



Territorial Dynamics in Europe Trends in Population Development



The ESPON 2013 Programme

Coordination Unit 70, rue de Luxembourg Esch-sur-Alzette LUXEMBOURG

Phone: +352 545580700 Fax: +352 545580701 Email: info@espon.eu

This publication is part financed by the European Regional Development Fund, the EU Member States and the Partner States Iceland, Liechtenstein, Norway and Switzerland. The Managing Authority responsible for the ESPON 2013 Programme is the Ministry of the Interior and for Spatial Development of Luxembourg.

ISBN 978-2-9599669-8-9

© ESPON 2013 Programme

Reproduction is authorised provided the source is acknowledged and a copy is sent to the ESPON Coordination Unit.

Printed in Belgium November 2008

Printed on paper produced environmentally friendly

Disclaimer:

The content of this publication is based on research results provided by a study of the ESPON 2013 Programme. As such, the maps and their corresponding texts do not necessarily reflect the opinion of the ESPON Monitoring Committee.

Index

	Page
A new series of ESPON publications	4
European challenge of population development and migration	5
2. Territorial evidence on population developments Which development profiles do the various regions in Europe have?	6-7
3. Main factors determining Europe's demography: Trends in detail What role do natural population and migration play for the demographic development of Europe?	8-11
4. Diversity of demographic profiles in Europe: Challenges and potentials for different types of territories Do urban regions show a better demographic profile than remote rural regions?	12-13
5. Prospects for European demographic development 13 observations for policy reflection	14-15

A new series of ESPON publications

Welcome to a new publication series of the ESPON 2013 Programme – the Territorial Observations.

ESPON Territorial Observations aim at giving policy makers and practitioners short and concise information on important new evidence related to various dynamics of the European territory, its regions and cities. By publishing several issues of Territorial Observations per year, ESPON will promote its role as provider of comparable facts and evidence on territorial dynamics in support of EU Cohesion Policy.

With its Green Paper on Territorial Cohesion the European Commission has recently initiated a debate on territorial cohesion as a future aim for European territorial development. In 2007 the Territorial Agenda of the EU put an equal focus on the concept of territorial cohesion. Both documents increased the demand for information on dynamics and analysis of trends that can support regions and cities in deciding on their development priorities and that can contribute to competitiveness and cohesion in Europe.

Global challenges, such as the current financial crisis and climate change, underline the need to take a wider geographical perspective on issues, particularly when looking for opportunities for development and territorial capital in a region or city.

The necessity to include a larger European territorial context in decision-making also enhances the need for facts positioning Europe in relation to other continents in the world. The EU Lisbon Strategy sets the objectives for a European Union with an economy based on knowledge. This process needs to be supported by evidence on the economic specialisation and social conditions and perspectives of other continents and the flows of activities occurring worldwide.

European policy makers are responding to the challenges of cohesion, competitiveness and globalisation. The ESPON Territorial Observations is meant as a source of evidence for policy makers that can inform about territorial dimensions and dynamics, which is part of meeting these challenges.

Reading the new evidence gathered in this issue of ESPON Territorial Observation may contribute to creating new awareness on demographic development and migratory trends and might eventually inspire new policy initiatives – for the benefit of Europe, its regions and cities.

1. European challenge of population development and migration

The European population is increasing at a slow pace and Europe is generally facing population trends like ageing and low fertility. It is important to point out, that the population development has significant territorial consequences. Between countries and regions there is a large diversity of demographic profiles across Europe which need to be considered in relation to regional competitiveness and territorial cohesion.

In this context, the ESPON Territorial Observation No. 1 focuses on the territorial dynamics of natural population development and migration within the European Union and its regions and explains the most recent territorial trends in the population development of European regions.

Migration and demographic change represent major challenges for the EU, its regions and cities regarding their stable growth. Many regions are already deeply involved in managing and finding solutions for these challenges. However, the European picture is highly diversified, with many regions facing positive trends while others are confronted with negative prospects.

The first part shows a European regional typology with regard to total population change. This typology combines natural population change (number of births – number of deaths) and net-migration (difference between in- and out-migration). Based on this, it is possible to show the demographic situation of the various European regions and their profiles with regard to population development.

The second part compares natural population and migration development between the period 1996-1999 and 2001-2005. The differences in annual changes are analysed and some territorial trends discovered.

