Policy Department B
Structural and Cohesion Policies

SHRINKING REGIONS:
A PARADIGM SHIFT IN DEMOGRAPHY AND TERRITORIAL DEVELOPMENT

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Shrinking Regions: a Paradigm Shift in Demography and Territorial Development

STUDY

Content:

The European Union, Russia and Japan are currently the parts of the world in which population growth is expected to be lowest over the next few years. This has implications in terms of not only external policy but also developments at regional and local level. In other words, economic, social and territorial cohesion policies as a whole are being affected by current demographic trends.

Shrinking population figures within entire regions are compounding and sometimes merging with the development disparity issues traditionally at the heart of EU cohesion policy. In the opinion of the authors, it is therefore necessary to review every aspect of this policy, including economic, social, environmental and, in particular, territorial issues. The problem of demographic decline must accordingly be met by means of a multilevel supraregional (European Union, Member States), infraregional (local authorities, conurbations) and transregional (cross-border and internal border areas) approach.
This study is dedicated to the memory of Professor Pasquale Coppola
Summary

The relatively straightforward medium-term predictability of demographic changes at national level, and to a lesser extent at regional and local level too, carries special responsibility for the political decision-makers. While it is possible, to some degree, to excuse the lack of foresight displayed by policy makers when faced with external economic crashes (such as the sub-prime crisis and the increase in energy prices) or environmental disasters (floods, storms, earthquakes and so on), it is much more difficult to forgive the failure to anticipate demographic phenomena when it is generally known what their predictable trajectories will be for the next 20 or 30 years.

The European Union, along with Russia and Japan, is expected to register the lowest demographic growth in the years to come. Failing any further enlargement the population of the EU is likely to remain fairly stable at around 500 million, whereby several European countries, including Germany, Italy and all the new Member States apart from Cyprus and Malta, will probably witness a decline in population. The countries of the eastern and southern Mediterranean, on the other hand, are expected to record a strong demographic growth during the same period, with the population of Turkey overtaking that of Germany by 2012 (82 million inhabitants) and Morocco overhauling Spain sometime around 2035 (44 million). These global trends, which are well recognised, raise a number of political and geopolitical dilemmas in respect of further enlargement and the opening, or closure, of borders to immigration.

These trends also interfere with much more formidable regional and local developments as far as demographic decline and ageing are concerned. In practically every EU country it is possible to find regions whose population has started to decrease in the course of the last twenty years (1980-2000), and this phenomenon is set to become more pronounced in the decades to come. It is therefore not only external policy issues but the entire range of internal policies on economic, social and territorial cohesion that will be affected by contemporary demographic transformation.

Shrinking regions: definitions and characteristics

Can we try to predict the nature of the regional demographic process over the next 25 years? Is there a systematic link between ageing and demographic decline? Is demographic decline linked to migration or is it attributable to the difference between the birth rate and the death rate?

- The concept of the ‘shrinking region’ is a recent one (the term was coined at the beginning of the current decade), even though this phenomenon goes back many years. What is essentially new here is that in some cases the phenomenon of depopulation has now come to affect entire regions, including urban areas (‘shrinking cities’).
- The very definition of the concept is still the subject of debate. Even if the phenomenon of population decline is linked to other events, such as ageing, it is preferable to stand by the simplest definition, which is the reduction in the number of inhabitants of a particular region over the course of a generation. This is therefore the option that has been adopted in this report.
- NUTS level 2 has therefore been retained, though the definition of those regions in demographic decline would be different if another regional division had been selected.
The typology of ‘shrinking regions’ comprises four different categories in which population decline between 2005 and 2030 is classified as almost certain, probable, improbable and highly improbable.

Figure 1: Typology of the ‘shrinking regions’ (2005-2030)

'Shrinking regions' are more numerous in the former Socialist states and in the Mediterranean countries. However, practically every EU Member State has at least one region that will probably or very probably be in demographic decline during the next 25 years and this phenomenon is to a large degree spatially distributed.

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‘Shrinking regions’ are more numerous in the former Socialist states and in the Mediterranean countries. However, practically every EU Member State has at least one region that will probably or very probably be in demographic decline during the next 25 years and this phenomenon is to a large degree spatially distributed.
At regional level (NUTS level 2) there is no relationship between the population density of the regions and their future demographic growth. The phenomenon of depopulation affects the former industrial conurbations just as much as it does the more remote rural areas.

The phenomenon of ageing depends not only on the average age of the population but also on their expectations of a healthy life. The authors of the report have proposed a new synthetic indicator for ageing that combines these two parameters (Figure 3) and highlights the close link that exists between demographic decline and ageing in the different regions.

Demographic downturn does not always depend on a surplus of deaths over births. It is also, and increasingly, dependent on migratory movements towards metropolitan areas, especially by young workers in search of employment. The loss of this active younger generation accentuates the phenomena of ageing and falling birth rates in the ‘shrinking regions’, thereby creating a true vicious circle.

The movement of retired persons in the opposite direction does not make up for these losses and ‘shrinking regions’ are generally less attractive to retired people from the wealthier classes who are likely to boost the local economy by way of pension transfers.

Are the regions that are being depopulated necessarily suffering most economically and socially?

Over the period 1995-2005 the economic situation of the ‘shrinking regions’ was less favourable than that of other areas, i.e. lower GDP per capita and higher unemployment rates. Most of these regions consisted of relatively poor outlying areas that were generally benefiting from cohesion policy investment. However it is important to note the very diverse nature of regions in demographic decline (agricultural, industrial and sometimes metropolitan).

Various interregional transfers (incomes, public aid, tourist consumption) do significantly reduce the revenue gap that exists between the different demographic types.

The ‘shrinking regions’ are poorer than the others but their economic growth rate during the period 1995-2005 was not really any lower than that of other regions because most were located in the new Member States where economic catch-up and demographic decline were going hand in hand.

What new information appears when we study demographic variations at the more local level of towns and villages? In particular, how are public services redistributed in areas affected by demographic decline and in spatially concentrated population centres?

Whether a region is undergoing a period of growth, stabilisation or demographic decline such mutations essentially affect the rural zones that are isolated and sparsely populated. The large towns and cities, by comparison, often display a certain dynamism. The same applies to communities that are located close to the major population centres, this being due to the sub-urbanisation effect.

Recent examples of depopulation have often involved areas that are already weakened, where there has been a loss of creative and innovative talent and the capacity to react to change. Depopulation phenomena of this kind compromise the chances of new and attractive economic zones developing and will inevitably lead to the introduction of a labour-force from outside the area, whether national or foreign based.

Ageing, combined with depopulation, has consequences both for the environment and for the local job market. This process accelerates the disintegration of certain services and
accentuates the inequality of access to these services. It also brings with it a set of new needs, especially where the elderly are concerned.

Figure 2: Population trends 1980 – 2000

As regards the management of these ‘shrinking regions’ what is being done at the present time on a European, national, regional and local level? Is support being provided for developing specific solutions?

- Actions taken at national level, which is the main reference framework, ensure that wealth is redistributed between the regions, in the same way as between the towns and rural areas –
this mechanism is in part the origin of what is referred to as ‘aid to small regions’. However, the general context for restructuring the welfare state places local and regional European communities at the head of the queue for investment. The region, in particular, has established itself as the key scale on which the planning process is based. In the particular case of ‘shrinking regions’ new opportunities (promotion of the living environment) are therefore arising for the communities, along with new financial constraints, due to the growing disparity in resources.

- The health sector is representative of these changes. Whether we are redrawing the medical-services map of France or Italy, the response to the problem of how to maintain public services in zones in decline is connected at both national and regional level with measures that relate to the individual and are based on the twin approach of ‘the stick and the carrot’; others are based on the complementarity between the public and the private sectors; and finally, at regional and international level, there is cooperation based on cross-border logic.

- This restructuring of territorial governance highlights two types of ‘troublespot’: that which is linked to the shortage of public resources, which at present particularly affects the countries of central and eastern Europe, and that which is linked to the crisis in inter-territorial solidarity, which at the present time mainly impacts on countries undergoing regionalisation-federalisation but could in future extend to include other European states.

- In this complex and often tense situation that governance in Europe is now experiencing it is noted that the European Union’s cohesion policy, through the impetus it has given to national and regional policies, represents an essential element of stability. However it too has experienced a number of changes in direction, which have affected its capacity to apply ‘leverage’.

‘Shrinking regions’ and territorial cohesion

The emergence of demographic decline over entire regions has come on top of – and sometimes merges with – the various problems associated with the disparities in development that traditionally lie at the heart of the European Union’s cohesion policy. This should lead to a rethink of this policy area in all its dimensions: economic, social, environmental and, most particularly, territorial.

An awareness of the territorial dimension, which is both regional and local, of the demographic changes under way radically alters the issues involved because it raises new questions and allows a new set of responses in relation to the macro-economic studies carried out at national level. If the Commission Green Paper of March 2005 marks a departure from the traditional thinking at European level it is less as a result of its written conclusions – which are relatively commonplace – and more to do with the fact that for the first time it includes in its annex regional demographic projections for the period 2005-2030. Whether consciously or not, the European Commission is thereby opening up a fundamentally new political debate since it appears that the local and regional impact of demographic change is totally different from that which might be perceived at state level. The question of public services, for example, can no longer be regarded as a simple parameter for adjusting the budget but becomes a real political and social issue since the free market will eventually lead to the abandonment of entire tracts of Community territory. Similarly, the question surrounding the environmental impact of the demographic changes can no longer be evaded since it appears that the process of desertification in sparsely populated areas is likely to create an increased risk of erosion, fire outbreaks, etc. Last but not least the question of social and territorial cross-subsidies is
something that will have to be addressed when examining the impact of depopulation at local and regional level.

Demographic decline and ageing form a complex system of interactions involving economic, social, political and environmental aspects and it is therefore impossible to take a sectoral approach to the problem. It would for example be futile to try to create centres of employment or competitiveness in zones that are losing population unless a policy is developed at the same time for maintaining and reorganising health, education and transport services. It would also be pointless to develop a pro-active policy of attracting national and international migrant workers to zones that are being abandoned (to provide support to services for the elderly, for example) unless account is taken of the problems associated with the economic and social integration of the new arrivals in the zones in demographic decline.

From this viewpoint the concept of territorial cohesion constitutes the most relevant deliberative framework for developing an integrated approach to demographic questions for it specifically includes the territorial dimension associated with these phenomena and proposes a strategic vision for regional development that takes account of the compound effects of each of the sectoral policies being pursued. While there is room for debating the relevance of NUTS level 2, the central role in drawing up a sustainable demographic development policy should certainly be played out on a regional level, provided that this is done in complementarity and not in competition with the national level. In fact from the moment the national and European levels introduced the cross-subsidies that were needed between the rich and the poor territories a new tier of management – intermediate between the local and the national levels – was created that certainly made it much easier to identify the issues of demographic ageing and to plan the reorganisation of the spatial population framework. This does not mean that other territorial levels cannot contribute, by way of specific actions, to the establishment of a global political response to demographic change. The European level and the national level remain more crucial than ever for providing the global cross-subsidies that will reduce the inequalities that exist between social groups, territories and generations, though the region constitutes a vital intermediary when it comes to producing an operational and territorial response, especially as regards access to welfare and medical services for the inhabitants of the ‘shrinking regions’.

‘Shrinking regions’ and multiscalar governance

Producing a response to the problem of regional decline means putting in place a multiscalar system of governance involving levels of intervention that are at the same time supra-regional (European Union and Member States), infra-regional (local authorities and conurbations) and trans-regional (cross-border zones, fringe areas).

At European Union level priority has to be given to the development of simple and reliable statistical indicators capable of both following and anticipating the demographic trends. No Community policy could in fact be implemented without the support of such indicators for assessing ex-ante and ex-post the effect of the policies to be decided on. From this point of view the typology of the ‘shrinking regions’ that we have put forward in this study comprises a simple and reliable indicator that can easily be updated by Eurostat on the basis of regional demographic projections. The indicator for sustainable demographic development, which is defined as the ratio between the healthy life expectancy and the average age of the inhabitants,
also constitutes an innovative index inasmuch as it is not based on predefined age groups (0-19, 20-64, 65 and +) that tend to fix people in specific roles (‘young’, ‘working’ and ‘elderly’).

Figure 3: Indicator for sustainable demographic development in the European regions
(Situation in 2005, predictions for 2030)

This indicator expresses the ‘remaining life potential’ (the percentage of years lived in relation to the number of years left to live), which does not prejudge the economic or social uses that may be made of it by a particular society. A region with a high percentage of elderly persons can have a good sustainable demographic development index if its inhabitants are likely to live for a long time and in good health. Such a region then has a number of options for making the most of this potential. Conversely, a region that appears to be ‘youthful’ may have an unfavourable sustainable demographic development index if its inhabitants have a low healthy life expectancy and if their prospects are poor when they reach retirement age. Unlike the traditional ‘dependency ratio’, which only relates to the working life-span and the legal retirement age, the sustainable demographic development index takes account of longevity and the quality of the social facilities as a positive fact or and not as a problem. The question of whether innovative demographic indicators can be introduced when reviewing regional policy clearly remains an open one.

At national level the central question concerns the social and economic transfers that operate simultaneously between individuals and places, both as a result of public action and through the activities of economic bodies. Our study has shown that ‘shrinking regions’ are by and large poorer than the national average, but that the differences are largely reduced when account is taken of the indirect transfers that are associated with retirement pensions, public allocations for equipment and facilities, spending by tourists, etc. The effect of these invisible transfers, which do not benefit all the regions in the same way, should probably not be overestimated, but they do need to be considered if a more equitable cross-subsidy system is to be achieved. Fair regional accounting should take account of the fact that certain peripheral regions provide
training for young workers whose labour is subsequently used by distant metropolitan regions; or conversely that some metropolitan regions transfer a large part of the added value they produce to regions specialising in tourism and in catering for wealthy retired people. **The question here is to know whether national cross-subsidy logic can be maintained in the future or whether in fact the beggar-my-neighbour attitudes of the richest and most dynamic regions will prevail.**

At regional level the main problem is that of the reorganisation of services and facilities in an environment where there is a dwindling population whose characteristics are gradually being transformed. A reduction in the number of young people will therefore require a downsizing of the training and education facilities (reduced number of classes) but leaves a number of options open as to the manner in which these closures can be effected, both in time and in space. Grouping schools together may in fact improve the educational system just as much as it may lead to a worsening of the demographic crisis in sparsely populated and isolated areas. In the same way an increased demand for care services for the elderly may provide an opportunity for regional economic development and the reorganisation of the spatial framework for care services. However it may also result in a deterioration in the quality of the service and in socio-spatial polarisation between zones that are well provided for and those that are not. While experience indicates that various institutional solutions are possible (deconcentration, decentralisation, federalism), it is nevertheless desirable that the region should constitute a political entity with a strong element of legitimacy (system of elections, budget and so on) when it has to take decisions of major consequences for the daily lives of its inhabitants, such as overhauling the services sector as a result of the decline in population. Disputes are inevitable when facilities become in short supply and the decision-making process has to be based on proper consultation of the people and of the local elected representatives. Special account has to be taken of the different demands of urban and rural areas, and of large towns and small towns, that will inevitably arise in such a context. The introduction of mobile services can often prove to be a useful option for isolated areas, thereby avoiding any dispersal of under-used facilities. **The question here is to know whether the regional policy for the reorganisation of the spatial framework for the local population and the provision of facilities would be better directed by giving priority to economic efficiency or by seeking to protect social equity and sustainable development.**

At local level the main challenge is to make villages and towns aware of the fact that they alone cannot resolve the problem of ageing and depopulation. In rural zones in demographic decline each community will try to protect its school and its local shop, at the risk of competing with neighbouring villages that are developing the same strategy, which will either result in everything closing or in prohibitive expenditure from public funds in order to support unprofitable activities. In urban areas the same type of opposition may be displayed between urban centres in demographic decline and the fast-growing urban fringes, the result being a waste of resources and seeking local responses to questions that should be addressed at a higher level. Short of leaving matters to the authoritarian decisions taken at regional or national level the best way to deal with the question of local town and country structuring, when faced with demographic change, is to put in place intercommunal structures (town and village communities, urban communities) or to resort to intermediate levels (country-wide, ‘bassins de vie’, for example). **The question here is to know what forms of dialogue can be found with officials from the upper levels so that local authorities can participate without being subjected to reconstruction where applicable.**
It should be added that this multiscalar approach to the governance of ‘shrinking regions’ should not simply operate vertically but should also include a horizontal dimension in order to avoid discontinuity at the boundaries between political and administrative entities.

**At cross-border level,** which in the wider sense also means intercontinental (the EU’s external borders), international (the EU’s internal borders), interregional (administrative boundaries) and intercommunal, there are numerous opportunities for cooperation on demographic issues that have hardly been exploited to date due to political, legal or administrative obstacles. There are plenty of examples of ‘shrinking regions’ that adjoin areas experiencing economic growth where the former are organising the expensive demolition of vacant and unwanted housing, while the latter are constructing new dwellings at great financial and ecological cost. Of course not all situations involving cross-border demographic complementarity are as striking as this, though it is certain that there is a rich seam of initiatives to be explored in the political contact zones. **The question here is to know whether the fear of demographic decline and unsustainable ageing would be sufficient to transcend the opposition and animosity that can exist towards ‘strangers’ and to do this on an inter-continental level** (e.g. a north-south partnership for the Mediterranean), **on an international level** (e.g. cross-border medical care) and **at an intercommunal level** (e.g. pooling of public health and educational services).
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Table 17: Number of general practitioners (per 100 000 inhabitants) by area type 95
Preamble: the scientist and the politician… revisited

When in 2050 the great Euro-African geo-socio demographer Ali Ibn Smith-Kadar published in the Sfax University Press the fifth edition of his monumental ‘General treatise on global geo-socio demography’ he was unsure about including the chapter devoted to the European Union, which he had penned in 2030. He wrote at the time: ‘having remained stable at around 500 million inhabitants from 2000 to 2030, the European Union has seen its share of the global population shrink in 30 years from 8% to 6% of the world total. This reduction has been due both to the EU’s abandonment of its enlargement policy after 2007 and to its decision to close its borders’.

