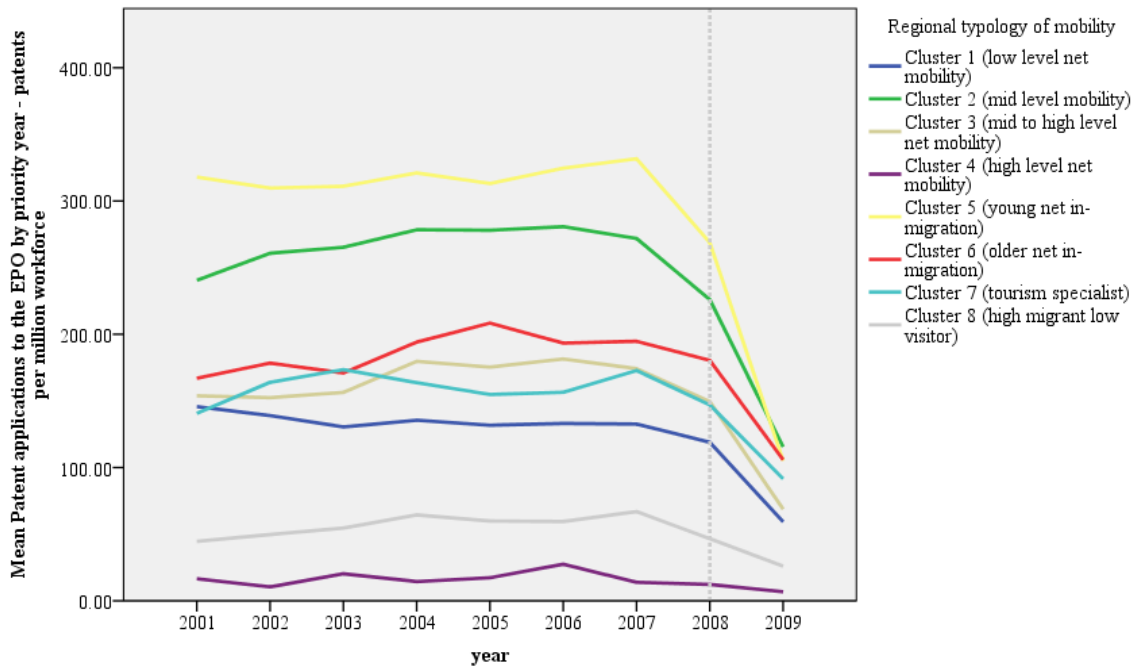


Figure 7: Unemployment amongst 25-64 year olds 2001-09 by cluster

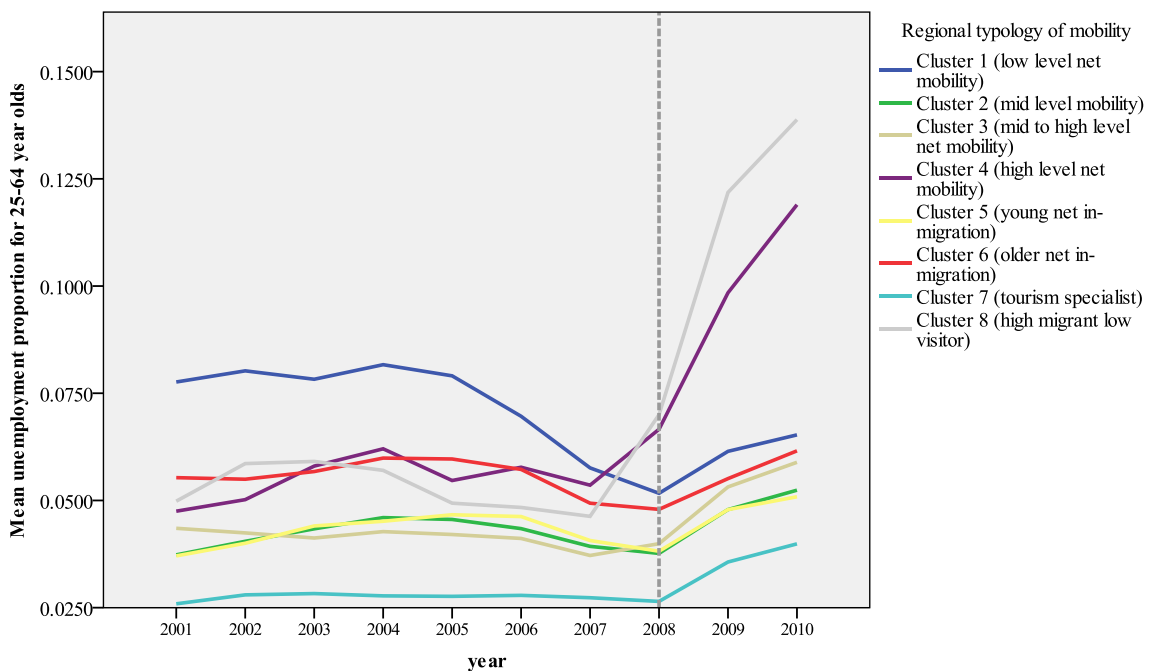
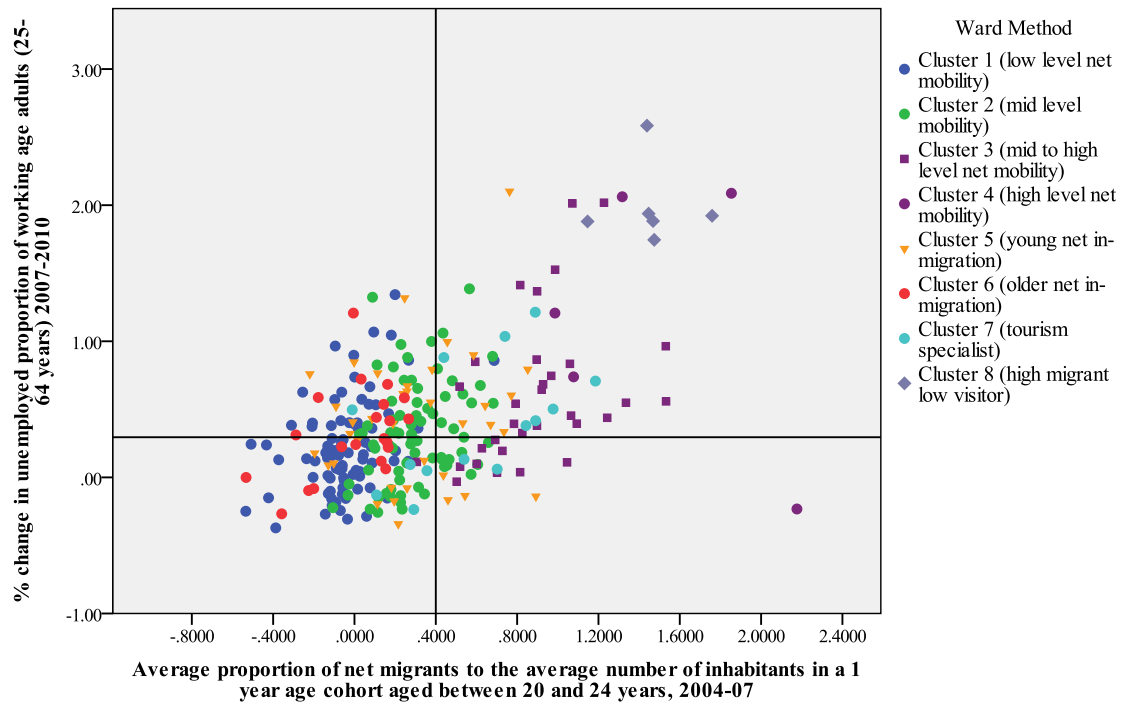


Figure 8: Labour market exposure to inter-regional migration and the economic slowdown 2007-10



This point is emphasised in Figure 8 where our measure of labour market exposure to inward migration (see Table 4) is plotted against the percentage change in the proportion of the working age population (aged 25-64 years old) who are recorded as unemployed between 2007 and 2010. The scatterplot suggests a positive association between these two measures. Thus regions in Clusters 3, 4 and 8 are most likely to be located in the upper right quadrant of rapidly increasing unemployment and labour market exposure. This is not to say that migration and mobility caused economic crisis but that the high mobility rates associated with these regions became problematic once the financial crisis had emerged.