The third part considers population development and migration in relation to urban and rural areas, using the urban-rural typology developed by the European Commission (DG Regio)¹, deliberately contrasting urban and remote rural regions².

The last part looks at future territorial perspectives of population development towards 2030 related to the ageing of the European population, and considers potential migration pressure in the context of Europe's neighbourhood. In addition, it summarises 13 points of observation of particular relevance for policy makers involved in regional competitiveness and territorial cohesion.

The maps included, based on an ESPON Study recently completed³ and providing data on population change for 2001-2005⁴, cover all 27 EU Member States plus Iceland, Liechtenstein, Norway and Switzerland. In providing for comparable regional information across Europe, a combination of NUTS 2 and 3 regions have been used.

The underlying data is available at www.espon.eu

¹ L. Dijkstra and H. Poelman (2008). Remote Rural Regions: How proximity to a city influences the performance of rural regions. In: Regional Focus, no 01/2008, DG Regio, European Commission.

² Regions are defined as remote when at least 50% of the population of that region lives at more than 45 minutes travel by road to a city of at least 50.000 inhabitants.

³ ESPON (2008) - Update of Demography/Migration Typology Map by Mats Johansson.

⁴ This period is the most recent data provision available.

2. Territorial evidence on population developments

At a European level there is a considerable regional diversity both in migratory and natural population balances. The trend of population development in Europe in the period 2001-2005 suggests an East-West polarisation between regions with population growth (red and orange areas in the map 1) and regions affected by population decline (blue areas). The regional figures for population development confirm this trend. Most of the regions with population growth are located in the Central-Western part of Europe, in the Southern part of the Nordic countries and Iceland. In addition, some regions with good amenities in Greece and Cyprus, as well the immediate surroundings of capital city regions in Eastern Europe reveal a positive population development.

Regions in a particular favourable situation, "double positive" regions (i.e. areas with population growth through both positive natural population and migration development) seem to be the most frequent type at European level. These "double positive" regions are mainly concentrated along a corridor stretching from the Mediterranean coast of Spain through France and Switzerland to Northern Italy and Western Austria. Outside this area, regions such as Navarra, Loire, Normandy, Western Wales and Ireland also enjoy a positive position in terms of population development. Also, some Southern European regions in Portugal, Italy, Greece and Cyprus have positive migratory balances and positive natural population developments. This last situation can be partly explained by the movement of pensioners towards regions which are scenic, offer a more favourable climate and quality of life.

Europe has as well regions in a "double negative" situation (i.e. areas with population decrease through both negative natural population and migration development). These regions are located in the European peripheries and in particular in

Eastern Europe, including regions in Poland (except the Malopolskie region), Estonia, Latvia, Lithuania, Eastern part of Germany, Bulgaria and Romania which are all loosing population due to both negative natural population and net out-migration. Some regions in Finland, Sweden, Italy, Greece and Portugal also face increasing demographic challenges due to depopulation.

In the Western European countries, the capital regions stand out as the most favourable regions concerning demographic development. Another situation is observed in Eastern parts of Europe, where the immediate neighbouring regions often experience higher population growth compared to the capital city.

Disparities in population development within countries are most prominent in Poland, Germany, Portugal, Sweden and Finland. These countries include a large variety of demographic situations, with declining and growing areas existing side by side.

The detailed analysis on the components of population development in Europe shows that regional population growth is mainly due to a positive migratory balance. This can be seen from map 1 due to the predominance of regions coloured with red and dark orange shades. This means to a large extent that in-migration regions have a higher demographic potential for population growth. However, a consequence of high in-migration rates can be important challenges related to ethnic diversity and the patchwork of cultural groups.

Evidence from the recent past: Demographic shifts within Europe

When analysing the demographic development in Europe it is important to consider the population change in comparison with the recent past. A continuity of the methodology developed within ESPON 2006⁵, enables a comparison of the demographic development within two periods: 1996-1999 and 2001-2005 (see maps 2 to 5).

The number of regions with growing population both due to migratory balance and natural balance, the so-called "double positive" regions, are today the most frequent at European level and represent 1/3 of European regions. The share of this type of regions increased considerably between the two periods analysed (raising from 26.4% in 1996-1999 to 34% in 2001-2005). This means that population development in Europe is generally improving for regions. However, this overall positive trend was mainly due to the higher contribution of Western European and particularly Southern German regions, which experienced a change in their natural population development from a negative balance in 1996-1999 to a positive balance in 2001-2005.