Today things have certainly changed. After three successive refusals from Cairo, the European Union (EU) at last succeeded in 2049 in joining the EurAsiAfrican Federation (FEAA), of which it comprised the smallest individual entity both economically and demographically. Had it not become a member of the FEAA the EU would only have accounted for 5% of the world population in 2050, with an economic output of not much more. Its economy was handicapped by the considerable burden imposed by the elderly, who lived in a small number of megacities separated by vast spaces devoted to agricultural production and practically empty of human activity. In this part of the world the population had not only declined but had also become spatially concentrated and whole tracts of land had eventually been abandoned or transformed into natural reserves due to the lack of a common policy for land use management and planning that could have taken account of the specific aspects of local demographic change and their economic, social and environmental impact.

‘And yet the demographic forecasts produced in 2000 for the period 2000-2050 had for once proved to be accurate!’ he sighed. The scientific researchers and the political decision-makers of the European Union finally had access early in the 21st century to all the tools that were needed to predict global demographic trends and largely to anticipate their impact at regional and local level. However, the overwhelming majority contented themselves with analysing the trends at national level (without examining the local and regional impact in any depth), restricted their investigations to the 27 European Union countries (without looking at the very different processes under way in the regions to the east and south), focussed on future trends over the following twenty years (without analysing the historical and political context of which they were part) and finally were tied to a purely economic perspective of global competitiveness (without taking account of the social and environmental impact of demographic change). They had devoted hundreds of reports to investigating dependency rates and the need for raising the retirement age and to examining increased life expectancy and its impact on health-care expenditure and on more general problems associated with the distribution of income and roles between the generations. However, they simply forgot that two key dimensions had to be introduced into all the analyses: time and space.

Ali Ibn Smith-Kadar finally decided to remove the chapter devoted to the European Union, with the exception of one sentence that he placed in the introduction to the fifth edition: ‘The example of the European Union teaches us that demographic phenomena are unpredictable, not because we do not know how to predict them correctly but because we do not know how to correctly interpret the expectations that they provide’.
Introduction

European countries that are ‘shrinking’…

Demographic phenomena are among the easiest to predict and anticipate, at least in the short and medium term, for they have a strong momentum of their own. Unlike economic and political crises, which can completely disrupt things in a few years or decades, age pyramids act like ‘historical sponges’ that absorb all the vagaries of the economic cycle but only change very slowly themselves and only when driven by events of a profound and lasting nature. This momentum is further strengthened by the increase in human longevity and, failing some truly massive upheaval in the social and political order, it is possible to predict to a large extent, and with a small margin of error, what the total population of the European Union and of the other countries of the world will be one generation hence in the year 2030 (Figure 1).

![Figure 1: Global population in 2030](image)

It is predicted that the European Union, along with Japan, will have the lowest demographic growth of all the regions of the world in the years ahead (ESPON 3.4.1., 2008). While the total population of the EU is set to remain fairly stable, several of its Member States will undergo demographic decline, including Germany, Italy and all of the new accession countries with the exception of Cyprus and Malta. This demographic downturn will also affect the countries on the EU’s eastern borders, where it will be even more pronounced (Ukraine). Contrast this with the countries lying to the east and south of the Mediterranean, which will see a large demographic growth during the same period. Just as the population of China will be overtaken by that of India by about 2030 (1.45 billion) the population of Turkey will outstrip that of Germany by the year 2015 (82 million) and Morocco will overtake Spain sometime around the year 2035 (44 million).
Shrinking regions: a paradigm shift in demography and territorial development

… in a European Union that is expanding

A look back at the developments of the last half-century shows that the countries that currently make up the European Union have been displaying an inevitable trend towards demographic decline. However this tendency has itself always been offset by successive phases of EU enlargement. As can be seen in Figure 2, which is one of the central findings of the ESPON study ‘Europe in the World’, the European Union’s share of the global population has remained fairly constant at about 6%, as if a subconscious political strategy has been motivating the Member States to compensate for their own demographic weaknesses by extending their common political territory. The same can be seen in the economic sector where, since the accession of the United Kingdom in 1973, the share of global wealth held by the member countries of the European Union has remained at a constant 20%, despite EU growth rates being lower than in the rest of the world.

Figure 2: EU share of the world population and global economy (1950-2020)
The difficulty in predicting regional and local demographic change

While it is true that global demographic developments as they affect the countries of the world are fairly easy to predict and anticipate, the same does not apply when it comes to forecasting population trends at regional and, more especially, local level. The greater the geographic resolution the greater is the margin of error for population estimates, which in turn makes it increasingly difficult to undertake long-term demographic projections. While the United Nations does not shirk from making population projections for each country up to the year 2050 (UNPP, 2006), the regional demographic projections published by Eurostat in 2004 do not go beyond 2030 and moreover are not comprehensive (there are no data for France or the United Kingdom). There are two main reasons why it is so difficult to produce relevant predictions for population levels on a regional and local scale.

The first reason, which is general in nature, is that the factors that are most likely to alter the population of a local community or region are the same as those which apply at national level, it is just that their impact is much more dramatic. The closure of a factory can lead to a massive reduction in the population of a small town or region (witness the steel-industry crisis of the 1980s) and result in large migratory movements to other parts of the national territory. However, there is every likelihood that such events would be offset at state level, especially if the country in question is a large one. Medium-sized demographic change at national level can in fact conceal the coexistence of regions that are undergoing massive growth and those that are in decline. This also applies when considering the demographic trends that affect town and village communities within a particular region or different districts within a large town or city.

The second reason, which is a technical one, is to do with the fact that demographic predictions of future trends are all the more reliable when they can rely on the reconstruction of long series of data from the past. It can be taken as a rule that any general prediction for the following X years should theoretically be based on the reconstruction of trends for X years in the past at the very least. This means that the forecasts for demographic changes in the different regions of the European Union in the period 2005-2030 (25 years), as produced by Eurostat, should at the very minimum have been based on figures for the period 1980-2005. Yet this was not the case at all. In fact when constructing regional changes for the different areas of Europe, or more accurately when producing a regional breakdown of the various trends that had initially been estimated at national level, Eurostat only used the regional demographic trends for the period 2000-2004 (birth rate, death rate and migration).

Why was a longer demographic series not used? Because the regional sub-divisions that apply to the countries of Europe have undergone numerous changes in recent decades, especially in the former Socialist states, which have repeatedly revised their regional breakdown since 1989 (Poland) or have drawn up a special set of regional divisions in time for the accession negotiations with the European Union (Romania). Only by a laborious process of estimations and evaluations, using complex statistical methods and spatial analyses, is it possible to produce a map for something as simple as the regional evolution of European population density during the last 20 years (Figure 3), as indeed we have done for this particular project.
Figure 3: Regional demographic trends in Europe (1980-1999)

Evolution of population density from 1980 to 1999 in a neighbourhood of 100 km (index 100 = population in 1980)

SHRINKING

INCREASING

80  90  100  110  120  130

UMS RIATE, UMR Géographie-cités, 2007
Data sources: ESPON Project 3.2, 2006
‘Shrinking regions’ and territorial cohesion

The geography of demographic decline within the European Union during 1980-1999 does not fit in with the normal territorial pattern, for Figure 3 exhibits none of the conventional ‘centre/periphery’, ‘east/west’ or ‘north/south’ divides that are usually seen when mapping social and economic indicators. The map for demographic decline in fact presents a ‘leopard skin’ picture with various spots of different size and intensity showing where population decline is most pronounced: eastern Germany and Bohemia, the Danube corridor from Budapest to Sofia, the Baltic states with the exception of Lithuania, the northernmost areas of Scandinavia, Scotland and Wales, the fringes of northern Spain and eastern Portugal, and the Ligurian coast of Italy. Very few countries seem to be spared by the phenomenon of regional demographic decline (Poland, Belgium, the Netherlands, Luxembourg, Ireland, …). Yet this impression is also misleading for it is linked to the scale that has been selected for the data collection process (NUTS level 2 or NUTS level 3) and to the curve-fitting procedure that has to be used to ensure compatibility of the non-concordant territorial breakdowns dating from the years 1980 and 1999. If more accurate local data had been used it would have been found that all European countries contain pockets of demographic decline, even if these differ in intensity and in size.

In fact zones of regional demographic decline began to become established during the period 1980-1999, at a time when virtually all the countries of Europe were still enjoying a positive demographic evolution. There is therefore little doubt that with the economic slow-down or demographic decline that is predicted for the years 2000-2030 these zones will extend to cover much larger areas and will lead to a dramatic reduction in the population in some regions, while others will continue to experience substantial growth. Since demographic phenomena have a large inertia of their own, as we have already pointed out, there is little chance of any rapid reversal of the trend or that regions currently in decline will regain their population to the detriment of those that have proved more dynamic. Even if the worst scenario is never certain the most probable outcome remains an increased level of polarisation between an ever dwindling number of regions in demographic growth and an ever growing number of regions in decline. This raises a number of questions that we shall try to answer in the different chapters that make up this report:

Can an attempt be made to predict regional demographic change over the next 25 years? Is there a systematic link between ageing and demographic decline? Is demographic decline linked to migrations or to the gap between the birth and death rates? Are the regions that are losing their population necessarily those that are also experiencing economic and social problems? What sort of new data appear when investigating demographic variations at the more local level of towns and villages? In particular, how are public services redistributed when there is demographic decline and when the local population is more spread out? What approach is being taken to this issue by the various political bodies (European Union, national governments, regions and local authorities)? What kind of governance problems arise when these various levels interconnect?
1 The long time-span of demographic phenomena

Key questions

- What general theories can be used to explain demographic evolution in the countries of the European Union?
- How will the demographic trends of the last 50 years influence those of the next half-century?

Main results

- Several successive versions of the theory of demographic transition have been proposed in an attempt to understand secular demographic change in the different European countries between 1750 and 1950. While these theories do in hindsight explain the various trends of the past, they have so far failed when it comes to predicting the future. In particular we do not know if Europe’s fertility rates will remain permanently below the level required for generation replacement and we are unable to say whether the huge advances in life expectancy will continue. The inherent flaw in these theories is that they focus on the concept of a ‘natural’ balance between birth rate and death rate without taking account of the contribution that international migration makes to the general demographic balance of a country.

- A detailed analysis of trends for the 27 EU Member States during the period 1950-2005 highlights the considerable differences that exist in the level and in the rate of change of the figures for births and deaths between the former Socialist countries and the rest. These differences are now to feature in the age pyramids and will have an influence on the national and regional demographic processes for several decades to come. We can already anticipate the fact that by 2030-2040 the labour market will quickly deteriorate in the countries of central and eastern Europe, just when the numerous generations born in the period 1975-89 will be retiring and will not be replaced by those born during the low years of 1990-2010. Migration trends are difficult to forecast due to a number of factors that have to be taken into consideration: appeal of the job market, migration policy, globalisation of migratory flows and the inertia in the migration chains and networks.
Before attempting to analyse demographic evolution at regional level it is necessary first to examine Europe’s current demographic situation from a medium-term and long-term historical perspective. We shall start by looking at the successive ups and downs of the ‘theory of demographic transition’ in order to establish the extent to which it is possible to put a global interpretation on European population changes over the last three hundred years and to try to conclude from this relevant scenarios for future trends. We shall then focus the analysis on the medium-duration demographic changes, which are fairly exceptional due to the successive effects produced by the geopolitical and economic division of Europe (1945-1989) and the period of transition that started with the fall of the Berlin Wall and ended with the accession of the new Member States in 2004 and 2007.

1.1 Demographic transition... and after?

We have used three deliberately simplified graphs (Figure 4) to illustrate the different forms that the theory of demographic transition has taken when applied to the industrialised nations (western Europe, United States of America, ...).

- The initial version of the demographic transition theory may be described as ‘optimistic’ because, as J. Vallin has said (2002), it provides a twin response to the fear of depopulation and to the phobia of overpopulation. The basic elements of this theory were drawn up at the time of the Great Depression, which was both economic and demographic, by the American sociologist Thompson (1929) and by the French demographer A. Landry (1934). The latter referred to a ‘demographic revolution’ when describing the transition from a state of demographic balance, as characterised by high mortality rates and high birth rates, to a new state of equilibrium characterised by low levels in both these parameters. However, it was not until the work published by the Americans F. Notestein, D. Kirk and K. Davis that the term ‘theory of demographic transition’ established itself within the context of research undertaken on behalf of the United Nations in 1944-45, immediately after the Second World War. The scientific and political success of the theory is dazzling, for it is thought to be compatible with all the trends observed in all the countries of the world and also to be capable of predicting and anticipating the future. As one of its founders (Kirk, 1996) recalls, the United Nations predictions have been based for nearly 30 years on successive versions of the theory of demographic transition and only from the 1980s on did questions and doubts arise that subsequently resulted in a revision of one of the theory’s fundamental aspects: the hypothesis of return to equilibrium between birth rate and death rate at the end of demographic transition. It had been naively thought that the end of demographic transition would automatically lead to greater life expectancy, approaching the upper limit of human longevity (estimated at 85 years), and to a fertility rate of 2.1 children per woman, which would just ensure generation replacement (Vallin, 2002). Yet only the first of these two conditions was being achieved, with fertility rates remaining permanently at very low levels as the ‘baby bust’ replaced the ‘baby boom’.

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8 The ‘baby bust’ corresponds with the negative swing in fertility rates that followed the ‘baby boom’ after the 1970s.
Figure 4: Three scenarios for the end of demographic change in Europe

(1) Classical theory: stabilisation and equilibrium level

(2) Easterling theory: cyclic evolution around equilibrium

(3) Theory of second transition: non equilibrium

Year of first formulation of the theory

Nativity rate

Mortality rate
• **The theory of a cyclic evolution in birth rates after the end of demographic transition** constitutes an attempt to rescue the initial theory by adding a new hypothesis on people’s attitude to the future. Drawn up by the American economist R.A. Easterlin and based on the American situation after 1961, and then applied to the industrialised countries of western Europe, the cyclic theory assigns a key role to the expectations that each generation has about its future. R.A. Easterlin (1976) begins by noting that when a ‘large’ generation follows a ‘small’ generation it has a greater chance of finding an interesting job, acquiring a higher income for employment and so on: this makes it more optimistic about the future and therefore more inclined to have children. The positive swing of the baby boom between 1945 and 1965 was therefore the consequence of the low birth rate during the depression years of 1920-1940, while the demographic downturn that set in during the 1970-1980 period could similarly be explained by the negative outlook of young couples from the following generation, who were faced not only with global economic slow-down but also, and more importantly, with the burden of the preceding generation, which permanently occupied the key jobs and offered them little or no economic prospects. The political success of the Easterlin theory peaked in the years 1970-1980 because, as an optimistic theory, it tended to predict an upturn in fertility rates sometime around 1990-2000, when a new generation cycle would be starting up. Unfortunately the recovery did not materialise and an analysis of a growing number of countries, notably in southern and eastern Europe, led to the conclusion that the theory had failed as a general explanatory hypothesis on subsequent developments at the end of demographic transition. Demographers who studied the Easterlin theory closely were to conclude that fertility rates post-transition would perhaps be cyclic in nature but that there was still no sign of this happening and that this phenomenon could not always be explained – or at least not uniquely – by the strength of successive generations (Chesnais, 1986; Wright, 1989).

• **The theory of a second demographic transition** seemed at the end of the 1980s to be a much more ‘pessimistic’ vision of the future for those countries that had completed their first demographic transition, since it endorses the fact that fertility levels can remain permanently below the level required for generation replacement and that only recourse to immigration from those countries that have not completed their first demographic transition can ensure that total population is maintained. First drawn up in 1985 by D J. Van de Kaa and R. Lestaeghe, and based on the work of the French historian P. Ariès (1980), its originality lay less in the predictions that it put forward (which only endorsed established facts) than in the explanation it gave, this being based on the increased impact of individualism and the pursuit of personal development. The first demographic transition had been driven by the reduction in mortality and corresponded with the increased significance of a modern vision of society: the reduction in fertility rate was in some way a rational optimisation. The second demographic transition, on the other hand, would be guided by a post-modern vision of society where the right to personal fulfilment prevails and where fertility becomes the decisive factor since the child may henceforth be considered as an obstacle to the achievement of other personal objectives. For D J. Van de Kaa (2004) the theory that he had drawn up probably cannot be proven by events, despite the numerous analyses that he had carried out on the relationship between the values of the peoples of Europe and their personal choice when it comes to the size of the family (Van de Kaa, 2002). However, until there is proof to the contrary it remains the best theory that we have for predicting the future.
Criteria for the theory of second demographic transition are not in short supply since it tends, like those that preceded it, to be based on compatibility with observed facts... until now. J.C. Caldwell (2004), for one, uses numerous examples to criticise the theory of second demographic transition, including that of Europe’s Mediterranean countries (Italy, Spain and Greece) where the birth rate is one of the lowest even though the values of individualism are much less pronounced there than in northern and in western Europe, where several countries have recorded a recent upturn in fertility levels (France and Sweden). Rather than introducing questionable moral and cultural variables – which are usually contradicted by the facts – Caldwell proposes adopting a long-term economic and historical vision where the transition from agricultural methods of production to industrial methods of production would still be too recent to be able to draw all the consequences from it. Objective and rational material facts explain why young families choose to limit the number of children they have at a time when questions are being raised about the welfare state. If we really want to see a revival of birth rates in Europe it will not be achieved by moaning about the decline in values but by taking concrete measures such as providing facilities aimed at combining work and family life, maintaining public-run day nurseries and child-minding facilities, adapting women’s working hours, introducing equal pay legislation, and so on. The collapse in the birth rate of the former Socialist countries after 1989 can fundamentally be explained by the reappraisal of the benefits package and the generalised context of social insecurity. As far as the low fertility rates of women from the Mediterranean countries are concerned this can be explained by the preservation of the patriarchal model (cohabitation of the generations) and by the difficulty that young couples have in finding accommodation against a background of rising property prices and the privatisation of local authority housing... According to Caldwell there is nothing to prove that the theories of first demographic transition will not end up by coming true, but the balance between births and deaths essentially depends on the political choices taken and not on hypothetical changes in values.