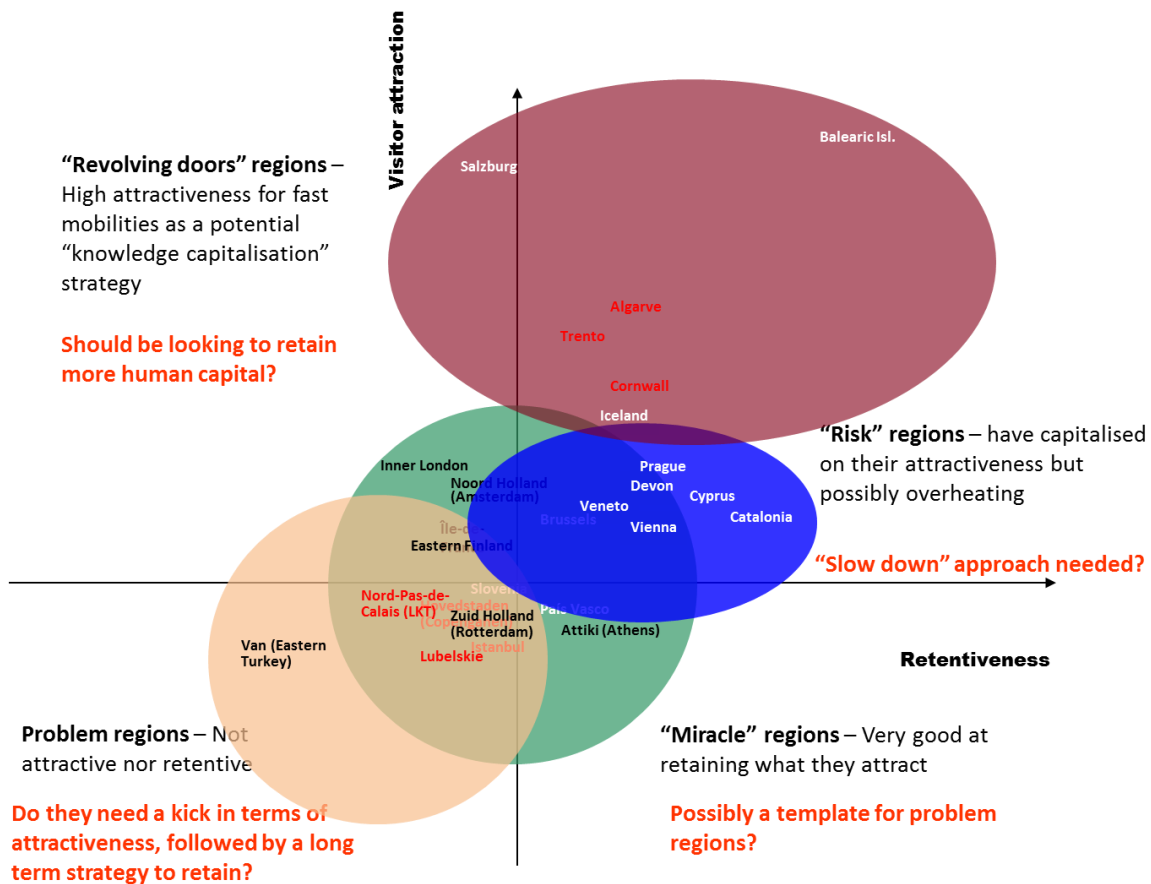
4. POLICY SPACES

The typologies illustrated in Figures 1 to 3 set up a first insight into classes of problems relative to regional attractiveness that should be addressed with specific local (place-based) policies. In particular these ‘policy’ issues relate to how regional policy makers might best make sense of the relationship between different types of mobility.