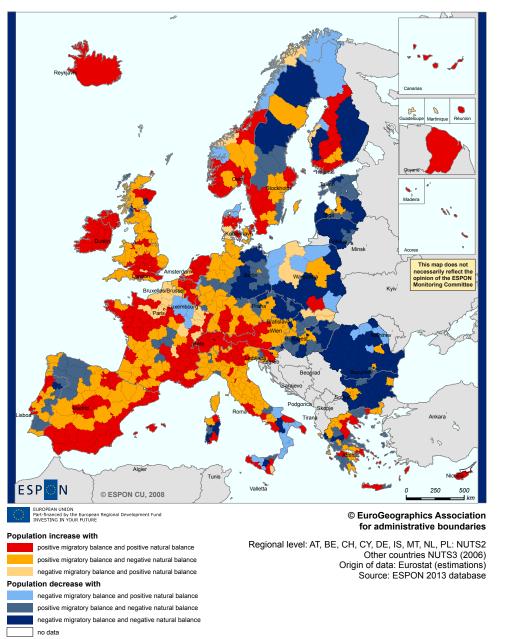
The number of regions gaining population due to a positive migratory balance and a negative natural balance has also increased. This fact reinforces the importance of migration as an increasingly dominant population growth factor over time.

Another important observation is the decrease of the total number of depopulation regions (blue shades in the map 1). However, at the same time this type of regions seems to become more concentrated in peripheral regions located in Eastern Europe and in the Nordic countries.

⁵ ESPON 2006 Project 1.1.4 – The spatial Effects of Demographic Change and Migration, Final Report, ITPS, 2005. Available at www.espon.eu.

Which development profiles do the various regions in Europe have?

Map 1. Population development by components 2001-2005



Observations for policy considerations:

- The European population as a whole is increasing. Regions with growing population, both due to migratory balance and natural balance, expanded considerably between 1996-1999 and 2001-2005.
- A trend of East-West polarisation of the pattern of demographic development is visible in 2001-2005. This development may challenge aims of territorial cohesion. Regions with population growth are mainly located in Central-Western Europe while regions with population decline are more dominant in Eastern Europe.
- Capital regions in Europe are favourable hotspots of demographic development, mainly due to in-migration. Particularly in Eastern Europe, the immediate neighbouring regions to capital cities stand out with respect to population growth compared to the inner parts of the capital region.
- Regions facing depopulation are in decrease.
 However, this challenge seems to concentrate in regions in the Eastern and Northern parts of Europe. In terms of European territorial cohesion this trend should be closely observed.
- Within some European countries the diversity of regions in terms of population growth is significant. This may pose particular concern related to a balanced regional development inside these countries.
- Migration plays a key role for population growth in Europe and has counterbalanced the impact of a negative natural population development in many regions. For the regional contribution to European competitiveness and cohesion it underlines the importance of migration.

3. Main factors determining Europe's demography: Trends in detail

The total population in EU27 plus Iceland, Liechtenstein, Norway and Switzerland, increased from 496 million people in 2001 to 504 millions in 2005 – a growth rate of 0,4% per year. However, the annual increase during this period has been less than during the period 1996-1999.

Migration contributed annually between 2001-2005 with 0,35% to the total of population increase in Europe, whereas natural development only with 0,04%. Mortality does not have a dominant effect on population size partly because further gains in life expectancy are expected to slow down. This means that fertility and migration levels are the important determinants of population growth in Europe. As significant gains in fertility rates seem unlikely, it is rather migration which shall be considered the prime driver behind regional population change in a positive as well as a negative way.

This fact supports the EC Communication on Immigration Policy published in 2000⁶, stating that immigration has an important role in increasing Europe's growth potential and achieving the goals of the (renewed) Lisbon Strategy.

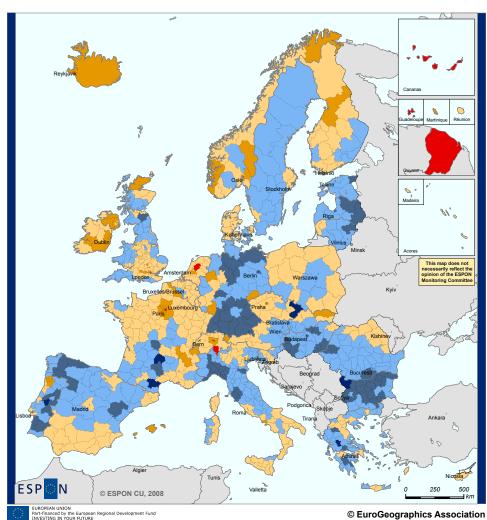
Despite this general trend, the main factors of demographic development, natural population development and migration, revealed different spatial patterns across Europe in the periods analysed.