What can we conclude from all this? Nothing for the moment, apart from the fact that the successive questioning of all the theories produced over the last 80 years and more on the future of European population levels at the end of demographic transition has been cause for much modesty and pragmatism. It is certain that the European countries have now entered a new demographic cycle where mortality and fertility are not the only parameters to be considered. Ageing of the population, on one hand, and the increasing role of international migration, on the other, are defining a new demographic order that we do not know much about, as it turns out. What will probably and ultimately appear to be the most astonishing thing to any future observer is the fact that we spent so much time being interested in these decisive factors, which are central to all current economic and political issues (Vallin, 2002). It is by starting off from these two fundamental, though little studied factors that we will no doubt best be able to attempt to comprehend the future of Europe’s states and regions.

After having reviewed the main theories, which propose a pluri-secular vision of demographic evolution, we are going to concentrate on developments in the 27 countries of the European Union over the last 50 years. Trends of average duration are particularly complex for each of the three factors that go to make up population change, namely fertility rate, mortality and migration. What is more, the theory that there is a common model that can be applied to all the countries of EU27 is an extremely questionable one.
1.2 Three different models for fertility trends since 1950

We first calculated the average trend for fertility rates in the 27 Member States of the European Union in order to establish typical trajectories as a function of initial birth levels after the Second World War (Figure 5 and Box 1). Finally we regrouped the countries by type as a function not of their fertility level but of their positive or negative cyclic fluctuations in relation to the general trend.

Figure 5: Average fertility-rate trends in the 27 EU Member States (1950-2005)

Box 1: Definition of families of demographic trends

Rather than propose 27 different fertility-rate curves, one for each of the countries of the European Union, we have opted for a method put forward by C. Grasland (1990), which allows several curves to be summed up using a family of trajectories:

- **Trajectory reference (m)** is defined as the general average trend for the countries under consideration. This allows the reference trajectory to be defined but does not show the extent to which the countries diverge from this path.
- **The envelope curves (m-2, m-1, m+1 and m+2)** are calculated by adding/subtracting one or two typical standard deviations to/from the reference curve. These enable the field of variation for the country curves to be displayed in a very visible way around the reference trajectory. Broadly speaking, two thirds of the curves have to follow a path lying between the low trajectory (m-1) and the high trajectory (m+1). Only a small number of curves lie at the level of the very low trajectories (m-2) or of the very high trajectories (m+2).

As can be seen from Figure 6, the average general trend for European countries seems to be particularly straightforward and consists of a steady decline in fertility rates from 2.8 to 1.5 children per woman between 1950 and 2005. Around 1975 the birth rate then dropped below the threshold of 2.1 children per woman, which is the level required for population replacement. Seen against this trend it is possible to establish high and low variants that correspond to what would have been the national trajectory if each country had followed an
evolution parallel to the European trend (Box 1). No single European country follows the average trajectory. All diverge to some degree in favour of a positive or negative swing, which allows three major families of trends to be identified:

- **The countries of north-west Europe** are characterised by a strong rise in fertility rates between 1950 and 1965 (the ‘baby boom’), followed by a rapid downturn from 1965 to 1975. In the 1980s birth rates in the countries in this group stabilised at around 1.6 to 1.8 children per woman. Some divergence does appear during the period 1990-2005, when certain countries witnessed a revival in fertility levels (France and Sweden), while others remained at a level that was far below the threshold for generation replacement (Germany and Austria).

- **The countries of Mediterranean Europe** are characterised by a similar evolution, though of longer duration, because fertility rates also peaked around 1965 but then remained at a fairly high level until 1975 and only fell again after a time-gap of some ten years in relation to the previously mentioned group of nations. In the 1990s the birth rates of these Mediterranean countries were at a very low level, namely 1.2 to 1.5 children per woman. While this evolution has in some cases been premature (Italy) and in others late (Portugal), all the countries that go to make up this group appear to follow a common trend model.

- **In the former Socialist countries of central and eastern Europe** the trend has been quite the reverse, since fertility rates started off by falling away significantly from 1950 to 1965, before stabilising or even recovering in the following years due to the pro-birth policies adopted at different periods in all the Socialist states of Europe. All these countries then witnessed a dramatic collapse in birth rates when the Socialist system came to an end, to converge around a very low level of about 1.3 children per woman at the beginning of this millennium. Even though, at the beginning of the 1950s, this group comprised countries with a very high (Poland and Slovakia) and a very low (Bulgaria, Hungary) birth rate, it nevertheless displays a certain cyclical alignment with a tendency to conform around a single level.

- **Ireland, Cyprus and Malta** all follow an atypical course. These countries are characterised by exceptionally high fertility rates, which in the 1950s were as high as 3.5 or even 4 children per woman. The trends are characterised less by cycles than by the fact that these three countries completed their demographic transition later than elsewhere.

These differential fertility trends are crucial because they result in major differences in the size of the ‘large’ or ‘small’ generations in each country. The age pyramids are particularly different on either side of the former Iron Curtain because of the contrasting nature of the cyclical birth-rate trends.
Figure 6: Three different models for European fertility rates (1950-2005)

**Type 1**
**NORTHERN AND WESTERN EUROPE**
Austria, Germany, Denmark, Finland, France, Luxembourg, Netherlands, Sweden, United Kingdom

**Type 2**
**SOUTHERN EUROPE**
Spain, Greece, Italy, Portugal

**Type 3**
**FORMER SOCIALIST COUNTRIES**
Bulgaria, Czech rep., Estonia, Hungary, Lithuania, Latvia, Romania, Slovenia, Slovakia, Poland

**OTHER COUNTRIES**
- Ireland
- Cyprus
- Malta
- Equilibrium
1.3 East/West divergence in life expectancy

As far as trends in mortality are concerned (Figure 7), or more accurately life expectancy, it is noted that like the birth rates there are significant differences in trend between the former Socialist states and the other countries.

- **The former Socialist countries of central and eastern Europe** initially enjoyed a substantial increase in life expectancy as a result of systematic health-care schemes (vaccination) and social policies (free medical treatment). By around 1965 life expectancy in the Socialist states was fairly similar to that in the non-Socialist countries, although there were significant diversities to be found within each bloc of states. However, the Socialist system then encountered a series of economic, social and political crises that led to a stagnation – and in some cases even a regression – in life expectancy, which affected the more advanced countries most of all (Hungary and Czechoslovakia). The collapse of the Socialist system in 1989 was followed by sharply contrasting developments as the more advanced countries saw their life expectancy levels rise rapidly, while others, and especially the Baltic States, initially recorded a marked decline in life expectancy, before they too returned to more normal levels.

- **The other countries of northern, western and southern Europe** have displayed a much more straightforward trend and advances in life expectancy in these areas have generally been fairly steady, with higher rates being recorded in those regions where the initial situation was sub-standard. Generally speaking we are witnessing a gradual convergence of life expectancy levels for all these countries at around 75-80 years.

*Figure 7: Two models for mortality-rate trends (1950-2005)*

![Figure 7: Two models for mortality-rate trends (1950-2005)](image)
1.4 Unequal recourse to international migration

The loss in demographic vitality of the European continent raises the key question of the renewal of the active population: will today’s younger generation be sufficient in number to support those who have retired and whose life expectancy goes on increasing, along with all the ‘baby boomers’ of the post-War era who are now reaching retirement age, which is a key feature of an active and ageing population? One possible political solution would be to move towards greater integration of Europe’s immediate neighbours, whose economic and demographic characteristics are complementary to those of the EU (ORATE, 2007). Such a step would require greater cooperation and increased migratory and economic exchanges between the two neighbouring regions. However, migration is a crucial political issue and EU Member States do not have a common position to put forward in this area.

The EU remains a centre of attraction, a model of success for all its European neighbours. According to traditional theories of attraction and repulsion these disparities are, in a free market situation, the key determinants for migration from the most backward regions (sub-Saharan Africa and eastern Europe) to the developed world (EU27). When applied to the European zone and its neighbours this probably implies that in future there will greater south-north migration to the advantage of western Europe. However, such a process of escalated migration would be less likely to benefit the countries of central and eastern Europe, which in many instances still have negative net migration levels and do not find themselves in close proximity to neighbouring regions experiencing strong demographic growth, in fact just the reverse (Figure 8).

Figure 8: Actual and potential migratory movements in the Euro-Mediterranean area
In any case it is difficult to rule on possible trends in the European migratory process. An analysis of the many factors that determine such movements is likely to result in contradictory prognostics:

- For one thing the EU is not the only attraction in the world and migration is increasingly becoming a long-distance affair. It is therefore not certain that the EU would be capable of competing with other areas of appeal that have a true migration policy (notably the United States), all the more since the migration policies currently being put in place by some countries, which are increasingly placing restrictions on the right of residence, are more likely to discourage potential migrants.

- However, several factors could help maintain Europe as a centre of attraction: on one hand the strength of the social networks and migratory chains creates a certain momentum in the migratory process. On the other, the intensification and spatial extension of human mobility has led to the ‘globalisation of migration’ (Simon, 1998), which is likely to generate a ‘pull effect’ on distant countries: the importance of long-standing migratory relationships (Albania/Italy, Algeria/France and so on) is now dwindling with the arrival of new groups (Filipinos, Chinese, Ecuadorians, etc.). For the moment central and eastern Europe is only affected to a limited extent by migratory flows of this kind, but the economic disparities that apply to the different regions of the world, and the mechanisms of change in the labour markets, suggest that immigration may well be directed at this part of the European Union in the years ahead. It is also necessary to consider the ‘domino effect’ exerted by the fairly restrictive migration policies still being imposed in western Europe, which could redirect these migratory flows towards central and eastern Europe (Schmoll, Weber, 2004).

- The dynamics of the labour market, both industrial and post-industrial, are another driver of migratory flows. In the case of Europe we are now in fact witnessing a process of convergence and growing interaction between the problems of migration, public-service provision and the rebuilding of the welfare model. These processes lead to an increased migration of female workers. The influx of woman migrants can be treated as a separate factor from the movement of male workers and the country of origin may also be different. In the case of Basilicate (Figure 9) male migrants come most often from Africa, while the female migrants are predominantly from central and eastern Europe. The male workers tend to be employed in agriculture whereas the females usually take on jobs in the health services and elderly-care sector.

Figure 9: Origin of foreign residents in Basilicate (data supplied by Istat, 2007)
1.5 Two demographic Europes?

On completion of this study of the medium-term and long-term demographic processes we had no option but to conclude that the 27 Member States of the European Union comprise a particularly mixed body that cannot be analysed using simple models of the type produced from the theory of demographic transition and its successive variants. If a legitimate attempt is to be made to anticipate future trends we have to take the opposite approach by acknowledging the diversity that exists in the recent trends for fertility, mortality and migration over the last 50 years.

Before going on to analyse regional and local processes it is important to extract the essential facts as regards the demographic situation at national level. From this point of view age pyramids provide the best possible overview of the situation at state level because they record past trends (birth-rate cycles, progress or stagnation in life expectancy, the contribution of migration) and to a large extent determine developments in the near future. We have produced a typology based on the shape of the age pyramids\(^9\), which shows a remarkable dichotomy in the European zone between two main types and four sub-types (Figure 10).

- **Type ‘west’** includes all the old Member States apart from Ireland. It is characterised firstly by a concentration of persons aged 30-45, which is in keeping with the peak fertility year of 1965. It is also marked by a growing proportion of elderly people due to the rapid progress in life expectancy. Yet it is also possible to distinguish two sub-types as a function of the scale of the recent decline in the birth rate. The sub-type ‘west-old’, which typifies the Mediterranean countries, Germany and Austria, presents an ever dwindling proportion of young people and finds it hard to offset the shortage of labour by increased recourse to immigration. The sub-type ‘west-young’, which characterises the north-western margins of the European Union, presents a much lower decline in the number of young people due to the higher birth rate recorded over the last 20 years and a longer-standing period of immigration, which is still at a relatively high level in spite of recent restrictions.

- **Type ‘east’** comprises all the new Member States plus Ireland – whose atypical character has already been singled out. The age pyramids of these countries include two particularly ‘full’ generations, one based on the 45-55 age group and another based on the 20-35 age group. This is evidently the result of an inverse swing in the fertility rate in relation to the countries of western Europe. For the time being, therefore, these countries have a fairly large proportion of young working people, which partly explains the success of the industrial relocations from western Europe. However, this centre of young labour is rapidly being eroded, especially under the influence of migration to western Europe (Ireland, the United Kingdom, Belgium and Italy). Even if ageing is still at a limited level it will quickly gather pace as advances are made in life expectancy. As in the previous case it is possible here too to distinguish between a sub-type ‘east-old’ (Baltic States, Hungary, the Czech Republic, Bulgaria) and a sub-type ‘east-young’ (Poland, Slovakia, Romania, Malta, Cyprus and Ireland), which is marked by quite different proportions of young people.

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\(^9\) Ascending hierarchical classification of structures by age and by sex using the Chi-2 metric.
Figure 10: Typology of age pyramids of the 27 EU Member States in 2005
2 Typology of the ‘shrinking regions’

Key questions

- What definitions can be submitted for ‘shrinking regions’? Which one should be retained?
- How do we construct a typology of ‘shrinking regions’ based on probable demographic trends for the regions in the period 2005-2030?
- What is the spatial distribution of the different types of ‘shrinking region’?

Main results

- The concept of the ‘shrinking region’ is a fairly recent one (early 2000), even though it corresponds with a reality that is in fact much older. The essential novelty lies in the spread of the phenomenon of depopulation to include entire regions.
- While the phenomenon of population reduction is associated with other factors, such as ageing, it is preferable to keep to the simplest definition, which is the reduction in the number of inhabitants of a region in one generation.
- NUTS level 2 has been retained, but the definition of regions in decline would be different if some other regional breakdown had been used.
- The typology of ‘shrinking regions’ comprises four types according to whether the decline in population in 2005-2030 is almost certain, probable, improbable or highly improbable.
- ‘Shrinking regions’ are more numerous in the former Socialist states and in the countries that border the Mediterranean. However, nearly every country in the European Union contains at least one region that will be in probable or very probably demographic decline in the course of the next 25 years and the phenomenon tends to spatially dispersed.
The aim is to construct a typology of ‘shrinking regions’ based on the Eurostat regional demographic predictions for the period 2004-2030 (Eurostat, 2006) and on further estimates for France and the United Kingdom. This typology represents a crucial step in the analysis process as it will serve as a reference for:

- examining the economic and social impact of demographic change at regional level (e.g. are ‘shrinking regions’ more disadvantaged than others in terms of unemployment and productivity?);
- choosing the case studies that will allow the local impact of the phenomenon to be examined (e.g. are the problems of sub-urbanisation and the reorganisation of locally-based public services in the ‘shrinking regions’ similar or different to those found elsewhere?);
- examining the effect of European, national or regional policies on those territories that are undergoing demographic change (e.g. does EU regional policy coincide with the distribution of the ‘shrinking regions’?).

This crucial step raises some major problems for at present there is no unanimous definition for the concept of the ‘shrinking region’ and merely translating the term into French (the working language of the researchers engaged in the study) has aroused much debate. We shall therefore proceed as follows:

- discuss the possible definitions for the concept of ‘shrinking regions’ with a view to ending up with a working definition;
- propose a typology of ‘shrinking regions’ based on the simplest and the most objective criterion, namely that of estimates for future population growth;
- examine the differential mechanisms for ageing and migrations associated with the process of demographic decline.

2.1 From ‘shrinking cities’ to ‘schrumpfende Regionen’

A large volume of scientific and political literature has been published in recent years on the subject of ‘shrinking cities’, notably in Germany and Japan, as it was here that the problem of population decline in the old urban centres was first acutely felt (Box 2). Some researchers doubt the novelty of the phenomenon and point out that the decline of urban centres in favour of the suburbs is a long-standing trend that is well known under the term ‘sub-urbanisation’ or ‘counter-urbanisation’. Yet the fact remains that the combination of ageing and the slowing-down of international migratory flows has accelerated the decline of some urban centres, which have lost a quarter or a third of their population in less than a decade. Moreover, in certain German towns – and more especially in some Japanese ones – demographic decline has affected not only the urban centres but also the inner suburbs and in some cases the outer suburbs too and this, paradoxically, at a time when some urban centres are witnessing a demographic revival as a result of urban renovation programmes. The Tokyo example should no doubt be taken as a warning for the future of many European cities (Figure 11).

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10 We have for the moment refrained from producing a French translation for the terms ‘shrinking’ (EN) and ‘schrumpfende’ (DE) in order to keep the debate open on this concept, even though this frequently means using expressions of convenience such as ‘régions qui rétrécissent’ and ‘régions déclinantes’. We shall return to this later in the report when examining the concept of territorial cohesion.
The emergent phenomenon of *Shrinking Cities* has still not been studied in any real depth, despite its growing importance at global level: in Japan, Germany, eastern Europe, the United Kingdom, the United States... But major research work has recently begun in this area, notably in Germany (Bontje 2005, Kabisch 2006, Lötshcher 2004, Müller 2003, Oswalt 2006, Weidner 2004). These studies allow us to comprehend the effects of urban shrinkage and to recognise the strategies that can be adopted for transforming the urban environment. Moreover, they help us to refine the definition of ‘shrinkage’ in this context. As well as the major research effort undertaken in Germany two international research teams are also investigating the phenomenon of shrinking urban centres. The project *Shrinking Cities* (2002-2008) is a federal cultural foundation under the direction of the German architect Philipp Oswalt (Berlin) and involves collaboration with the Leipzig Gallery of Contemporary Art, the Bauhaus Foundation in Dessau and *Archplus* magazine. The project brings together people from various disciplines (urban geography, culture, architecture, journalism and art) who are able to draw up a comparative analysis on an international scale. This work is now the theme of an exhibition that has been travelling around the world and has been covered in various publications (see the bibliography). The *Shrinking Cities Group*, which is led by Karina Pallagst and is based at the University of Berkeley (California), comprises 13 members, mostly Europeans and Americans. Nothing has been published to date but the Group does operate an internet site.