We are arguing that the typologies analysis and the descriptive statistics offered in Section 3 create a series of policy spaces (or problematic ‘issues’) for regional policy makers who want to mould regional development through the facilitation or influencing of mobility. It is clear that regions experience different combinations of inter-regional mobility outcome as measured by the four dimensions outlined in this paper. Figure 9 marks out spaces generated by the simple mobility ‘wavelength’ typology as a series of bubbles around the

data points⁴. It also marks out some potential policy questions for regional policy makers associated with different locations around the scatter plot.

Figure 9: ATTREG Regional typology by wavelengths of mobilities attracted and regional strategies



The first point however is to recall that on the whole visiting rates and net migration rates are broadly correlated for most regions (94%) in the accession member-states and for around two thirds of regions in the older member-states (around 65%). These are the regions that are clustered with Clusters 1 to 4 of the ‘combined’ typology (see Figure 3). Referring to Figure 9, this suggests that region policy-makers might face two extreme positions:

- Regions in Cluster 1 (combined typology) and Cluster 1 (wavelength typology) are faced with low levels of inward mobility and general outward mobility. Through the early part of the 2000s this was not problematic because outward migration appears to have helped tackle the issues of spare labour in these regions. However in 2007/08 these regions appear to have converged with the bulk of European regions and now

⁴ This picture also includes the mention of some exemplary regions in each class, those in red having been included in the ATTREG project as case studies.

these regions might need to think about how they might retain their working age population as employment grows. In this sense these regions have approached a problematic juncture (hence the ‘problematic’ label in Figure 9) and may need to start thinking about ‘return’ migration or an ‘attraction kick’ based on an event strategy or a new university;

- Regions in Cluster 3 and 4 (wavelength typology) or Clusters 3 and 4 (combined typology) have needed to face up to the challenges of high levels of visiting and migration. Figure 8 suggests that the high levels of migration may be at the very least a symptom of labour market vulnerability (high levels of net migration relative to the indigenous production of labour). Equally these regions are more heavily dependent upon tourism as an economic sector both in terms of exposing regional labour and housing markets to external pressures and shocks (the ‘risk’ regions of Cluster 4 in the wavelength typology in Figure 9).

The policy issues associated with the ‘revolving door’ and ‘miracle’ quadrants are more closely brought into focus through the composite typology and the clusters of ‘specialising’ regions. For example this composite typology identifies three forms of ‘revolving’ door regions where one of the dimensions of inter-regional mobility is working in the opposite sense to the other dimensions indicating potentially problematic interactions between our measures of inter-regional mobility. The three ‘revolving doors’ are:

- Cluster 5 regions (part of Cluster 2 in the wavelength typology) where there is high net migration amongst the younger working age group but out-migration amongst the older working age group. This is a cluster of regional performing well in terms of patent registration and GDP per capita. This is a group of mainly metropolitan and university-focused non-metropolitan regions that we might simply accept as regional escalators in labour market terms;
- Cluster 6 (part of Cluster 2 in the wavelength typology) regions experience a revolving door of older age working age in-migration and relatively high visitor rates but with out-migration by the younger working age group. This becomes more problematic when the outflow of younger adults exceeds the inflow of older working age adults. This group of regions is more likely to be located in the ‘revolving door’ quadrant than Cluster 5 regions.
- Cluster 7 regions (part of Cluster 4 in the wavelength typology) appear to be tourist specialists that received relatively modest net in-migration despite their elevated rate of receiving visitors. These are regions that may be effectively managing the demand for residence in the region but these regions may then need to deal with a ‘gentrification’ of residence.