Spatial patterns of natural population change and ...

At European level, natural population development has a very small impact on population increase (as indicated above only 0,04% per year for the period 2001-2005). Natural population change is determined by the birth and the death rates. As death rates today are relatively stable, it is fertility and birth rates that are the strategic variables for analysing natural population variations.

Page 8 ESPON Territorial Observation No.1

Map 2. Natural population development for 1996-1999



for administrative boundaries

Annual change, base year 1995



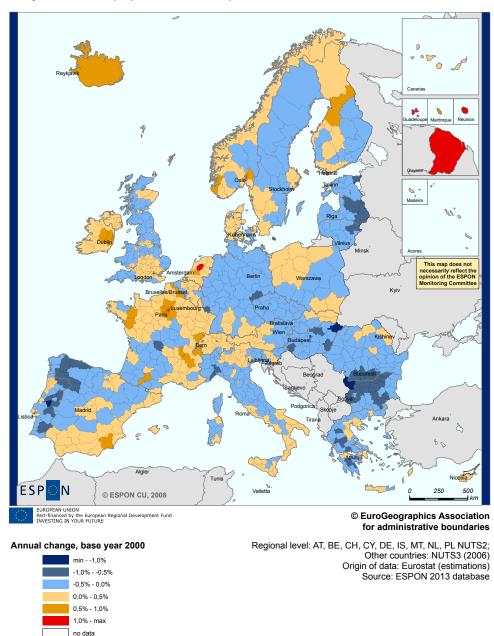
Regional level: AT, BE, CH, CY, DE, IS, MT, NL, PL: NUTS 2 Other countries: NUTS3 (2006) Origin of data: Eurostat (estimations) Source: ESPON 2013 database

⁶ COM(2000) 757.

⁷ ESPON (2008) - Update of Demography/Migration Typology Map by Mats Johansson, KTH, Sweden.

What role do natural population and migration play for the demographic development of Europe?

Map 3. Natural population development for 2001-2005



According to the latest ESPON findings⁷, the total fertility rate (TFR) has declined in Europe since the 1960s and is now below the reproduction rate of 2,1 children per woman in almost every country allowing for a constant population without any migration. This means that it is not possible to ensure a continued replacement of the generations at the same level. Out-migration areas have in general a lopsided age structure with shortage of women in fertile ages. The opposite is thus applicable for the in-migration regions – in-migration of younger people results in a positive impact on natural population development.

Comparing maps 2 and 3 reveals that the spatial pattern of natural population development in Europe did not change significantly between 1996-1999 and 2001-2005. The difference between births and deaths in Europe is very little and negative in many regions across Europe. However, a negative natural population balance is more prevalent in Central and Eastern European countries, in particular the Baltic States, Germany, Czech Republic, Romania and Bulgaria. Indeed, only the region of Flevoland in the Netherlands presented an annual natural population increase above 1% in both periods analysed.

Shifts in natural population development between 1996-1999 and 2001-2005 are mainly observed in peripheral areas in Europe. An exception to this is Southern Germany which, being a central area in Europe has showed a positive evolution. The best performances are found in Valencia, Midi-Pyrenees, Southern Germany and Denmark plus Liguria and Tuscany in Italy. On the other side, some regions, most parts of Sweden, the Baltic States, Czech Republic, Northern UK, Eastern Poland, Bulgaria and Romania have experienced a decrease in the natural population development.