These two groups point out that one city in six around the world may be described as ‘shrinking’. But what exactly does that mean? What is being counted? The definitions do not specify the type of quantitative data being considered or the observation rating scale used. The *Shrinking Cities Group* considers that this is a multidimensional phenomenon that can affect all or part of the city in question, or even entire metropolitan regions that are in economic and social crisis. The group led by Philipp Oswalt takes the view that shrinking cities are conurbations that are losing their population as a result of a whole series of changes: de-industrialisation, post-socialism, ageing and… sub-urbanisation. The publication *Shrinking Cities* (Oswalt 2005) states that ‘there is also growth associated with the phenomenon of shrinkage: this growth results from the abundance of vacant spaces and vacant buildings. In spite of their low occupation rate shrinking cities continue to spread and create an environment of double dispersion: fewer and fewer activities spread out in an increasingly diffuse way’. Here there appears to be some confusion between urban shrinkage and counter-urbanisation, which implies decline at a local level due to the migration of people and jobs out of the towns and cities and into the rural areas. The demographic decline of the town and city centres is not a new phenomenon. On the other hand, population transfer is worth investigating. In Japan, for example, urban shrinkage tends to lead to the abandonment of the outer suburbs and a return to the city centres, which are now undergoing ‘redensification’ thanks to private developers, encouraged by the 2002 legislation on urban renewal. Henceforth any further shrinkage will be sub-urban in nature.

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*Figure 11: Trends in population growth as a function of the distance to Tokyo city centre*
The concept of the ‘shrinking region’, or rather of ‘schrumpfende Regionen’, dates back to 2003 with the work of B. Müller and S. Siedentop on demographic change in eastern Germany (Figure 12). Unlike previous studies, which separately analysed the problems of demographic decline in the city centres and in the rural countryside, the work of Müller and Siedentop (2004) focused on the need for a global and planned response to the demographic challenge posed on a region-by-region scale. From the moment demographic decline becomes widespread in a particular area any local responses will be counter-productive unless they are coordinated at a higher level. Demographic decline may provide an opportunity if it is properly exploited, in other words if it is anticipated and planned for. This is the reason why we have chosen to construct a typology of ‘shrinking regions’ that is not based on past trends but on future developments in order that the current study might enable us to anticipate events and produce political responses to them.

Figure 12: Accelerating rate of demographic decline in Germany from 1993 to 2002

‘Fatalism is certainly not the right response to the demographic changes that have been observed over many years. Population decline may also provide us with an opportunity. It can in fact open a door to renewal and modernisation (e.g. competition and the revitalisation of urban development). It can also open up new opportunities for improving the quality of life (e.g. creation of new recreational spaces, development and generation of green spaces in residential areas) and help mobilise endogenous regional resources (e.g. new industries and initiatives). Nevertheless, these opportunities can only be exploited on condition that the local authorities are willing to cooperate with those at regional level. If this dialogue is to be effective the local authorities have to see demographic change against the background of town and country planning and development. They also have to recognise the physical and spatially localised impact of such developments and must try to put forward diverse solutions by making the most of specific resources or by making preparations for a reduction in their population. The demographic changes and falling population levels currently being witnessed may provide an opportunity for opening up a fruitful dialogue between the region and the local authorities. Ideally they should provide the platform for developing a new social contract.’

2.2 The spatio-temporal scale of demographic decline

The concept of ‘shrinking regions’ therefore appears to be a new paradigm for the local planning of demographic changes at regional level. This even defines a spatial scale for identifying demographic trends (the region) that will serve as a preferential analysis level. Yet, for all that, this does mean that all the problems are resolved, since we still have to specify clearly the spatio-temporal scales for demographic decline.

- **From a temporal viewpoint** we propose considering that a region that is ‘shrinking’ is a region that is losing a significant proportion of its population over a period greater than or equal to one generation. A minimum period of 20 to 30 years is in fact needed to appreciate the demographic trends that often come in cycles, as we saw in the preceding chapter, and that may present temporary unforeseen events linked, for example, to the opening or closure of a business or factory. A period of 20 to 30 years is required to really appreciate those developments that are due to ‘unforeseen events’ and those that are due to the structural changes that affect societies and their territory. From this point of view we might consider, when observing the regional evolutions of the last 20 years, that we are right at the start of the process of regional demographic decline in Europe and in Japan (Figure 13). Of course many regions have already witnessed a demographic downturn, though this has been limited in its scale. Regions that have lost more than 10% of their population between 1980 and 2000 (an annual rate of about -0.5% a year) are very few in number and are confined to Finland, northern Bulgaria and eastern Germany. Nevertheless it can be seen that this process will accelerate since a number of European regions have already experienced reductions of between 5 and 10%, as is the case in Japan. This leads us to take as the criterion for defining ‘shrinking regions’ future trends (2005-2030) such as those that can be predicted by means of the various scenarios produced by Eurostat.

- **From a spatial viewpoint** we have to stress straightaway that the definition of regions that are ‘shrinking’ is very sensitive to the selection of territorial units adopted for the exercise. Even bringing the regional levels within the European Union into alignment is a particularly questionable process, as shown by the ORATE study 3.4.3, *Modifiable Area Unit Problem* (Grasland & Madelin, 2006). From the scientific viewpoint of statistical unity the best analysis level would be that which retains roughly equal regional units in respect of population size and land area. From the political viewpoint of capacity of governance, however, the choice would be based rather on levels of relevance to town and country planning and programming. In either case it would be necessary to mix different units at NUTS level. This solution is not possible because all the sources at our disposal for making demographic predictions relate to the official NUTS level 2. **We have therefore retained NUTS level 2 as the spatial framework as it is relevant in terms of European regional policy and since the study has been commissioned by the European Parliament.** However, we would stress that this choice of framework does have its limitations and would point to the advantages of possibly using other regional analysis levels that might be more general or more detailed in scope.
Figure 13: Regional demographic trends for Japan and the EU (1980-2000)
2.3 A working definition open to debate

The international research team that conducted the present study long debated the choice of working definition that was eventually used. The least that can be said in this regard is that it was difficult to reach a consensus on this subject. Before moving on to the typology of ‘shrinking regions’ it is therefore important to take stock of the questions that this poses and of the alternative approaches that might have been suggested (Box 3).

**Box 3: Theoretical problems of defining ‘shrinking regions’**

Demographic decline and population density. Specialists working on the case studies of Norrland (SE) and Basilicate (IT) proposed combining population decline and low density of population in their definition of ‘shrinking regions’. Their argument was based on the observation that the problems of a decline in the number of inhabitants in a sparsely populated region (depopulation and remoteness of public services) are of a different nature from those encountered in a densely populated area, such as a former industrial zone where the decline in population could be considered as a return to a state of balance and an opportunity to reorganise the territory on more positive lines.

Demographic decline, ageing and natural growth. A second proposal put forward by the Italian specialists working on the Basilicate case sought to take into account other demographic parameters such as birth rates and life expectancy. The underlying idea was to try to identify those regions that were experiencing a ‘loss of endogenous demographic vitality’, that is to say those that could no longer achieve demographic renewal without the contribution of migration and economic self-sufficiency without the help of outside aid. In fact, a region undergoing population growth due to an influx of older migrants could almost be regarded as a ‘shrinking region’ because its future would be tied to the continuous supply of people and capital (retirement pensions).

Demographic decline and living space. A third proposal put forward by the Norrland specialists was critical of the arbitrary nature of the politico-administrative breakdown used to measure and map population trends at both local and regional level. It would be more relevant to set out from the viewpoint of the inhabitants who were seeing their potential for social interaction increasing or declining against a background of a reduction in the local population, while at the same time taking account of the fact that the increased ease of travelling about was counterbalanced to some degree by the level of personal isolation. The most useful criterion would therefore be to estimate the number of possible interactions in a functional neighbourhood, based on distances measured in terms of time or cost. A ‘shrinking region’ would for example be a portion of space where the population has diminished in an area that can be covered in one or two hours and whose contours do not necessarily follow the administrative boundaries.

Regions that are shrinking and regions that are contracting. Finally, to pick up the work done on metropolisation, it could be considered that regions whose population is concentrated in several urban centres to the detriment of an increasingly empty countryside are ‘shrinking regions’, even though the number of their inhabitants might be growing. To parody a famous expression by Waldo Tobler we could say that regions shrink but can also contract or crumple. The criterion for population decline would then have to be complemented by a criterion for the spatial concentration and dispersal of the inhabitants of a particular region on different scales. An increase in local concentration (polarisation) can go hand in hand with the ever growing isolation of a fringe minority of the population.

In holding to the simplest definition for regions that are shrinking (region in NUTS level 2 that is destined to undergo significant population decline during the period 2005-2030) we have not sought to avoid these debates but rather to clarify them by initially setting out from the simplest possible definition, even if it means calling it into question again as and when the various analyses are presented.
2.4 Typology of ‘shrinking regions’ (2005-2030).

As demographic forecasting is not an exact science we cannot accurately predict the list of regions that will undergo significant population decline over the next 25 years. Demographic specialists have been proposing alternative trend scenarios comprising variants that are variously optimistic or pessimistic in terms of global evolution of birth rates, mortality and migration along with subtle differences as to the convergent or non-convergent character of the trends that apply to different regions within the same country. At regional level Eurostat (2006) has restricted its scope to three different projections that enable us a priori to define four types of regional population trend according to different levels of probability of a decline in population occurring (Figure 14).

- **Type 1: Certainly growing**: this relates to regions for which all scenarios predict a population growth, even in the most unfavourable case. Brittany (FR) is one such region.
- **Type 2: Probably growing**: this applies to regions where only the worst scenario indicates a decline. This is the case for Upper Norrland (SE).
- **Type 3: Probably shrinking**: this relates to regions where only the best possible scenario predicts a growth in population. Moldavia (RO) is one such region.
- **Type 4: Certainly shrinking**: this applies to regions for which all the scenarios point to a decrease in population, even in the most favourable case. One such example is the region of Basilicate (IT).

However, difficulties were encountered when drawing up an exhaustive typology of all the regions of the EU27 and some estimation and arbitration was variously required.

**Box 4: Problems encountered when establishing a typology of ‘shrinking regions’**

The first difficulty was linked to the fact that the Eurostat scenarios are not strictly organised in terms of regional population growth since they are based not only on general national trends (fertility, mortality and migration) but also on different hypotheses for convergence of regional disparities within the countries concerned. The ‘high’ scenario, for example, predicts both a strong growth in population and a reduction in inter-regional disparity, while the ‘low’ scenario predicts a feeble growth in population along with a preservation of regional disparity. The reference scenario, for its part, suggests an average demographic trend and a degree of convergence that, while being higher than zero, is less pronounced than in the ‘high’ scenario. Under exceptional circumstances a region could therefore be allocated a positive growth for the ‘high’ scenario and for the ‘low’ scenario but be given a negative rating for the ‘central’ scenario. These exceptions, which are very rare, were resolved on a case by case basis.

The second problem concerned the absence of Eurostat predictions for France and the United Kingdom. We compensated for this by using national projections, but these only comprised a single scenario whose theories did not necessarily coincide with those of Eurostat. We therefore had to make some adjustments in order to ensure compatibility with the Eurostat predictions at national level. Then we had to undertake an indirect estimate of demographic types based on growth rates for the different regions of France and the United Kingdom, which were compared with those for the other regions of each type. Altogether it was possible to assign each of the French and British regions to one of the four types of trend, though with a certain margin of error and a tendency to favour average types (2 and 3) for these two nations rather than extreme types (1 and 4).
Figure 14: Typology of ‘shrinking regions’ (2005-2030)
Table 1 shows that 42% of the regions of EU27 (113 out of 268) conform to types 3 or 4 of our typology and will therefore probably witness a drop in population over the next 25 years. The ‘shrinking regions’ should see their populations decrease from 192 to 176 million inhabitants between 2005 and 2030, which represents a loss of 16 million people, though this should virtually be offset by gains in other regions (types 1 and 2). The population of EU27 will therefore remain stable at about 490 million, even though major transfers of population will continue to take place between the various European countries and regions.

<table>
<thead>
<tr>
<th>Types of region</th>
<th>Number of NUTS level 2</th>
<th>Population in 2005 (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>non Socialist in 1989</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT Austria</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>BE Belgium</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>CY Cyprus</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>DE Germany (west)</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>DK Denmark</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>ES Spain</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>FI Finland</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>FR France</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>GR Greece</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>IE Ireland</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>IT Italy</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>LU Luxembourg</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>MT Malta</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>NL Netherlands</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>PT Portugal</td>
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<td>3</td>
</tr>
<tr>
<td>SE Sweden</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>UK United Kingdom</td>
<td>24</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>72</td>
<td>75</td>
</tr>
<tr>
<td>Socialist in 1989</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BG Bulgaria</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>CZ Czech Rep.</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>DE Germany (east)</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>EE Estonia</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>HU Hungary</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>LT Lithuania</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>LV Latvia</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PL Poland</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>RO Romania</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>SI Slovenia</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SK Slovakia</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>73</td>
<td>82</td>
</tr>
</tbody>
</table>

While it is undeniable that regions that are ‘shrinking’ are more numerous in the former Socialist states of eastern Europe it would be wrong to think that such areas do not exist in western Europe. Leaving out those countries that comprise fewer than four regions it can be said that most EU states exhibit a wide diversity of regional situations. Very few are composed exclusively of growing regions of type 1 or 2 (Belgium) or exclusively of declining regions of type 3 or 4 (Bulgaria, Romania).
2.5 Spatial distribution of demographic decline after 2030.

It would be excessively optimistic to believe that population decline will only affect two regions in five over the course of the next 25 years. Considering global population trends for the period 2005-2030 we have actually ignored the fact that a number of regions will reach a population peak during this period before going into a decline. While this will certainly not take them to a point below the current level it will definitely rank them as regions in population decline. The population of the Spanish region of Navarra, for example, is likely to increase from 580,000 to 605,000 inhabitants between 2005 and 2020, before falling back to some 597,000 inhabitants by 2030 (Figure 15).

![Figure 15: Population trends for the region of Navarra (ES) 2005-2030](image)

An attempt can therefore be made to estimate, for each European region, the date when the population will reach a peak before going into a period of decline. Maps plotting the probable dates for the start of demographic downturn in the European regions (Figure 16) suggest the existence of a process of spatial distribution of demographic decline around those regions that are currently affected by the phenomenon. In a situation of increasing restrictions on extra-European immigration such a process of distribution of decline seems logical when we accept that a region that is economically dynamic but surrounded by ageing regions in demographic decline will find it increasingly difficult to attract labour and a younger population. Conversely, ageing in neighbouring regions can lead to the creation of new employment opportunities (elderly-care services and tourism), which will compete with the labour market in demographically dynamic regions and deprive them of some of their workforce. The bottleneck created by the lack of a young working population could therefore gradually push regions towards economic and demographic decline. As far as we can judge, this phenomenon of distribution will particularly affect Finland, western and southern Germany, Austria, Italy, Spain and the north-east of France. The regions that are expected to resist demographic decline longest are those in Ireland, the UK, Belgium, Sweden and the Netherlands, along with the south-west part of France and the Paris region. To this we can add some of the islands of the Mediterranean (Cyprus, Malta, Corsica) and various isolated cities such as Vienna and Prague.
Figure 16: Spatial distribution of demographic decline

Estimation of the year when population will start to decrease

DIFFUSION

UMS RIATE, UMR Géographie-cités, 2007
Data sources: Eurostat (EUROPOPO2004) for all regions, except for FR and UK (National estimations), 2007
3 The demographic mechanisms of depopulation

Key questions

• Are ‘shrinking regions’ uniquely those with a low population density?
• Will ‘shrinking regions’ undergo accelerated ageing?
• What effect does migration have on ‘shrinking regions’?

Main results

• At regional level (NUTS level 2) there is no relationship between the population density of the regions and their future demographic growth. The phenomenon of depopulation also affects the old industrial and densely populated regions just as much as the more remote rural regions.
• Ageing depends not only on the average age of the population but also on their healthy life expectancy. A synthetic ageing index that combines these two parameters serves to illustrate the very marked ageing process under way in the ‘shrinking regions’ in 2005 and its predictable increase between now and 2030.
• Demographic decline does not always depend on a surplus of deaths over births. It is also increasingly dependent on migration to urban areas, especially by young people of working age seeking employment. The loss of these young workers accentuates the phenomenon of ageing and lowers the birth rate in ‘shrinking regions’.
• The movement of retired people in the opposite direction does not generally compensate for these losses and ‘shrinking regions’ are usually less attractive for better-off retired persons who are more likely to boost the local economy by way of pension transfers.
Having established, in the previous chapter, a typology of future demographic trends for the European regions we are now going to examine the specifically demographic mechanisms that underlie the process of population reduction: we intend to investigate, in turn, the impact of population density, ageing and migration.

### 3.1 Demographic decline and population density

Does demographic decline mainly affect those regions with a low population density, leading to a cumulative process of desertification in some areas and an accumulation of people in the metropolitan centres? There is no clear answer to this question as it depends to a large degree on the scale of the analysis that is used.

On the scale of NUTS level-2 regions the only conclusion to be drawn is that there is a total absence of any relationship between growth rate and population density (Figure 17). In the period 2005-2030 demographic decline will affect regions with a low population density, such as the Finnish region of Itä-Suomi (9 inh./km²), just as much as it will impact on densely populated areas such as the Land Berlin (3 800 inh./km²). Conversely, we will witness significant population explosions in sparsely populated regions such as French Guyana (2 inh./km²) and in densely populated areas such as Malta (1 280 inh./km²).