The final policy issue that regional policy-makers in some regions may need to address is the problem raised by Cluster 8 (combined typology) that forms part of Cluster 3 (in Figure 9). These are ‘miracle’ regions in that they experience high levels of net-migration but do not seem to have a level of visitor rate that might be expected in regions within the ‘standard’ regions in Clusters 1 to 4 (combined typology). Regions in the ‘miracle’ region quadrant (Figure 9) all appear to combine the capacity to retain migrants without any great capacity to attract visitors. Cluster 8 is made up of 6 Spanish regions in and around Madrid

and Catalonia. Other peripheral regions within Cluster 2 (wavelength typology) neighbour major metropolitan areas (Amsterdam, London, Prague and Dublin). Thus it is possible to speculate that their power to attract is related to either the attraction of a neighbouring area (with overspill effects from labour and housing markets) or of the metropolitan component of the region.

None of the combinations of processes outlined above are necessarily problematic but that regional policy-makers need to understand them in terms of positioning an appropriate attractiveness strategy for their region. For instance, regions in the second quadrant (displaying higher-than-average visitor attraction rates and lower-than-average retentiveness), were characterised as ‘revolving doors’ regions whose main strength is the capacity to attract tourists and other shorter-term visitors. This does not need be a bad thing (as emerged from a conversation with policy stakeholders during the ATTREG Second International Workshop, held in Tarragona on October 27, 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 facilitating tourists into longer term visitors as temporary residents or offering favourable housing conditions to young educated people at the end of their study careers).

Thus regional policy-makers need to address the nature of the flows of which their region is a part. This can be a delicate balance as the revolving door regions in Clusters 5 and 6 demonstrate in that attracting one particular audience may facilitate the outmigration of other groups. Equally attracting too many migrants may contribute to economic fragility in times of economic downturn as might be the case for Clusters 3 and 4 (both wavelength and combination typologies). The data presented in the previous section suggests that regions that experienced the highest performances in terms of attracting a working age population (thus increasing their labour market exposure) or have specialised in attracting tourists have experienced the largest slumps in the crisis years. Thus they could be characterised as ‘at risk’ from overheating in terms of excessive attractiveness, which in ATTREG has been attributed to local ‘soft’ amenities like quality of life and of the natural (climate) and antropic (attractions) environment. Hence a regional attractiveness policy might also incorporate for some an element of demand management to facilitate a reduction of inter-regional flows.

To sum up the main insights from this analysis, and recollecting the ‘policy spaces’ introduced here with actual suggestions of policy approaches that might be deployed at a regional level to achieve a more sustainable development also in the light of the post-2007 events, the ATTREG report on which this paper is based enumerates the following pointers:

- Although the creative class has become the key target of most attraction strategies in the last decade, particularly for urban areas, our evidence suggests that the success of smart strategies cannot be guaranteed simply by attracting members of the creative class, but need to be embedded in wider regional or urban strategies that are rooted in local potentials and a place-based approach. Some regions did succeed in building a critical mass of the creative class to support greater competitiveness in the knowledge economy.

- The traditional labour force or specific skills can be targets of attraction for successful regions experiencing improvement in their economic performance and successfully developing competitive industrial sectors. In these regions resilient development and enhanced territorial competitiveness will require the attraction of skilled workers to areas characterized by a diffuse SME environment, as well as appropriate forms of labour force to areas with rural-based economies.
- It is not only work-related mobility that can produce positive externalities in target regions. For instance, ‘silver migration’ of affluent groups to certain southern regions (e.g. the Algarve case study in ESPON, 2012) or certain coastal areas in northern countries has led to the development of a form of economy which goes beyond the traditional forms of tourism exploitation and is arguably more sustainable. The provision of adequate levels of services of general interest and housing in these cases will require dedicated policies to ensure that the needs of new migrant populations are addressed and are retained and additional migrants attracted, without generating intolerable market distortions. Adapting the existing built stock of historical value and diversifying the delivery channels of services of general interest could be the way to achieve this balance.
- Positive effects can be seen not only in destinations of mobility but also in origin regions (Katseli et al., 2006; Gagnon and Khoudour-Castéras, 2011), where over time, the prospect of better future opportunities abroad has encouraged people in origin countries to acquire education and skills. This may also have spilled over into an increase in educational policies and in general measures dedicated to human capital, including services to specific sectors for retaining population. This reflects recognition that while many of those who benefit from such policies will leave some will stay and there can be positive effects within the region.
- Strategies dedicated to the reinforcement of quality of life can have long-term benefits, in particular by encouraging returning processes whereby those who have left for a more ‘attractive region’ eventually migrate back and contribute to development with skills, knowledge and resources acquired elsewhere. The key issue here is to establish cooperative relationships between origin and destination regions to better manage migration and ensure the achievement of ‘win-win’ situations.
- In addition there is some evidence that shows that counterbalancing effects may be created by the activation of synergies associated with tourist-oriented strategies. Short term visitors may induce a double effect: direct economic gain in relation to tourism activities; and an induced effect of repositioning the region as potential destination of longer-term mobility. Hence, sustainable tourism could be an additional factor justifying supporting development in sending-regions.
- Finally, the evidence provided by the ‘overheating regions’ indicates the presence of thresholds representing the balance between inflows of new regional users and quality of life and access to resources for local residents, beyond which local economic systems may become less attractive and/or resilient. In this sense it may be appropriate to develop policies that support mobility among the working population that provide support for delocalization in a situation where a region approaches a ‘critical condition’. Such approaches could be developed in terms of a partnership of shared responsibility