.... migratory balances

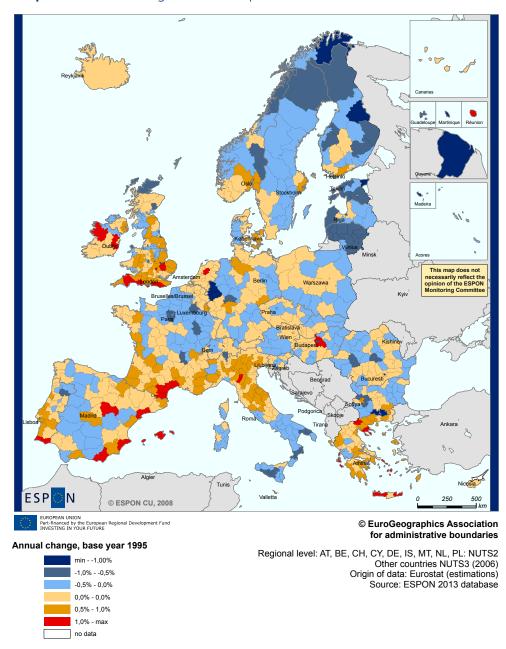
Net migration trends in Europe, presented in maps 4 and 5 show a clear West-East divide. Western and Central European countries, as well as the Southern part of the Nordic countries, Ireland and Cyprus did experience a general upward trend when comparing the two periods 1996-1999 and 2001-2005.

A negative migration balance is mainly observed in many regions in Eastern Europe, in particular in Estonia, Latvia, Lithuania, Romania and Bulgaria. This situation is particularly visible in some isolated rural regions and former industrial areas in Poland (such as Silesia) and Romania. Regions with a positive migratory balance are the capital regions, Sophia, Warsaw, Vilnius, Riga and in addition the region of Varna. The latter region is a major tourist destination and the third-largest city in Bulgaria.

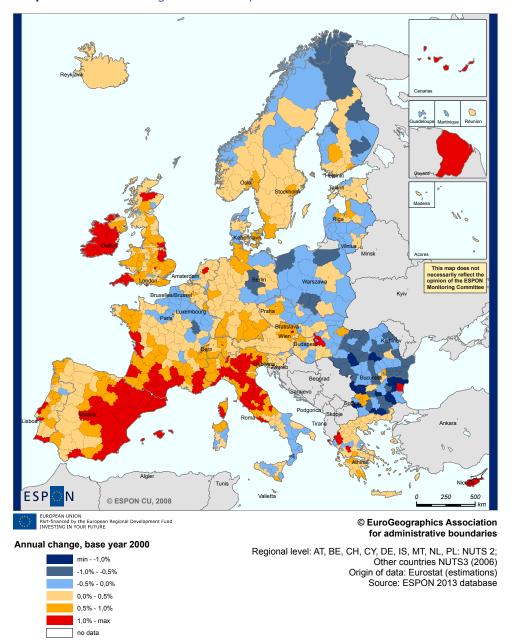
In general, capital regions in Europe reveal to be in-migration areas. In addition, more regions with good amenities in Spain, France and Greece have experienced a positive annual growth in the net migration in 2001-2005 than in 1995-1999.

A large variety of regional migratory balances can be found inside France, Germany, Poland, Hungary, Finland, Romania and Bulgaria. However, for France and Germany, the migratory balance is positive in most of the regions, whereas for the other countries most of the regions experience negative migration developments in the period 2001-2005. At least for some countries, such as Sweden, the migration balance is to a large degree influenced by in-migration particularly by refugees.

Map 4. Annual net migration development for 1996-1999



Map 5. Annual net migration development for 2001-2005



Observations for policy considerations:

- At European level, natural population development has very small impact on the increase of the population of 504 million citizens. The spatial pattern is fairly stable when comparing 1995-1999 with 2001-2005 with a negative tendency for Eastern Europe in particular. A shift to the worse can be observed in peripheral regions.
- Net migration trends in Europe show a clear East-West divide. A negative migration balance is mainly observed in Eastern Europe. In particular, a positive migratory trend is perceived in many capital regions in Europe being main economic drivers. The same positive situation is observed in some regions in Spain, France, Greece and Cyprus with good amenities in particular for pensioners.
- As the migratory flows appear to be the main factor in European demographic development, the national distribution of migration seems to be an issue for reflection in some countries.

4. Diversity of demographic profiles in Europe: Challenges and potentials for different types of territories

The regional typology on demography has been combined with the urban-rural typology recently presented and used by the European Commission (DG Regio). The purpose is to see if the changes indicated earlier in this Territorial Observation are linked to specific types of territories and to analyse if any relation exists between the demographic profiles and the two contrasting types of regions – urban regions and remote rural/intermediate regions – selected from the typology mentioned above.

Relation between demographic development and the specific types of regions: Urban regions and remote rural regions

Map 6 shows the urban and remote regions combined with the positive and negative demographic development. It appears that 85% of the urban regions have a positive demographic development and only 15% have a negative development. Most of larger urban regions showing negative trends can be found in the West of Germany, South of Poland, Italy, Estonia and Lithuania.