*Figure 17: Future population density and growth*
However, the conclusions are very different when we examine local trends. By way of example we have taken the communes of Brittany, which are very small in area compared with the local units found in most of the other European countries. At this level a relationship clearly emerges between population density and growth rate. However this relationship is a non-linear one (Figure 18). Generally speaking communes with a very low density have gone through population decline and the most pronounced growth is found in communes with density levels of 80 to 800 inhabitants per square kilometre. We then observe a reversal of trend and growth becomes increasingly weaker and possibly even negative for those communes whose population density is above 2,000 or 3,000 inhabitants per square kilometre.

Figure 18: Population density and growth in the communities of Brittany
3.2 Demographic decline and ageing

If we are really to appreciate the factor of ageing in the regions of Europe it is not enough to use the age of the inhabitants in terms of their ‘distance from birth’. We also have to take account of their life expectancy, that is to say their ‘distance from death’ as can be estimated from the present conditions of mortality, using the hypothesis that these conditions will be maintained in the near future. As part of the ORATE programme an index for durable demographic development has been proposed that is based on the difference between life expectancy at birth and the average age of the population in question: this gives an approximation of the number of years of life remaining.

For the purpose of the current study we have adopted the indicator principle that was developed for the ORATE programme, taking account of the years of invalidity that affect those who are very elderly. We subsequently estimated the healthy life expectancy for each European region, which can be interpreted as the activity potential of the population. We therefore only have to establish the ratio between the average age of the population and its healthy life expectancy in order to obtain a synthetic ageing indicator expressed as a percentage of the activity potential that has been consumed.

In order to set these ideas down we have taken as an example four regions that exhibit different characteristics in respect of average age and healthy life expectancy (Figure 20).
Shrinking regions: a paradigm shift in demography and territorial development

Figure 20: Definition of synthetic ageing index

Ile-de-France (FR) and the region of Moldavia (RO) have populations that appear to be relatively young on a European scale, as their average age is around 37 years.

The region of Piedmont (IT) and the region of Severozapaden (BG), by comparison, have populations that appear to be relatively old on a European scale, as their average age is about 44 years.

Ile-de-France (FR) and Piedmont (IT) are regions that enjoy good living conditions, as their healthy life expectancy is close to 74 years.

The region of Moldavia (RO) and the region of Severozapaden (BG), by comparison, exhibit poor living conditions, since their healthy life expectancy is not more than 65 years.

The synthetic ageing index (SAI) combines both sets of data into a single value:

<table>
<thead>
<tr>
<th>Region</th>
<th>SAI</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ile-de-France (FR)</td>
<td>37 / 74</td>
<td>50% Moderate</td>
</tr>
<tr>
<td>Piedmont (IT)</td>
<td>44 / 74</td>
<td>59% Strong ageing</td>
</tr>
<tr>
<td>Moldavia (RO)</td>
<td>37 / 65</td>
<td>57% Strong ageing</td>
</tr>
<tr>
<td>North-west (BG)</td>
<td>44 / 65</td>
<td>68% Very strong</td>
</tr>
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</table>
• ‘Shrinking regions’ tend to have the highest mean age

When we calculate the mean age of the regions as a function of type of growth in 2005-2030 and political heritage (Socialist or not) we find, not surprisingly, that there is a very marked relationship between the typology of ‘shrinking regions’ and the average age of their inhabitants (Figure 21). This relationship is especially pronounced in western Europe but is slightly less so in the former Socialist Europe, where the contrast tends to be between the extreme types (1 and 4) rather between than the average types (2 and 3). The problem with mean age is that it does not take account of life expectancy and gives the impression that the regions of eastern Europe are ‘younger’ than those of western Europe.

![Figure 21: Average age of European regions as a function of type of growth and political heritage](image)

• Differences in life expectancy do not follow the same logic in the East and in the West.

There are marked differences in life expectancy at birth between the capitalist regions and the former Socialist states, especially as far as men are concerned (76.9 years as compared with 70.6 years) and to a lesser degree for women (82.6 years compared with 78.3). It can clearly be seen that the differential (6.3 years for men and 4.3 years for women) is much greater than the difference observed in respect of average age (Figure 22). In terms of the typology of ‘shrinking regions’ it can be noted that this correlates with the level of life expectancy but applies in an opposing sense in each of the ‘two halves’ of Europe:

- **In the regions of the former Socialist states** the lowest life expectancy is observed in those areas undergoing demographic decline. There is an almost linear relationship between demographic growth and life expectancy.
- **In the other regions of western Europe** life expectancy levels are fairly similar in areas experiencing demographic growth and in those undergoing moderate decline. However, distinctly higher life expectancy levels are observed in those regions that are destined for the highest level of demographic decline.
Synthetic ageing indicator and ‘shrinking regions’

Whether it is calculated on the basis of total life expectancy or healthy life expectancy the synthetic ageing indicator shows remarkably similar values as a function of gender (M/W) and type of political heritage (Socialist or capitalist). In all the scenarios we observe an extremely distinct hierarchy of ageing levels as a function of the typology of the ‘shrinking regions’ (Figure 23).

The geography of ageing therefore tallies almost perfectly with the geography of the regions that are going to shrink over the next 25 years. Demographic decline is accompanied by a depletion of the activity potential of those regions whose inhabitants are on average closer to death (or at least to invalidity) than to birth.

- In 2005 the majority of regions still have moderate ageing indices of between 50 and 60% (Figure 24). Only a few pockets of strong ageing that group together several neighbouring regions are to be found in Bulgaria, Hungary and eastern Germany.
- The ageing index should increase considerably towards 2030 and the zones of strong ageing (more than 60%) will cover most of central, eastern and southern Europe as well as the remoter regions of the British Isles and Scandinavia (Figure 25).
Figure 24: Synthetic ageing index for European regions in 2005
Figure 25: Synthetic ageing index for European regions in 2030

Synthetic index of ageing (Mean Age / Healthy life expectancy)

- 52%: MODERATE
- 55%: STRONG
- 58%: VERY STRONG

Source for administrative boundaries: UMS 2414 FRATE

EU Parliament study - "Shrinking regions: a paradigm shift in demography and territorial development"

UMR Géographie-cités, 2007
Data sources: Eurostat + National estimations + UN-WHO
3.3 The components of demographic decline

Population decline can be broken down into two factors: one is endogenous and relates to natural growth (the difference between births and deaths) and the other is exogenous and has to do with increases in migration (the difference between immigration and emigration)\(^1\).  

- **As far as natural growth is concerned** it can be noted that in central and eastern Europe the age structures are not unfavourable: the very low birth rate can be explained purely and simply by the dramatic downturn in fertility levels. In middle Europe and in north-west Spain the low birth rate is due rather to the combination of structures involving relatively high ages and low fertility levels. The mortality rates provide much less pronounced geographical contrasts. In particular it can be seen that despite a much lower life expectancy the countries of central and eastern Europe have average mortality rates due to the fact that their population structures are still fairly young.

\[\text{Figure 26: Natural and migratory balances in the European regions (1995-2004)}\]

\(^1\) The migration component of demographic evolution has been evaluated indirectly by calculating the difference between global population growth and natural change.
As regards the increase in migration it can be seen that in western Europe most of the regions have positive net migration, which is understandable due to the intense nature of the migratory flows towards Europe and the migration that has taken place from eastern Europe. However there are also significant contrasts between the net migration change for different regions of the same country: this is the result of the scale of the inter-regional movements within different nations. These inter-regional flows show a geographic map that has remained fairly stable over time and whose main features are: north/south flows in France; east/west flows in Germany; south/north flows in Italy; periphery/metropolis flows in the Nordic countries; centre/ periphery flows in Britain. In Spain, Portugal, Ireland and Greece the scale of the external flows is such that internal contrasts are masked to some extent, even though the internal regions of Spain retain net migration levels that are much less positive than the coastal zones and Madrid. These peripheral areas of Europe have become attractive to foreign immigrants, and this includes the south of Italy where the overall balance is negative. For some ‘shrinking regions’ these flows lessen the impact of demographic decline and provide much needed labour in specific sectors such as agriculture and health and welfare services.

Figure 27 reviews demographic growth during the period 1995-2004 as a function of the natural and migratory components that make up these trends. The most striking feature is that the central and eastern regions are in decline while the western regions are in growth. The first group of regions often combines a negative migratory balance – especially as far as western Europe is concerned – with a natural balance that is also negative due to the significant decline in birth rates. Hungary and the Czech Republic, along with some urban centres (especially Warsaw), in fact have positive net migration levels, though these do not offset the very negative pattern of natural change. When natural balance is examined separately it is found that this is only positive in some regions of Poland and Slovakia.

The figure also shows how ‘shrinking regions’ have evolved between 1995 and 2005. Not all the regions concerned – and here it should be recalled that these were defined using trend predictions for the period from 2005 to 2030 – necessarily underwent decline during the previous period: for example the centre of Portugal, Burgundy and Sicily did not suffer demographic decline between 1995 and 2005, in spite of the sharp fall in birth rates in the former and the negative net migratory balance of the latter. During the period 1995-2005 ‘shrinking regions’ can be distinguished by the reasons for their demographic decline. The regions of Romania, Bulgaria and the Baltic States have witnessed a downturn that is linked to both natural change and a negative migratory balance. This situation is also found in eastern Germany, apart from Brandenburg, in the southern parts of Poland, in two Nordic regions and in eastern Scotland. In Hungary, the Czech Republic, the north-east of Spain, the Alentejo region of Portugal and some industrial areas of western Germany the decline is strictly associated with a negative natural balance that is not offset by sufficiently positive levels of net migration. The declining birth rate has been the main reason for this trend over the last decade. Some regions have recorded negative overall balances solely due to the fact of having negative net migration levels: this includes northern Poland, Champagne-Ardenne in France, Basilicate and Calabria in southern Italy, the north-east of Romania (the only region in Romania to have recorded a positive natural balance between 1995 and 2005), and Mellestra Norrland in Sweden. The regions of the UK that fall into this category are somewhat different in that these are urban centres that have been undergoing a continuous process of sub-urbanisation, if not to say 'rurbanisation'.

43
**Figure 27: Typology of regional growth patterns (1995-2004)**

Demographic trends, 1995-2004

- **INCREASE OF POPULATION**
  - Positive migratory and natural balances (M+ and N+)
  - Positive natural balance and negative migratory balance (N+ > M-)
  - Positive migratory balance and negative natural balance (M+ > N-)

- **DECREASE OF POPULATION**
  - Negative migratory balance and positive natural balance (M- > N+)
  - Negative natural balance and positive migratory balance (N- > M+)
  - Negative natural balance and negative migratory balance (M- and N-)

**Source for administrative boundaries**: UMS X414 RIATE

**UMS RIATE, IGEAT, 2008**

*Data sources: Eurostat, 2007*
3.4 Age-based migration reinforces the process of decline

The global migratory balances conceal huge contrasts as far as age is concerned: regions that are considered to be the most attractive will not always be the same at different times in a person’s life cycle. Migration may therefore help accelerate ageing in a region or, conversely, may lessen it, irrespective of whether the total migratory balance is positive or negative. Moreover, the economic consequences of these migratory movements, as differentiated according to age, may be fairly significant.

Generally speaking, ‘shrinking regions’ have migratory balances that are much less positive or much more deficient than other regions for all age groups. This means that a metropolitan region that appeals to the working population will also be attractive to the youngest and oldest members of society. On the other hand, a region in demographic and economic crisis will lose not only its working population but also its young people, its adolescents and/or its elderly citizens.

- Students and young workers (17-30 years) provide the greatest contrast between the regions as at this time in life they are at their most mobile. In this age group, which is crucial for generation renewal and for the local economic process, ‘shrinking regions’ almost systematically exhibit negative balances and this applies to western Europe just as much as to the new Member States. The map for the migratory balance of 25-29 year-olds (Figure 28) could not be clearer in highlighting the appeal of the rich metropolitan areas both at a European level (northern Italy, Ireland) and when compared with the national average (capital cities of central and eastern Europe).

- As far as young households with children are concerned (1-16 & 31-44) the contrasts are less marked and are reduced further when we move into the ‘older workers’ age group (45-64 years) whose mobility levels are usually much lower. Within the ‘shrinking regions’ the balance for these age groups remains on the positive side in EU-15, while it is slightly negative in the new Member States.

- Younger retired persons (65-74 years) constitute a particularly interesting population group because, in the context of the welfare state and deregulation, they are likely to generate value-added transfers at the end of their working lives by retiring to a different region where they will spend the fruits of their labour in the form of public or private pensions. Pensioners who have a high income will most likely generate an entire economic sector of their own that is based on health and welfare needs. However, the map for the migratory balance of 65-74 year-olds shows that when these retired persons leave metropolitan zones they mainly tend to head for certain specialised southern regions like the Algarve, south-east Spain, Languedoc-Roussillon or the south-west of England (Figure 28). These extremely attractive areas are therefore not ‘shrinking regions’ because tourism and the influx of retired persons have produced a global dynamism that is also appealing to the younger generation.
Table 2: Migration rate (per thousand) by age group between 2000 and 2005 according to demographic type

<table>
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<tr>
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<td>10.90</td>
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<td>6.86</td>
<td>7.94</td>
<td>1.47</td>
<td>1.26</td>
<td>0.57</td>
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</tbody>
</table>

Figure 28: Migratory balances for age groups 25-29 and 65-74 between 2000 and 2004
4 Economic and regional impact of dynamic change

Key questions

- Are ‘shrinking regions’ disadvantaged at national level? And at European level?
- What are the specific characteristics of the production structures in the ‘shrinking regions’?
- What impact do transfer payments have (pensions, aid, etc.) on their economy?

Main results

- The economic situation of the declining regions was more unfavourable during the period 1995-2005 (lower GNP per inhabitant, higher unemployment rate). The majority of these regions are relatively poor outlying areas, though it should be noted that regions in demographic decline are widely diversified in economic terms (agricultural, industrial and occasionally metropolitan).
- The impact of interregional transfers markedly reduces the income gap between the different demographic types.
- ‘Shrinking regions’ tend to be poorer than the others, but their rate of economic growth during 1995-2005 was essentially no weaker than that of the other regions because most are located in the New Member States where demographic recovery and demographic decline go hand in hand.
4.1 The complex link between demographic and economic trends on a regional scale

The question of the relationship that exists between demographic and economic change is a complex one that has been present since the beginning of economic theorising. It can be found, for example, in the physiocrat school towards the end of the eighteenth century. Seen in extremely simplified theoretical terms there are two opposing views. From a frequently updated Malthusian perspective demographic growth acts as a brake on development. On the other hand, when seen from the viewpoint that the only wealth is man himself economic dynamism is encouraged when there is an increase in the number of potential producers. In return, economic developments also have an impact on the demographic process. However, we have to be clear about the type of demographic growth we are talking about. The natural balances depend on structural demographic elements that evolve slowly (age structures and fertility behaviour), whereas the migratory balances are more influenced by short-term fluctuations. We shall now try, by empirical means, to examine this relationship as it exists on a regional scale in Europe.

‘Shrinking regions’ that are economically mixed but on average poorer with fairly peripheral structures …

‘Shrinking regions’ are significantly poorer than the average (Table 3). This is also true when the figures for GDP per inhabitant and for unemployment are examined in relation to the national average: this indicates that ‘shrinking regions’ are on average also poorer than the rest of the country to which they belong (Figure 29). This applies equally both in EU-15 and in the New Member States.

However, when GDP per inhabitant is ignored and the analysis focuses on regional incomes as corrected by interregional transfers, linked for example to certain public expenditures and to commuter spending, the inequalities that exist between the different types of region are somewhat reduced, even if the hierarchies between the types remain the same (Behrens incomes in Table 3). These data show at what point it is important, when looking at regions that are declining in demographic terms, to take account of the different forms of interregional transfer. The mechanisms of income redistribution between regions not only ensure that basic services are maintained but also support the consumption capacity of the local population, which in itself helps maintain economic life. Declining regions that can be described as ‘peripheral’ therefore benefit from a series of transfer payments that enable them to maintain living standards, namely transfers (national and European) linked to direct regional aid, transfers linked to mechanisms of national interpersonal solidarity – which indirectly benefit these regions due to the larger proportion of persons receiving aid (pensioners, the unemployed, …) – and transfers linked to public investments in infrastructure and in basic services. Any reduction of these transfer payments could therefore have serious consequences not just for economic advancement but even more for social development in these regions.

12 The physiocrat school became famous through its maximum of laissez-faire, laissez-passer (‘let men do, let goods through’). In contrast with the mercantile theory it considered that a country’s wealth – in this case this meant agriculture, on which its whole approach was based – was that of its inhabitants. It was founded on property and liberty as seen as ‘laws of nature’.

13 In fact the Behrens indicator tends to adjust regional revenues by including the regional distribution of certain public spending.
Figure 2: GDP per capita for regions in demographic decline, with reference to the national average, in 2005 (demographic types 3 and 4)
<table>
<thead>
<tr>
<th></th>
<th>GDP/per capita at PPP EU 27 =100</th>
<th>Regional income acc. to Behrens. EU25=100</th>
<th>GDP/inh. National average = 100</th>
<th>Unemployment rate. EU 27 = 100</th>
<th>Unemployment rate. National average = 100</th>
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Note: The Behrens index is an indicator of the inhabitants’ income corrected as a function of interregional transfers. There are no data available for Hungary, Slovakia, Malta and Bulgaria. For a definition of the types see Chapter 3.

These differences in the production level between ‘shrinking regions’ and the others in fact convey the differences in the economic structures (Table 4). On average ‘shrinking regions’ tend to specialise in agriculture, other commercial activities (especially personal services of a general nature) and non-commercial activities. On the other hand they tend not to specialise in high-level services. Apart from a few slight variations these differences are found irrespective of whether the focus is on western Europe or on central and eastern Europe. In short, an analysis of the sectoral structures confirms the centre/periphery distribution of the demographic types: those types that are in greatest demographic decline have on average the most peripheral structures, with agriculture and general services being over-represented in their economic make-up.