between receiving and sending regions; this would provide greater flexibility for these regions and more social security for the mobile population.

5. CONCLUSIONS

In the way of final remarks, we'd like to bring back this discussion to the implications for European policy. In the analysis of this paper we have approached the issue of attractiveness especially from the point of view of local and regional strategies. Each region could try to improve its performance in attracting flows that are determining certain development trajectories, with the caveats highlighted above: attractiveness *tout court* per se does not imply high levels of performance, especially looking at the labour market, to the point that we have seen extremely attractive regions in the 2001-07 period recording the most negative score in terms of employment destruction in the crisis years, while regions that have experienced a net outflow of population in the previous period have proved to be more resilient face to the economic slowdown. Consistently with this approach we have outlined in Section 4 a number of pointers that regions could follow in the light of their relative positioning in 'policy spaces'.

However we need to note that it is unlikely that regions and cities will have the necessary powers and resources to activate integrated attraction policies themselves, even when taking into account the wide variety of sub-national institutional arrangements in Europe. Thus, regions need to secure national and where possible European support and coordination. Some regions are able to take greater control of their own development, as was observed in the case of Trento among the ATTREG case studies (ESPON, 2012; see also Otgaar *et al.*, 2012); while other regions are much more dependent on state-led policies, often implemented by Regional Bodies (e.g. Algarve from the same source). 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. This suggests the importance of a system of multi-level governance that is able to integrate and coordinate the actions of different levels of governance. 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.

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.

Hence EU policies may play an important role in making regions attractive for particular audiences by providing resources and creating the opportunity to create overarching, long-term strategic partnership. This was mentioned explicitly in the ATTREG case studies of Denmark/Bornholm, Cornwall, Lille Eurometropole, and Lubelskie. In particular the role of

Cohesion Policy, by focussing on particular places, is important given its longer term and focussed nature. However, evidence of a capacity to integrate other EU sectorial policies into a place-based approaches is scarce and this must be considered a genuine policy dilemma that needs to be addressed at EU and national level. Nevertheless, difficulties are likely to be encountered in developing appropriate governance structures, particularly in cross-border cases, and there will be a need for European and national support to facilitate the development of appropriate forms of governance (e.g. the Lille Eurometropole case).

Finally, policymakers need to bear in mind that mobilisation strategies that target the development or enhancement of capital assets as well as the construction of place brands can only be successful in the medium-long term time scale. This requires the combination of specific policy measures, related to a clear territorial strategy that addresses the mobility and retention of population; this is what ATTREG termed policy bundles (ESPON, 2012, pp. 37-ff.), which are part of a place-based approach. Such a strategy must combine a 'nested' and integrated set of policies aimed at achieving short, medium and long term goals supported by appropriate monitoring and evaluation systems to allow for any necessary reorientations.