Remote regions appear to have an almost 50%-50% distribution between positive and negative demographic development. The spatial distribution over Europe however, is quite different. Remote regions with a positive development are mainly found in the Western part of Europe: Spain, France, Ireland, the UK, Iceland and Norway. On the other side, Sweden and Finland have many large remote regions with a negative demographic development. Furthermore, almost all remote regions in the three Baltic States, the South-East of Europe and most of the remote regions in the Eastern part of Portugal encounter negative development.

Territorial diversities in the situation for urban regions and for remote rural areas

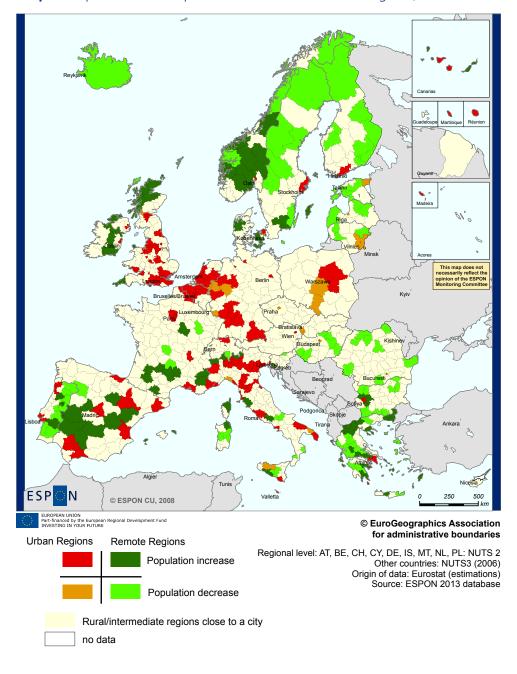
Although, most urban regions show a positive demographic development, many capital cities in the Eastern part of Europe do not comply with this. Examples of these are Riga, Vilnius, Prague, Bratislava, Budapest and Bucharest. It is remarkable that their immediate surrounding regions perform better than the inner cities themselves (see map 1). This could indicate that people are now settling in the surrounding regions, promoting suburbanisation.

Concerning the remote regions, areas for improvement of balance and cohesion could be considered where positive and negative demographic developments are found in neighbouring remote regions. This phenomenon appears in border regions between Norway and Sweden as well as in border regions of Spain and Portugal.

Finally, as an exception related to the current "normal" demographic pattern of urban regions and remote regions, in Sicily the remote coastal region of Agrigento is demographically performing better than Palermo.

Do urban regions show a better demographic profile than remote rural regions?

Map 6 Population development in urban and remote regions, 2001-2005



Observations for policy considerations:

- 85% of the urban regions reveal a positive demographic development.
- 50% of the remote regions show a positive development, most concentrated to regions in the Western part of Europe. The challenge to reverse a negative demographic development path seems to be concentrated in other parts of the European territory.
- Most capital cities in Europe have a positive demographic development. Exceptions are some capital cities in Eastern Europe, where a population increase takes place in surrounding regions.

5. Prospects for European demographic development

Leading into the future, in 2030 the European population will be older on average than in 2005. However, spatial scenarios display significant territorial variations (map 7), which will challenge regional development decisions and strategies differently in different parts of Europe.

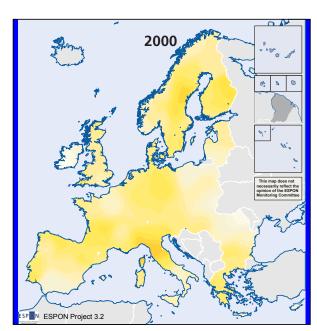
The ageing process already observed in the early 2000s is amplifying up to 2030. As early as 2015, wide areas in Europe will have reached a median age of above 44 years. In 2030, most European regions will have reached this average and in some

regions, such as on Corsica and in Noreste (Spain), the median age of the inhabitants will even be above 50 years.

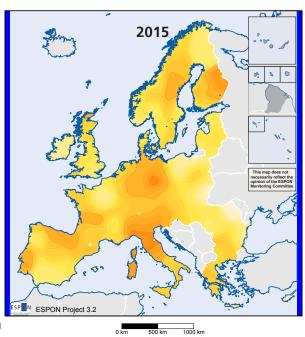
This situation poses challenges to the regional competitiveness and to territorial cohesion in general as the proportion of people of working age to support the labour market and the local economy will differ markedly between regions.