The demographic types also display a significant internal heterogeneity when it comes to their economic structures. Some regions in demographic decline have ‘central’ economic structures. Figure 30 sums up this diversity and shows that those regions that are most at risk demographically in fact have extremely varied economic structures. Some of them, particularly in the central areas of western Germany and in the Czech Republic, even exhibit central structures and sectors specialising in medium-tech and high-tech industry.

The diversity to be found in the ‘shrinking regions’ in terms of population density, wealth and economic structures would appear to be an essential feature for it probably presupposes different political options. We shall come back to this later in the report.
Table 4: Economic structures of demographic types in 2002

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<th></th>
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<th>Other commercial services</th>
<th>High-level services</th>
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<td>Types 1 and 2</td>
<td>2.6</td>
<td>18.2</td>
<td>42.0</td>
<td>21.3</td>
<td>15.6</td>
</tr>
<tr>
<td>Type 3</td>
<td>4.8</td>
<td>22.3</td>
<td>39.3</td>
<td>16.2</td>
<td>16.2</td>
</tr>
<tr>
<td>Type 4</td>
<td>7.0</td>
<td>20.1</td>
<td>39.3</td>
<td>17.0</td>
<td>13.3</td>
</tr>
<tr>
<td>Average</td>
<td>4.6</td>
<td>20.6</td>
<td>40.1</td>
<td>17.9</td>
<td>15.3</td>
</tr>
</tbody>
</table>

Source: IGEAT

Figure 30: Typical economic models for regions in demographic decline
... which conveys a good global correlation between levels of wealth and demographic change

If the ‘shrinking regions’ are on average poorer it is because there exists in Europe, at regional level, a relationship between the economic strength of the regions and their recent demographic development. As Figure 31 shows, the greater the economic strength of a region the more likely it is to have experienced positive demographic development during the period 2000-2005 (Table 5).

Table 5 shows us that this relationship is equally significant when examining both ‘natural’ population trends as well as migratory balances. In other words, the richest regions have tended to benefit both from a more positive difference between births and deaths as well as from being a stronger ‘pull’ for migrants. The migration element presents a wide range of contrasts depending on age group: the richer regions mainly attract young workers or students and proportionately are much less attractive for the middle-aged and, more especially, for the older working population. By contrast, the poor regions often find it difficult to retain their young people, a fact that can also lead to a decline in the birth rate. Moreover, the younger aged groups, by virtue of their high level of residential mobility, generate regional contrasts to the extent that they canradically change the overall regional migratory balances. This explains the correlation between migratory balance and GDP per inhabitant at regional level, whereas in reality this only corresponds to the ‘pull effect’ that the richest zones have on 18-30 year-olds.

Nevertheless, the connection between demographic change and wealth distribution at regional level is not stable in time and in space (Table 5). In fact this correlation is much less significant when the analysis is limited to the regions of EU-15, where moreover it is very unstable over time: the link between demographic growth and the wealth distribution of the regions is seen to be especially pronounced between 2000 and 2005 (Table 6). In other words, it certainly appears that part of the correlation observed within EU27 captures the difference in behaviour between the regions of EU-15 and those of NMS-12: central and eastern Europe is less wealthy and has known demographic change that is much more negative than in western Europe. The demographic trends under way in eastern Europe can themselves be explained by the dramatic decline in birth rate that these countries have experienced since the 1990s and, to a lesser degree, by a negative migratory balance in favour of western Europe. On the other hand, if the analysis is restricted to the countries of central and eastern Europe the correlation between the two variables is very significant, at least for the period 2000-2005: here the more affluent regions have known the greatest demographic change and this in particular reflects the migratory ‘pull’ of the metropolitan regions, which are by far the most prosperous.
Figure 31: Regional prosperity and demographic change on a regional scale in EU27

Table 5: Simple correlation between demographic change and GDP per capita on a regional scale between 1995 and 2005

<table>
<thead>
<tr>
<th>Population trend (NUTS2, EU27)</th>
<th>GDP/per capita at PPP EU27=100 (2000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-2000</td>
<td>0.373</td>
</tr>
<tr>
<td>2000-2005</td>
<td>0.514</td>
</tr>
<tr>
<td>1995-2005</td>
<td>0.491</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Population trend (NUTS2, EU15)</th>
<th>GDP/per capita at PPP EU27=100 (2000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-2000</td>
<td>0.158</td>
</tr>
<tr>
<td>2000-2005</td>
<td>0.233</td>
</tr>
<tr>
<td>1995-2005</td>
<td>0.220</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Population trend (NUTS2, NMS12)</th>
<th>GDP/per capita at PPP EU27=100 (2000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-2005</td>
<td>0.573</td>
</tr>
<tr>
<td>1995-2005</td>
<td>0.458</td>
</tr>
</tbody>
</table>

Broadly speaking the correlations are significant at 0.01. All the correlations are weighted by population for NUTS level 2 in 2005. Source: Eurostat

Table 6: Correlation (Pearson ratio\textsuperscript{14}) between the components of demographic growth and GDP per capita, 2000-2004

<table>
<thead>
<tr>
<th></th>
<th>GDP/per capita 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EU27</td>
</tr>
<tr>
<td>Natural rates 2000-2004</td>
<td>0.440</td>
</tr>
<tr>
<td>Migration rates 2000-2004</td>
<td></td>
</tr>
<tr>
<td>1-16+31-44 years</td>
<td>-0.025</td>
</tr>
<tr>
<td>17-24 years</td>
<td>0.629</td>
</tr>
<tr>
<td>25-30 years</td>
<td>0.521</td>
</tr>
<tr>
<td>45-54 years</td>
<td>-0.214</td>
</tr>
<tr>
<td>55-64 years</td>
<td>-0.361</td>
</tr>
<tr>
<td>65-74 years</td>
<td>-0.382</td>
</tr>
<tr>
<td>overall</td>
<td>0.367</td>
</tr>
</tbody>
</table>

Broadly speaking the correlations are significant at 0.01. All the correlations are weighted by population for NUTS level 2 in 2005. Source: Eurostat

\textsuperscript{14} The Pearson ratio, also known as the coefficient of linear correlation, provides a summary measure of the strength and direction of the relationship between two variables. The values of this coefficient vary from -1 to +1. If the value of the coefficient is close to 0 it can be concluded that there is no linear relationship between the two variables retained. If the value of the coefficient is close to -1 there is a strong negative relationship between the two variables. If the value of the coefficient is close to +1 there is a strong positive relationship between the two phenomena.
Economic growth not linked to demographic change

The different types of region exhibit surprising differences from the point of view of economic growth (Table 7): on average, the regions that are most in decline (type 4) and are most dynamic (type 1) in demographic terms have witnessed the strongest economic growth. As far as type-4 shrinking regions are concerned this can partly be explained by the fact that the majority of them are in eastern Europe where growth levels have been above average between 1995 and 2005. However, it has to be stressed that irrespective of the context or reference point the most dynamic regions in demographic terms have experienced greater economic growth than the average during 1995-2005.

These findings, which appear paradoxical when the regional demographic typologies are superimposed on the economic trends, reflect the absence of any correlation between the economic and demographic processes at regional level in Europe, with the exception of the 2000-2005 period (Table 8). Yet from 2000 to 2005 the correlation is in fact negative: here we can note the difference in behaviour between the western and the eastern regions of Europe, since within each bloc the relationships are not significant over this period. Between 2000 and 2005 we therefore see, in eastern Europe, a connection between stronger economic growth and weaker demographic development. In EU-15, by comparison, we find a positive relationship between these two variables between 1995 and 2000 and between 1995 and 2005. By and large, the changeability in time and in space of the observed correlations makes any causal interpretation of the observed correlation difficult to achieve.

It can be assumed that the relationships will be clearer if demographic growth is broken down into its migratory and natural components. In fact, if natural growth – and to a lesser extent migratory growth – is correlated with wealth distribution at regional level it is found that in the case of economic growth there is no link either with the migratory balances or with the natural balances. Even when the migratory balances are broken down into their main age groups we find no stable relationship with the economic processes. This result indicates that the fact of being a focus of attraction for certain age groups, and to the young in particular, does not necessarily lead to a better economic performance, at least not in the medium-term period 1995-2005.

Table 7: Economic growth rates for demographic types during the period 1995-2005.

<table>
<thead>
<tr>
<th>Region</th>
<th>GDP trends between 1995 and 2005, in relation to the average:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>European</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>EU27</td>
<td></td>
</tr>
<tr>
<td>Type 1</td>
<td>4.4</td>
</tr>
<tr>
<td>Type 2</td>
<td>-2.8</td>
</tr>
<tr>
<td>Type 3</td>
<td>-2.1</td>
</tr>
<tr>
<td>Type 4</td>
<td>13.1</td>
</tr>
<tr>
<td>EU15</td>
<td></td>
</tr>
<tr>
<td>Type 1</td>
<td>4.1</td>
</tr>
<tr>
<td>Type 2</td>
<td>-5.4</td>
</tr>
<tr>
<td>Type 3</td>
<td>-8.4</td>
</tr>
<tr>
<td>Type 4</td>
<td>0.5</td>
</tr>
<tr>
<td>NMS12</td>
<td></td>
</tr>
<tr>
<td>Types 1 and 2</td>
<td>12.8</td>
</tr>
<tr>
<td>Type 3</td>
<td>15.9</td>
</tr>
<tr>
<td>Type 4</td>
<td>9.3</td>
</tr>
</tbody>
</table>
Table 8: Simple correlation between demographic and economic growth

<table>
<thead>
<tr>
<th>Population trend for NUTS2, EU27</th>
<th>Trends in GDP in comparison with the European average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-2000</td>
<td>0.068</td>
</tr>
<tr>
<td>2000-2005</td>
<td>-0.232</td>
</tr>
<tr>
<td>1995-2005</td>
<td>-0.077</td>
</tr>
<tr>
<td>Population trend for NUTS2, EU15</td>
<td></td>
</tr>
<tr>
<td>1995-2000</td>
<td>0.308</td>
</tr>
<tr>
<td>2000-2005</td>
<td>0.003</td>
</tr>
<tr>
<td>1995-2005</td>
<td>0.269</td>
</tr>
<tr>
<td>Population trend for NUTS2, NMS</td>
<td></td>
</tr>
<tr>
<td>1995-2000</td>
<td>0.068</td>
</tr>
<tr>
<td>2000-2005</td>
<td>-0.222</td>
</tr>
<tr>
<td>1995-2005</td>
<td>-0.130</td>
</tr>
</tbody>
</table>

Broadly speaking the correlations are significant at 0.01. All the correlations are weighted by population for NUTS level 2 in 2005. Source: Eurostat

4.2 Reflections on the economic consequences of future demographic trends

We propose developing some theories as to the potential economic consequences of demographic trends (2005-2030) according to the classic perspective of production and also from another viewpoint that is less frequently considered, namely in terms of income and/or consumption.

- The production perspective: the unequal decline in the proportion of persons of working age on a region by region basis

The only demographic indicator that can be used for evaluating the impact of future demographic change is the classic dependency rate, in other words the ratio between the number of inhabitants who are in employment and the number who are not. However, this indicator raises major problems from both a methodological and a political point of view.

For one thing we can discuss the age limits that should be used for evaluating such a ratio, especially from a long-term perspective, when we know the major trends in age-based employment levels as determined by the increasingly late entry to and departure from the employment market. Moreover, national regulations play an important role in the differences that currently exist, and no doubt will continue to in the future, in spite of various calls for European convergence. A particular factor here is that employment rates for older persons vary enormously from country to country: for example, in the year 2001 the proportion of working women aged between 50 and 64 varied from 26% in Italy to 73% in Sweden. However, changing the age limits for defining the dependency rate does not appreciably alter the geographical differences to be found at regional level.

For another it has to be noted that as things stand at present the national scale is the most relevant level for measuring dependency rate: after all, it is the national framework that is responsible for funding welfare systems for pensioners, along with health and education systems. Nevertheless, from the perspective of territorial changes the demographic process, and in particular its potential impact on employment rates, will also have implications for
economic development: any reduction in the proportion of the working population, all things being equal, will have an effect on a region’s production capacity.

A survey of the regions of Europe shows that the ageing process is quite clear-cut whatever type is being considered and there appears to be little differentiation between the demographic types between now and 2030 (Table 9). In fact this observation applies to the divergent trends found in both western and eastern Europe. In the eastern part of Europe the dependency rates are tending to deteriorate less markedly and without any major differences between the regional types. However, this masks the divergent trends between the age groups: types in decline are those whose proportion of under 20-year-olds will be smaller in 2030, though this development will be offset from a dependency-rate point of view by a slightly higher proportion of persons of working age. In western Europe the situation is different: types in decline (types 3 and 4) are seeing their demographic situation deteriorate much more perceptibly than the others in terms of dependency rates (Figure 32). The dwindling proportion of persons in the under-20 age group does not sufficiently compensate for the dramatic increase in life expectancy witnessed between 1995 and 2005, which is likely to be confirmed by Eurostat’s predictions for the period 2005-2030.

If we keep to the main demographic types defined within the framework of this study we see that the trends over the course of a generation (2005-2030) do not appear to be sufficiently distinct to permit sound hypotheses to be drawn up relating to changes in the economic pattern: the generalised ageing process is unlikely to produce consequences that differ significantly from one type of demographic region to the next. It is mainly the type-4 shrinking regions of western Europe that are likely to experience the most dramatic developments by way of a continuation of the trends observed between 1995 and 2005. Figure 32 shows that from this point of view the most worrying changes are predicted for eastern Germany, central France, eastern Finland and the northern part of Spain.

<table>
<thead>
<tr>
<th>Table 9: Age-structure trends by demographic type between 1995 and 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>EU 15</strong></td>
</tr>
<tr>
<td>Type 1</td>
</tr>
<tr>
<td>&lt; 20 years</td>
</tr>
<tr>
<td>20-65</td>
</tr>
<tr>
<td>&gt; 65 years</td>
</tr>
<tr>
<td>&gt; 80 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age structure in 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20 years</td>
</tr>
<tr>
<td>20-65</td>
</tr>
<tr>
<td>&gt; 65 years</td>
</tr>
<tr>
<td>&gt; 80 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age structure in 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20 years</td>
</tr>
<tr>
<td>20-65</td>
</tr>
<tr>
<td>&gt; 65 years</td>
</tr>
<tr>
<td>&gt; 80 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trends in dependency rate (ratio between non-working and 20-65 year-olds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
</tr>
<tr>
<td>2005</td>
</tr>
<tr>
<td>2030</td>
</tr>
</tbody>
</table>
Figure 32: Size of the 20-64 age group in 2030
• **Redistribution of income and new consumption patterns: differential impact of unequal ageing at regional level**

From the perspective of incomes and consumption any possible trends are very much linked to the existence of different forms of direct and indirect transfer that are essentially handled by the national redistribution systems. In the event of these being reduced, the regions most affected by the deterioration in the dependency rate between now and 2030 (Figure 33) could well be hit hardest. Here we are working on the assumption that direct and indirect interregional transfers will be maintained.

Without going into the detail of the structural make-up of private consumption as a function of age it is possible to lay down a few markers as to the possible consequences of developments in the age-related structures in terms of public service consumption. When viewed from this perspective it is possible to identify three major trends.

The first process is the rapid decline in the proportion of young people, which is likely to lead to a reduction in local expenditure on education. The past and predictable spatial differentiations for the younger age groups (under 20 years) are considerable: in western Europe type 1 comprised 24% in the under-20 age group in 2005 and will include 20% in 2030, while in type 4, over the same period, the proportion of under-20s in the total population will decrease from 17 to 13% (Table 9).

The second process is the rapid rise in the proportion of over 65-year-olds. It appears that we have to differentiate increasingly between the potential impact of the 65-80 year-olds and the over-80 age group. If only the 65-80 age group is taken into account – and this will continue to represent the majority of the over 65-year-olds in 2030 – the economic impact of this population is not merely limited to health spending, even though this expenditure is very much linked to age and has grown enormously in recent years. The economic impact of the growing proportion of 65-80 year-olds in the total population also has to be considered in the context of income transfer and the manner in which these revenues are used. In fact people in this age group have significant transfer income and their place of residence can potentially alter the geographic distribution of interregional income transfers by way of the pension payments system. Migration amongst the older generation is still at a relatively low level (see Chapter 3), but this phenomenon is becoming more pronounced. Indeed some regions already have a large proportion of non-native retired persons, including the south-east of Spain and the Algarve (Portugal). An entire leisure economy has built up around this group, whose health has been steadily improving over the years.

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15 This 80-year threshold is itself subject to variation. Various French studies tend to distinguish between the under-75s and the over-75s: between 65 and 75 the use of care services increases, along with the frequency of recourse to such services, but by and large this population remains sufficiently self-reliant to be able to take care of itself and to resort to these services on an ad-hoc basis, whether it be municipal amenities or hospital services, including surgery, ophthalmology and cardiology. Moreover, after the age of 65 people develop specific pathologies (diabetes, impaired sight, respiratory problems, cardiovascular complaints and psychological conditions) and polypathologies. These specific or multiple pathologies involve recourse to various professionals, namely GPs, nurses, physiotherapists and specialist doctors: dentists and ophthalmologists, cardiologists, lung specialists and psychiatrists. According to this approach, after the age of 75 mobility and self-sufficiency tend to decline and the use of care facilities becomes part of a life-style adjustment that is characterised by increasing dependence on others as opposed to selected recourse to care services.
Figure 33: Size of the 65-80 age group in 2030
From a geographic viewpoint the differences that exist between the demographic types as far as the proportion of over 65-year-olds is concerned have grown considerably between 1995 and 2005; these differences are expected to persist until 2030 (Figure 33). By 2030 the over-65 age group could make up as much as 40% of the population in some of Europe’s peripheral regions, including eastern Germany and northern Italy.