ACKNOWLEDGEMENTS

This paper draws from results produced by the whole research team involved in the ESPON ATTREG project and from its intermediate and final outputs. We also acknowledge ESPON for funding the participation of A. Russo to the ERSA congress.

REFERENCES

- Aydalot, P. (1986). *Milieux innovateurs en Europe*. Paris: GREMI.
- Barca, F. (2009). An Agenda for a Reformed Cohesion Policy: A Place-Based Approach to Meeting European Union Challenges and Expectations. Available at: http://ec.europa.eu/regional_policy/policy/future/seminars/barca_sem_220609_en.htm.
- Bräuninger, D., and C. Majowski (2011). Labour mobility in the euro area. Deutsche Bank Reports on European integration. EU Monitor 85, 20 September 2011.
- Büscher, M., Urry, J., & Witchger, K. (Eds.). (2011). *Mobile methods*. Oxon, UK: Routledge.
- Camagni, R. (2003). Incertidumbre, capital social y desarrollo local: enseñanzas para una gobernabilidad sostenible del territorio. *Investigaciones Regionales 2*: 31-58.
- Camagni, R. (2008). Regional Competitiveness. Toward a Concept of Territorial Capital. In Capello, R., Camagni R., Chizzolini B., and Fratesi U. (eds) *Modelling Regional Scenarios for the Enlarged Europe. European Competitiveness and Global Strategies*. Berlin: Springer.
- Castells, M. and Hall, P. G. (1994). *Technopoles of the World: The Making of 21st Century Industrial Complexes*. New York: Routledge.

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

Dziembowska-Kowalska, J., and R.H. Funck (2000). Cultural activities as a location factor in European competition between regions: concepts and some evidence. *Annals of Regional Science* 34(1): 1-12.

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

ESPON (2012). ATTREG - The attractiveness of regions and cities for residents and visitors. Final Report.

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

Florida, R. (2002b). Bohemia and economic geography. *Journal of Economic Geography* 2: 55-71.

Gagnon, J. and Khoudour-Castéras, D. (2011). Tackling the Policy Challenges of migration Regulation, Integration, Development. OECD, Paris.

Hall, C.M. (2005). Reconsidering the geography of tourism and contemporary mobility. *Geographical Research* 43(2): 125-39.

Katseli, L.T., Lucas, R. E. B. and Xenogiani, T. (2006). Effects of Migration on Sending Countries: What do we know? OECD Working Paper No.250.

King, R., A.M. Warnes, and A.M. Williams (1998). International retirement migration in Europe. *International Journal of Population Geography* 4(2): 91-111.

Mangiameli, P., S.K. Chen, and D. West (1996). A comparison of SOM neural network and hierarchical clustering methods. *European Journal of Operational Research* 93(2): 402-417.

Martinotti, G. (1993). *Metropoli. La nuova morfologia sociale della città*. Bologna: Il Mulino.

Milne, W.J. (1993). Macroeconomic influences on migration. *Regional Studies* 27(4): 365-373.

Niedomysl, T. (2008). Residential preferences for interregional migration in Sweden: demographic, socioeconomic and geographical determinants. *Environment and Planning A* 40(5): 1109-1131.

OECD (2010). *OECD Territorial Outlook*. Paris: OECD Publishing.

Otgaar, A., E. Van Tuijl, and L. Van den Berg (2012). Mobilisation strategies and territorial assets: a comparative study of regional attractiveness. Paper presented at the 52^o Congress of the European Regional Science Association, Bratislava, 21-24 August 2012.

Plane, D.A. (1993). Demographic influences on migration. *Regional Studies* 27(4): 375-383.

Servillo, L., Atkinson, R. and A.P. Russo (2012). Territorial Attractiveness in EU Urban and Spatial Policy: A critical review and future research agenda. *European Urban and Regional Studies* (on-line first: first published on December 22, 2011 as doi: 10.1177/0969776411427326).

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

Williams, A.M. and Hall, C.M. (2000). Tourism and migration: new relationships between production and consumption. *Tourism Geographies* 2: 5-27.