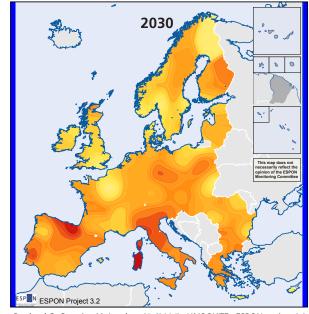
Taking a closer look at the demographic prospects up to 2030 for Europe and its neighbouring countries (map 8), significant demographic discrepancy in terms of population growth exist between Europe and its Eastern neighbours and between Europe and the neighbours to the South. Whereas the neighbours to the East face a clearly negative trend, the neighbouring countries to the South and South-East are expected to have significantly higher population growth than Europe. The current migration pressure from Southern neighbouring countries is therefore likely to continue.

Map 7. Baseline scenario: Demographic perspectives. Median age (years)

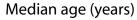


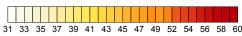
Projections based on data from UNPP 2004, ESPON database 2005 and ULB 1991 © EuroGeographics Association for administrative boundaries





Grasland C., Guerrien M., Lambert N. (2006) - UMS RIATE - ESPON project 3.2

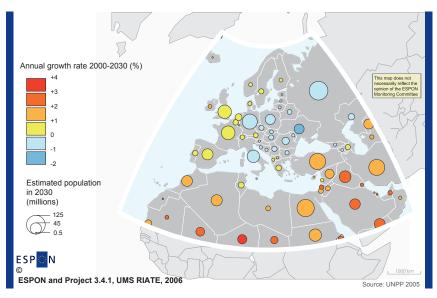




no data

13 observations for policy reflection





Main points for policy consideration

European demographic development is showing a number of positive trends which can contribute to a positive regional development. However, the territorial pattern is not always favourable for all parts of Europe and all types of regions.

The following brief summary of key points intends to give policy makers engaged with regional competitiveness and territorial cohesion an overview of 13 main points for consideration in their further policy process:

- 1. The European population of 504 million citizens (in 2005) is increasing slowly over time.
- 2. Regions with growing population both due to the positive natural and migratory balance expanded considerably from 1996-1999 to 2001-2005.

- 3. 85% of the urban regions reveal a positive demographic development.
- 4. 50% of the remote regions show a positive development, most of them concentrated in the Western part of Europe.
- Regions facing depopulation are in decrease.
 The main challenge of depopulation seems to concentrate in regions in the Eastern and Northern parts of Europe.
- 6. A trend of East-West polarisation of the pattern of demographic development is visible in 2001-2005, mostly due to negative migration balance in Eastern Europe.
- 7. Migration plays a key role for population growth in Europe and has counterbalanced the impact of a negative natural population development in many regions.

- 8. Natural population development has very small impact on population increase. Negative trends can however be observed for some peripheral regions.
- Most capital cities in Europe have a positive demographic development. However, in capital cities in Eastern Europe, population increase takes place in surrounding regions.
- 10. Some regions in Southern Europe with good amenities experience a positive migration balance in particular due to pensioners.
- 11. Within some European countries the diversity of regions in terms of population growth is significant, in particular due to the regional distribution of migration.
- 12. Europe is getting older. In 2030, the median age in some regions will exceed 50 years. The challenge of ensuring the necessary labour force and services of general interest will be profound in some regions.
- 13. Towards 2030, population growth will be significantly higher in countries neighbouring Europe to the South which may sustain a particular migratory pressure on Europe.

The ESPON 2013 Programme will continue observing demographic trends in Europe. Looking into future demographic developments and linking these to economic, social and environmental development issues in European regions and cities will be a major priority.



Interested in ESPON?

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.

ESPON shall support Cohesion Policy development with European-wide comparable information, evidence, analyses and scenarios on framework conditions for the development of regions, cities and larger territories. In doing so, it shall facilitate the mobilisation of territorial capital and development opportunities, contributing to improving

European competitiveness, to the widening and deepening of European territorial cooperation and to a sustainable and balanced development. The Managing Authority responsible for the ESPON 2013 Programme is the Ministry of Sustainable Development and Infrastructures of Luxembourg.

ISBN 978-2-9599669-8-9