The third predictable process is the increase in the proportion of what is sometimes referred to as the ‘fourth age’, which for our purpose constitutes those who are more than 80 years old. The economic issues at stake here are different from those of the 65-80 age group: the central question concerns the increased expenditure on health care and the need to provide care facilities for a proportion of those who are in this age group. The development of a specific economy devoted to elderly care services will certainly be faced with the need to recruit qualified personnel at regional level. Nevertheless it has to be noted that between now and 2030 the proportion of over 80-year-olds will remain relatively modest, in spite of everything. Moreover, the spatial differentiations on this indicator remain low: in western Europe, where they are most pronounced, the proportion of over-80s could reach 6% in type 4 and 5% in type 1. By 2030 the highest proportions will be found in northern Spain and in northern Italy.

4.3 Conclusion: the economic heterogeneity of ‘shrinking regions’ requires a diversified political response

Regions in demographic decline are on average poorer, have higher unemployment rates and more peripheral economic structures, with services of a general nature and agriculture playing a major role. This average ranking masks the broad divergence that exists between the different demographic types. For the purpose of simplification we can distinguish between four different types of ‘shrinking region’ as far as economic structures are concerned: the peripheral regions of the New Member States; the western peripheral regions, which differ from those of the NMS by having a standard of living that is higher than the former but is still lower than the European average; densely-populated central regions whose living standards are relatively high, being close to or even above the European average; and the very sparsely populated Nordic regions. These distinctions are important, for the differences in population density, living standards and economic structures probably presuppose different political options.

When interregional transfer payments are taken into consideration the ‘shrinking regions’ appear on average to be less poor, which supposes that they are in fact benefiting from various forms of transfer. From this viewpoint the existence of these direct and indirect transfers is essential for maintaining the living standards of those who live in the regions concerned. The impact of demographic trends could reinforce this situation. In fact these regions will tend to witness a more significant ageing process, and this has already been observed between 1995 and 2005. This means that their reliance on transfer payments, and especially on pensions, could well be increased. Furthermore, the burden of providing personal services, which is already specific to economies of this kind, could grow further, especially in the provision of health facilities and care for the elderly, but also for certain types of consumption that are more linked to leisure activities.
These relatively optimistic conclusions must however be qualified by two factors that relate to the time and area scales that have been used:

- **In terms of time**, the period 1995-2005 was a catch-up phase for the countries of central and eastern Europe, which are already seeing the benefits of pre-accession funding (now replaced by cohesion policy funding) and industrial relocation projects, after the initial shock of the post-Socialist transition. In some cases the loss of population due to migration to western Europe has mechanically raised the GDP per inhabitant, whereas total GDP is in fact developing much less rapidly. Moreover, the age pyramid for the former Socialist countries is actually very favourable (see Chapter 1 above) and the impact of the collapse in the birth rate after 1989 will not be felt for 20 or 30 years, but then it will be extremely dramatic. As regards the peripheral regions of western Europe that are in demographic decline, these are currently benefiting from major transfer payments through EU cohesion policy funding (southern Italy) and as part of the national policy for redistribution (Sweden). However, in both cases the future of these policies is under threat.

- **In terms of area**, the fact that relatively large NUTS level-2 regions are retained as the analytical unit means that the local impact of depopulation is underestimated, as averages are drawn up between local units that are growing and units that are in decline. The 2005 study that was carried out on a more scaled-down level (NUTS level 3) by the Council of Europe therefore highlights a much greater spatial extension of the phenomenon of demographic decline than does ours, along with much a more intense process of decline and ageing.
5 Local impact of depopulation and ageing

An abandoned house in Sweden’s Norrland,
© Roger Marjavaara

Key questions

• Do local demographic dynamics differ from regional trends?
• What are the local economic impacts of depopulation and ageing?

Main results

• Whether a region is undergoing a period of growth, stabilisation or demographic decline, such mutations essentially affect the rural zones that are isolated and sparsely populated. The large towns and cities, by comparison, often display a certain dynamism. The same applies to communities that are located close to the major population centres, this being due to the sub-urbanisation effect.
• Recent examples of depopulation have often involved areas that are already weakened, where there has been a loss of creative and innovative talent and the capacity to react to change. Depopulation phenomena of this kind compromise the chances of new and attractive economic zones developing and will inevitably lead to the introduction of a labour-force from outside the area, whether national or foreign based.
• Ageing, combined with depopulation, has consequences both for the environment and for the local job market. This process accelerates the disintegration of certain services and accentuates the inequality of access to these services. It also brings with it a set of new needs, especially where the elderly are concerned.
This section examines the diversity of situations and processes related to demographic decline in Europe, through studies of four different regions matching the four categories in the ‘shrinking regions’ typology set out in Chapter 2: Basilicate has a negative migratory balance and negative natural growth, Romania’s Moldavia\textsuperscript{16} has positive natural growth and a negative migratory balance, Upper Norrland\textsuperscript{17} has a positive migratory balance and negative natural growth, whereas Brittany has both positive natural growth and a positive migratory balance. Although it is not a ‘Shrinking Region’ as such, it was decided to include Brittany in a bid to demonstrate how an approach on a smaller scale can produce certain processes and problems in relation to depopulation in spaces actually earmarked as targets. This chapter is divided into two parts. The first part (5.1) provides an account of the demographic situation in the regions studied, whereas the second (5.2) analyses the many and diverse impacts of demographic processes on social and territorial cohesion.

5.1 Contrasting demographic situations

Basilicate, and Moldavia to a greater extent, are the two regions already undergoing the most spectacular decreases in population, and this trend is set to continue according to forecasts up to 2030: -7% for Basilicate by 2030 with respect to the levels in 2005, and -12.8% for Moldavia (Figure 34). Demographic decline in Basilicate has been a constant process since 1980, whereas in Moldavia the population decrease has taken place more recently – in fact, between 1980 and the end of the 20th century, the population in this region was on the increase. \textit{A priori}, demographic decline in both regions has some surprises in store: economic analyses in Basilicate point to a certain amount of dynamism with respect to other regions in the Mezzogiorno\textsuperscript{18}. In Moldavia, the pro-births policy implemented by the socialist government in Romania has tipped the natural balance favourably. These factors, however, have proved insufficient to prevent abandonment and ageing. The trend has been completely different in the other two regions studied. Upper Norrland has a stagnant population, whereas Brittany has been experiencing substantial growth since 1980. Both regions, however, are experiencing decline at lower levels.

\textsuperscript{16} Also called Western Moldavia, Romanian Moldavia covers half of the historical region of Moldavia, which remained part of today’s Romania following the annexation of Bessarabia by the Russian Empire in 1812.

\textsuperscript{17} The NUTS2 region Upper Norrland, containing the counties of Västerbotten and Norrbotten, has a total of 29 municipalities, 15 of which are located in Västerbotten and 14 in Norrbotten.

\textsuperscript{18} Despite many structural weaknesses, Basilicate’s economic performance in recent years has been better overall than in the rest of the Mezzogiorno (the present rate of unemployment is 12%, and GDP is 70% of the national average). Moreover, due to statistical redefinitions caused by EU enlargement, Basilicate lies outside Objective 1 of the Framework Programme for 2007-2013.
Demographic decline is concentrated in sparsely populated, isolated, economically fragile areas

The dynamics of population trends are certainly distributed unequally within regions. Northern Sweden (Figure 35), for example, has traditionally had a low population density, where residents are mostly found in small or average sized towns. This means that in northern Sweden the percentage of land occupation is 2%: 98% of the land, in fact, has no population at all! The gap between more sparsely populated areas, in decline, and more densely populated areas, on the increase, has recently been widened. Less densely populated areas of Upper Norrland are experiencing significant population losses, whereas Umeå shows a 38% population gain between 1980 and 2007 (Figure 35). The town also boasts a large active population, pointing to certain aspects at local and regional level of the relationship between economic attractiveness and demographic dynamism.
Brittany, which is not in demographic decline, also shows striking contrasts between the fringes of its main towns and the rest of the region. Densely populated areas, particularly the sub-urban villages of major Breton cities (Rennes, Brest, Lorient, Vannes, Quimper, Saint-Brieuc), have shown the greatest population increases in recent years (Figure 36). In these areas, the youthfulness of the population (under 15 years of age), especially around Rennes, Brest and Vannes, would indicate the presence of families (Figure 37). In Brittany, as at other locations, available accommodation, housing prices, a more attractive lifestyle and better communications in central areas are the main reasons for population increases on the fringes of large towns. It is the more isolated rural spaces, on the other hand, that are affected most by depopulation. Demographic decline in parts of central Brittany is as much as -4% per year, even though a number of villages such as Pontivy and Carhaix would appear to have avoided this trend. The depopulation phenomenon cannot, however, merely be put down to the opposing concepts of rural areas in decline and flourishing urban areas.

The map of population trends in Brittany often remits to the map of economically dynamic areas, although the ageing factor in certain parts of Brittany could also exert an impact on the job market by development of services specifically targeting the elderly.
Shrinking regions: a paradigm shift in demography and territorial development

Figure 36: Population trends 1980-2000
Basilicate and Moldavia also show some major infra-regional differences. The data for Basilicate show that ageing is predominant in the innermost areas: Figure 36 shows a central strip crossing Basilicate from north to south with the lowest rates of natural growth. This strip contains mountains and hilly districts, mainly agricultural areas. Between 1962 and 2001 the average population decrease in this area was over 40%. On the other hand, the natural balance was positive throughout the coastal belt adjacent to the Ionian Sea and in the region’s two principal towns, Potenza and Matera, since they act as a start point for internal migration by local people. Positive balances are also observed around the tourist area of Maratea (Tyrrhenian Sea), and recently in the Vülture area, near Melfi. Like the other regions studied, there are indications of a clear relationship between economic and demographic dynamics. A large car factory has been operating near Melfi for the last fifteen years, for instance, and this, along with its subcontracting outlets, is a major job creator. Likewise, the ‘furniture making belt’ between Matera and Puglia and a small lingerie production unit in towns around Vülture to the north-east constitute major areas of endogenous development. More recently positive demographic figures were recorded in villages in Val d’Agri due to the discovery of oil deposits.

Similarly, the demographic situation in Moldavia is undergoing some major transformations in its spatial structures: population densities concentrated around towns (acceleration of sub-urbanisation) and on transportation routes; changes in demographic patterns in mountainous areas (here the structures, which during communist rule were more recent than in the rest of the region thanks to private ownership, are now rather dated) and acute ageing in isolated hinterland areas. The phenomenon of sub-urbanisation on the fringes of towns in Moldavia, characterised by a large population of young people (Figure 37), is not dissimilar to the situation in Brittany.

By way of a summary, the four cases studied show the following:

- the boundaries of demographic decline approaching NUTS level 2.
- that the local scale does permit a more accurate apprehension of the relationships between demographic evolution and economic dynamism, and the phenomena of decline and ageing, which chiefly concern isolated rural areas with low population densities. Larger towns, however, often show considerable dynamism, and the same is true of villages in close proximity to large towns thanks to sub-urbanisation movements.
Figure 37: Population and age structure

**TYPE OF AGE STRUCTURE IN 2000**

A) Excedent of young population
- Type A.1
- Type A.2

B) Excedent of active population
- Type B.1
- Type B.2

C) Excedent of old population
- Type C.1
- Type C.2

D) Medium profile
- Type D

Population in 2000 (inhabitants)

Data sources: National Censuses of France, Sweden, Italy and Romania

UMS RIATE 2009
• The many causes of ‘shrinking’

A number of factors can explain the shrinking phenomenon (see Chapter 3 above). Some concern the natural balance, with a general downward trend in the birth rate, and in fact the age pyramids in Moldavia and Basilicate shrank drastically between 1980 and 2005 (Figure 38). The effect of demographic decline is also an ageing of the population. One of the aspects of ageing is the prolongation of lifespans, as shown on the age pyramids, all of which point to an increase in the numbers of those aged 65 between 1980 and 2005.

Decline must inevitably relate to the migratory balance of the regions concerned (departures to other regions or other countries, absence or rare instances of immigration). There is an obvious link between the migratory balance and the natural balance: the departure of young people reduces the birth rate in both Basilicate and Moldavia; similarly, ageing in Brittany is enhanced by the influx of retirees (Figure 39). The causes combine depending on the context studied, as we may observe in Table 10.

### Table 10: General characteristics of demographic decline

<table>
<thead>
<tr>
<th>Region</th>
<th>Migratory balance</th>
<th>Natural balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basilicate</td>
<td><strong>Negative.</strong> International and internal emigration since the second half of the 19th century. A recent return to emigration following a phase of stabilisation.</td>
<td><strong>Negative.</strong> Prolongation of lifespans. Low birth rate.</td>
</tr>
<tr>
<td>Moldavia</td>
<td><strong>Negative.</strong> Internal emigration, return movements followed by a renewal of internal and international emigration very recently. No immigration.</td>
<td><strong>Positive.</strong> Prolongation of lifespans. Low birth rate.</td>
</tr>
<tr>
<td>Northern Sweden</td>
<td><strong>Positive.</strong> Internal emigration. International immigration.</td>
<td><strong>Negative.</strong> Prolongation of lifespans. Low birth rate.</td>
</tr>
<tr>
<td>Brittany</td>
<td><strong>Positive.</strong> An emigration region since the 19th century. Positive migratory balance since the end of the 1960s. Substantial internal immigration.</td>
<td><strong>Positive.</strong> Prolongation of lifespans. Higher birth rate than in other regions studied.</td>
</tr>
</tbody>
</table>

The decline in Basilicate occurred relatively early. Italy, which used to have one of Europe’s highest birth rates, has been experiencing a drastic reduction in these rates since the 1960s to its current position at 9.5%, around one point lower than its death rate. In parallel fashion, the population of Italy is ageing: more than one fifth of Italians are now over 65 years old, with a life expectancy of over 77 years for males and 83 for females.

The situation in Italy differs depending on the region: the northern regions that have experienced the most intense ageing. In the north, however, the population figures were offset by the arrival in the 1990s of a large majority of 3 million foreign immigrants. On the other hand, the south of Italy has a falling birth rate, albeit less than in the north, but this is not offset by large numbers of immigrants. In the Mezzogiorno, therefore, the population has decreased overall, especially in the inner mountainous areas, previously considered the ‘bone’ of this party of Italy, as against the coastal areas, or ‘pulp’ (Rossi Doria, 2005, republished): these areas lost their vitality many years ago, with the additional factor of long-term emigration.
Figure 38: Age pyramids for 1980, 2005 and 2030 (central projection scenario) for the regions of Basilicate, Brittany, Moldavia and Upper Norrland.
Basilicate is fully representative of this situation:

- **Within 100 years, 700 000 Lucanians emigrated to other parts of Italy or abroad:** a much larger number than the current population of the region. As of the end of the 19th century, social and economic slumps led to en masse emigration to the Americas. Official records show that over 460 000 people left between 1876 and 1925, mostly entire families who took up permanent residence in the new country. This created the first holes in the younger elements of the population, which were only replaced due to the extremely high birth rates of the time. Within only a few decades the sudden huge shift away from rural areas caused a number of major environmental catastrophes. Emigration slowed during the inter-war period as a result of the Fascists’ demographic policy and immigration restrictions adopted in certain countries, and subsequently soared again at the end of the 1940s, this time towards countries in western Europe busy with reconstruction work. After this period, during the first half of the 1960s, the number of emigrants again exceeded 15 000 per year on the heels of a massive economic boom in north-west Italy. The exodus slowed up towards the mid-1970s when the prospects had tailed off, and it was then that a number of retirees began to return home from other EU countries.

- **Evolution in reproductive patterns.** The total population in this region was stagnant for around twenty years as of the mid-1960s, whereas a net decrease was recorded as of the year 2000 (approximately -2% over one decade). The drop was mainly caused by a number of births sustainably lower than the number of deaths. This points both to a consolidated pattern of limited procreation and a distribution of age categories tending towards ageing. The natural balance in Basilicate, as in other interior Apennine regions, is well below the rest of the Mezzogiorno, and even, albeit to a lesser extent, below the figures for the rest of Italy. The birth rate (8.4%), for example,
is around one point lower than the average for southern Italy. On the other hand, the death rate (9.6%) is one point higher than the south. It is obvious this stems from ageing which is already extremely high (146 elderly people to 100 young people), producing an increasingly inverted age pyramid and a high level of dependence of younger and older residents on the adult population.

- **The influx of young people to the centre of northern Italy consists of foreign immigrants.** The flow of foreign migrants to Basilicate is composed of only a few thousand people (some 1% of residents, as against a national average of over 5%) (Figure 40). These are chiefly middle-aged females working as home helps and caring for the elderly: a migratory phenomenon which produces no family groups, and therefore does not increase the birth rate.

- As of the last decade we have observed a moderate but significant exodus of young people (between 25 and 34) who, after they have completed their higher education or university course, cannot find a job in the region, and so they leave for other more dynamic regions in Italy. This depletion of the fabric of professional skills and creative capacity affects local potential for innovation.

*Figure 40: Number of foreign residents in Basilicate 2003-2007*

The global balance between those leaving (for the rest of Italy) and the influx of foreign migrants is sufficiently negative to make the lack of the most vital age categories a major concern.

Population disruptions in Romania’s Moldavia are much more recent and illustrate the situation of demographic systems in central and eastern Europe, showing decreasing dynamics despite the violent pro-births policy under Communist regimes (see Chapter 1 above).
The fall of Communism had a marked impact on the region, which experienced certain contradictory social and economic dynamics that contributed to a weaker demographic situation:

- the low-tech industries that emerged as of the 1970s fell into an economic slump; this brought a halt to the numbers commuting to towns from rural areas, and even forced some of them to return to their rural origins.
- Romania’s most developed regions encountered similar difficulties, and Moldavians were compelled to return to Moldavia, which experienced immigration on an unprecedented scale for a short period.
- most of these immigrants arrived in rural areas, poorly equipped with drastic fragmentation of land (an average of 1.6 ha per farm - Hirschhausen(von), 1997), and this served to increase the pressure on agriculture (Rey et al, 2007), create more unemployment, and increase the need for public funds – an outright increase in poverty.

These dynamics gradually led to considerable international emigration, particularly towards western European countries. This trend chiefly affected Moldavia’s most developed areas – the region’s western half, in other words. Since there was a good deal of female emigration, especially among the fertile age groups, the lower numbers of marriages and births added to demographic decline. This phenomenon was also accompanied by a resurgence in internal emigration to other parts of Romania or other parts of Moldavia that were more economically dynamic.

Box 5: International migration and welfare, a relationship drawing ever closer

Female emigration in Moldavia, female immigration in Basilicate: these two phenomena are related within a global situation concerning the international share-out of care working. Women currently account for more than half of the world’s economic migrants (UNFPA, 2006). Their insertion in job markets is often linked to what feminists call the reproductive sphere, which among other areas covers care, domestic work and sex work (Kofman, 1999).

From the point of view of the countries of origin, particularly in the post-Socialist era, opening and restructuring of economies have encouraged employment emigration. From the point of view of the host countries, ageing and an increasing presence of women on the job market have created a growing need for reproductive work. This is particularly noticeable in southern European countries, where the state plays a rather minor role in the welfare system (Esping Andersen, 1999; Saraceno, 1994).

In Italy in particular, the welfare system is based on the principle of subsidiarity, amended by the constitution, whereby it is the family rather than the state that must take action in matters of assistance for individuals. Italian families may thus avail themselves of workers within their own families, whether or not they are officially declared as such (the famous colfis or badanti), who take care of small children, the elderly and the sick.

On a global scale, we are now witnessing the implementation of ‘care chains’, to use the phrase coined by Arlie Russel Hochschild (2003): women in transition countries emigrate to richer destinations as care workers and home helps. The female migrants simultaneously hire immigrants, often from other poorer countries or regions, to cover their absence at home.

In the case of Upper Norrland, it is the positive migratory balance that just manages to maintain positive growth in the population. Internal immigration mainly concerns Umeå, whilst net international migration is positive for the entire region. The period peaked at the beginning of the 1990s with the arrival of refugees from former Yugoslavia, and the recent arrival of Iraqi refugees has continued this immigration trend. It is therefore international immigration on a large scale that is slowing down the process of demographic decline.
The demographic evolution of Brittany during the 20th century was rather irregular, although a number of trends may be clearly distinguished, and may be simultaneously explained by the region’s demographic transition model and social and economic history:

- The natural growth rate (births – deaths) gradually diminished (with the exception of both world wars, when the number of deaths far exceeded births, and the post-war baby-boom periods) from a respectably high level – an annual average growth rate of almost 0.50% to around 0, placing Brittany on a par with other regions in the process of demographic transition. France, in fact, does show a premature fall in the birth rate, almost immediately associated with a fall in the death rate, which considerably limits the effect on the natural excess and its impact. Brittany showed a much steadier fertility rate in the course of the 19th century, the vestige of a more rural society, although since then it has fallen into line with fertility rates in France.

- The special characteristics of Brittany tended to invert the migratory balance during the 20th century: this was highly negative during the first half of the century (migratory growth less than –0.50% per year), and subsequently positive over the second half (values in excess of 0.25% per year). This sudden swing may be explained by the specific social and economic history of the region. With the arrival of the railroads, the disappearance of the textile industry (100 000 weaving jobs in 1800) and its high fertility rate, Brittany became a major emigration region as of the latter half of the 19th century. ‘Transformation processes within the economy, means of production, costs and selling prices, communications and lifestyles encouraged a considerable number of young adults to join the exodus’ (Rouxel, 2000). This exodus was somewhat irregular, but it gathered momentum during the 20th century up to the 1939-1945 war, whereupon the trend reversed.

- The region’s migratory balance is now continuing with consolidation, having moved from negative to positive in the mid-1960s. The accumulated migratory balance for the 20th century, however, shows a deficit of 580 000. The reversal in the trend was accompanied by a development process, partly as a result of the reversal, consisting of public and private initiatives at both regional and national level, which led the region to reconquer a modern productive economy. Following Brittany’s request for a multiannual programme law, Citroën’s decentralisation in Rennes, the CNET in Lannion and Olida in Loudéac, among other initiatives, helped double the region’s share of government spending (from 2.5% to almost 5%). In parallel fashion, development of the agri-foodstuff sector throughout the region kept populations steady in less urbanised areas.

Population growth is the consequence of the natural balance and the migratory balance. Overall, the mass exodus was such that in the 1960s the growth of the population was close to zero, and even negative in certain years. Brittany lost part of its population. As of the 1960s and reversal of the migratory balance, the Breton population began to grow again, despite a natural balance tending towards zero.

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19 An industrial and commercial business producing processed and cured meats, operating in the meat and canning sector.
5.2 Multiple impact of shrinkage on social and territorial cohesion

The impact of the shrinkage process varies in accordance with the social and economic characteristics of regions, and the systems used to distribute resources. It affects the environment and patrimony, public and private services, and also the job market.

- Demographic decline and environmental sustainability in Basilicate

Basilicate is now one of Italy’s most agriculture-intensive regions, where 12% of assets are given over to the primary sector and 58% of the region’s area is used for agricultural purposes, according to data from the Corine Land Cover project\(^{20}\). The region, however, does show some major internal contrasts: irrigation is used to allocate areas with access to considerable water resources to a flourishing agricultural trade in fruit and vegetables. On the other hand, farms located in the extensive mountainous and hilly areas are extremely modest and barely profitable. In this hinterland, a slump in activity was accompanied by a falling population, and the area of land used for agricultural purposes in mountain areas dropped by 19% in the 1980s.

This has had both positive and negative consequences: on the one hand, there is less pollution, the land has retained a certain amount of variety, and nature areas, even outside the official parks and reserves, have been preserved. On the other hand, in certain areas of rugged terrain, rural decline increases hydrogeological and fire risks, with some extremely serious consequences on daily preservation of mountain areas.

These inland areas are also the most disfavoured from the point of view of local education, inferior in comparison to the average for the population, thus producing a low innovation capacity. Furthermore, the overall lack of an offer of public and private services in mountain areas has negative repercussions on the rural population’s quality of life and on the ability of these areas to attract new residents and new activities. Decline ultimately increases the risk of neglect of historic remains (castles, fortresses, and medieval areas which could constitute a genuine asset in terms of heritage).

It must be observed that environmental vulnerability problems go hand in hand with economic slump, and help widen the breach between urbanised areas, few in number and at contained locations, and marginalised areas. A few years ago the need to simultaneously deal with a decline in the population and abandonment of agriculture led the region to implement a number of courses of action geared towards combining protection of the environment (particularly by reforesting), promotion of sustainable agricultural practices, improvement of service equipment, increased competitiveness of agricultural businesses and diversification of farming activities in rural areas.

- Destructuring of the regional economic base

Shrinking of the active population and the impact on local taxation in Upper Norrland

During the 20th century, like the rest of Sweden and all developed countries, Upper Norrland was confronted by major changes to employment structures. The number of jobs in the

\(^{20}\) The Corine Land Cover project is an inventory of land occupation on the EU’s CORINE programme (Coordination of Information on the Environment), administered by the European Environment Agency.
primary and secondary sectors fell, whereas the services sector grew. Employment in Sweden overall fell by 7% between 1990 and 2003. In Upper Norrland, the decline was much greater: -16%, and even -25% in the most sparsely populated areas. Industry was affected most in economic terms, but almost all sectors went into decline. In Upper Norrland and the least densely populated areas, employment increased only in the ‘research and development’ sector and in education.

One central aspect of these transformations is that while by 1990 women’s share of the job market had considerably increased, female employment was the first casualty of the economic crisis of 1991-1993. Since then jobs for women have not succeeded in regaining their historic levels. Figure 41 shows employment in 2006 by industrial sectors in Sweden, Upper Norrland and the least populated regions of Upper Norrland. In spite of noticeable losses in mining, the manufacturing industry, the health sector and social services, it is these sectors that remain predominant in the sparsely populated areas of Upper Norrland in terms of jobs. Steady international demand turned mining into a prosperous industry, although modernisation of the industrial process meant this could not create many new jobs.

*Figure 41: Employment by industrial sector for Sweden, Upper Norrland and the least populated regions of Upper Norrland in 2006*

Changes to the numbers, distribution and structure of the workforce have a considerable political impact in that local authorities are responsible for taking care of the elderly. Shrinkage of the active population in relation to the emigration of young people has major consequences at local level: a larger proportion of elderly people means increased cost, while the outgoing active population exerts pressure on local coffers.

Since the local taxation system is counterbalanced by a redistribution of funds among the local authorities, the richest local authorities in the suburbs are compelled to transfer increasingly larger sums to the others, and there is a risk this could stir up discontent among those who disagree with the redistribution system. Despite this system, taxes are high in sparsely populated areas, and this makes them even less attractive. It should, however, be mentioned that the cost of living, especially accommodation, is much lower in such areas, which offsets the negative repercussions of high taxation.
Another aspect which ought to be borne in mind is the presence of second homes and temporary jobs in the tourist industry, the effects of which are particularly noticeable in less densely populated areas. The tourist sector in mountainous areas creates jobs for many non-residents. Lundmark (2005a) claims that in the 15 most mountainous municipalities, one quarter of the jobs in the tourist industry are taken by seasonal migrants and casual workers. Tourism in terms of ownership of a second home is very common in Sweden. Some of these, especially in mountainous areas, are located in Upper Norrland’s most sparsely populated areas. Many country houses abandoned due to urbanisation have now been transformed into second homes. Müller and Hall (2003) claim that in 1996 second homes increased the populations of 190 of Sweden’s 288 municipalities. The impact of the population stemming from second homes is particularly noticeable in the most sparsely populated areas, especially in terms of consumption and social activities. Taxes, however, are always paid to the municipality where the permanent residence is located.

In Moldavia, the decrease in the active population and the increase in their higher average age is weakening the economic system

Moldavia is much more sensitive to demographic decline in that it is still an extremely rural and agricultural location. There has been little modernisation of agriculture, requiring a large work force, and this is difficult to secure in the current climate of a mobile active population. Modernisation needs young entrepreneurs who can use structural funds, and these are now in short supply. The exodus of young people and overall national ageing have reduced the active population that could maintain the social and economic system. In all cases, employment forecasts point to a reduction in active numbers and an increase in their average age. These estimates take account of the active population as legally defined – in other words, women between 16 and 57 years old, and men between 16 and 62. The hypotheses (low, medium and high) were drawn up in accordance with the various potential combinations of the two major components: natural balance and migratory balance. The low variant was drawn up in accordance with the idea of an increase in demographic decline, which set in throughout the region in 1992, firstly on the basis of emigration and subsequently in the conditions of installation of the natural deficit, with a tendency towards perpetuation. The medium hypothesis projects the trends of the last ten years, while the high hypothesis is based on the reduction of emigration (especially young people), a major increase in fertility rates and the resultant fall in the death rate. Although for many years Romania’s Moldavia was a source of qualified labour, and especially unqualified labour, for areas of Romania lacking manpower, the region experienced a constant increase in the work force, even during the period of sustained rural exodus between 1960 and 1990. After 1992 the negative trend in the components of the natural balance reversed the situation: an active population of 2.116 million was reported in 1966, 2.198 million in 1977, 2.287 million in 1992, and only 2.008 million in 2002.

By 2030 all the predictions indicate a major decrease in the potential regional work force (Figure 42). The trends observed in recent years tend to confirm the low hypothesis in most of the region’s departments, with the exception of Suceava and Iași, reporting a stable low natural excess of around 2-3‰. This hypothesis is also favoured because internal mobility accelerates to the profit of the more dynamic regions, receiving or attracting most investment. The only ‘positive’ feature of the forecast is that decline will affect rural areas which have already aged considerably, thereby absorbing ‘excess’ agricultural manpower (around 45% of occupied workers on the regional scale and 75% in rural areas). The predictions also point to an increased decline in female employment, an active player in the
Shrinking regions: a paradigm shift in demography and territorial development

emigration process, a process enhanced by major erosion of women between 20 and 30 years old. The average age of employees also increases by 5 years for men and 4 years for women (Figure 42). The effects of the increase, expressed by a lower employment capacity and difficulties relating to professional reinser tion for the jobless over 45 years old, will sap the strength of the social and economic system, and this is a serious problem in view of the ageing context: 18.5% in the low hypothesis and 15.5% in the high hypothesis for a population of 65+ in 2030 with respect to 14.5% in 2005.

Figure 42: Effect of demographic decline on the regional work force

- Destructuring of public and private services

Destructuring of the health system in Moldavia

In Moldavia, although the number of hospitals increased slightly between 2000 and 2006, the number of beds in public hospitals fell by 16%, and the number of doctors by 3.4%. The increasing number of dentists and pharmacists and a moderate increase in medical staff with average qualifications cannot hide the spatial inequalities of these dynamics, which have all taken place to the benefit of urban areas. Privatisation combined with implementation of the family doctor in the public system had a considerable effect on rural areas. Dispensaries (343 in 1990 and only 35 by 2005), which constituted the main infrastructure of rural medical services, were closed down since it was felt that they had been replaced by the family doctor system. Doctors refuse to work in rural areas, where there is a chronic lack of facility infrastructures and a medical service is only provided for a few hours every week on an outpatient basis. Reforms and a lack of means in addition to the falling birth rate led to the closure of a number of maternity units in rural environments, followed by closure of nurseries for infants (143 in 1990, as against 41 in 2005).
Destructuring of the health system has a major spatial dimension (Figure 43), and all the more so since the region is considerably behind in terms of automobile accessories and road quality, particularly in the most isolated areas. The east of the region has aged structurally, containing many small villages lost amid the hills, the perpetrators of the rural exodus of 1960-1980, but on a quantitative basis the western sector is home to increasing numbers of elderly people, since a more diversified economy and a more benign environment have increased life expectancy slightly earlier. Fewer public hospital beds and rural dispensaries, poorly equipped pharmacies and the exodus of auxiliary medical staff are also the key note throughout the region, but it is the east that suffers most (with the exception of the area around Iași). Emigration abroad by doctors and auxiliary staff, especially nurses, makes the situation even worse.

**Figure 43: Ageing and health care facilities**

Decline in local shops in Upper Norrland

Declining regions may experience a fall in demand for certain public and private services, with possible negative repercussions on supply, and this is what has happened in Upper Norrland. The longitudinal database ASTRID allows us to examine the evolution of services offered in the sparsely populated area of Åsele in the municipality of Västerbotten. The population of Åsele fell by 21% between 1990 and 2005. What happened to its services? There was a mixed bag of results – on the one hand, the numbers of certain public services such as schools and clinics have been stable since 1990, as have some private services such as restaurants and hairdressers, whereas other kinds of private services have disappeared, such as groceries, which embarked on a noticeable decline. It is nevertheless difficult to distinguish what is actually the result of demographic decline and what is the result of more general processes in commercial restructuring. Retail outlets in the region tend to be increasingly concentrated, while small businesses are disappearing with the advent of shopping centres (Bergström and Fölster, 2005).
The services crisis in Basilicate: when territorial cohesion and competitiveness go hand in hand

The ageing process and prolongation of lifespans not only lead to an increase in the portion of the population accounted for by the elderly, with an increasing need for social and health services, but also a severe deterioration of needs which calls for a complete rethink of management and allocation of services. This process must also take account of the geographic characteristics of a territory containing very small villages, access to which is often difficult.

The second factor compromising potential for development in the region is the re-emergence of emigration of young educated people, university students or those newly qualified looking for a job. These dynamics deprive the region of human resources that would be of more potential use in increasing competitiveness and improving natural balances. Emigration, moreover, is occurring within a context in which the conditions of the Italian job market, even for qualified employees, offer very low pay and unstable employment contracts (Contratti atipici - Atypical contracts). This prevents the formation of new family units and leads young couples to suspend any decision to have children. With respect to the past, emigration by young people nowadays does not guarantee families an economic contribution from remittances, but is rather seen as subsequent expenditure to pay for their studies or top up their excessively meagre salaries.

To date there had been a certain equilibrium within the job market due to the coincidence of factors such as the emigration of young people (thereby reducing pressure on employment), population-ageing and a greater flow of immigrants providing a response to elderly people’s need for services. However, as the Region emphasises in programming documents for 2007-2013, ‘this adjustment cannot continue indefinitely: new demands for integration by immigrants or for assistance by the elderly may outstrip the region’s revenue and social cohesion. This adjustment eventually places negative conditions on any real development by means of a reduction in the most productive work force and increasingly less dynamic consumer demand’.

As we have observed, the depopulation and ageing processes largely concern the hinterland and smaller centres, while the two capitals and the main urban nuclei have positive demographic contexts, intercepting the majority of internal and external flows of migrants. Differentiations in terms of demographic dynamics are often accompanied by social and economic disparity (income, employment) and accessibility to public and private services. The differences stimulate the region’s internal imbalances and point to the need to introduce strategies to deal with territorial cohesion. The question of efficient management and supply of services has recently become a major issue in the region’s programming documents, with a dual purpose:

− to guarantee the same chance of access to essential services with homogeneous qualitative standards;
− to build on the attractiveness and capacity of inner areas to the benefit of local development and the fabric of production.

From this perspective, territorial cohesion and competitiveness are considered as complementary aspects which strengthen each other mutually. Even in a region as small as Basilicate there are sub-zones showing a trend with different demographic and migratory dynamics, with different repercussions on demand for services or on types of social exclusion.
Areas showing positive demographic trends need better services for the elderly, for young couples or infants, as well as proper housing policies. In the two principal towns and in the Metapontino region on the Ionian coast, the need for services targeting integration of foreign immigrants is becoming increasingly obvious, since in most inner areas demand has not been met in terms of domestic services and care for the elderly. Another aspect which cannot be omitted is the relationship between demographic evolution, a low percentage of females in the job market, and availability of services for child care and care for the elderly. This problem particularly concerns the Mezzogiorno region in Italy, to the point that the National Strategic Unit (Ministry for Economic Development, 2007) made female employment one of the strategic objectives of development and cohesion policies. In Basilicate, the active female population in 2007, calculated for those aged between 15 and 64, was 41.7%, above the southern average of 36.3%, but still a far cry from the national figure of 50.7%. The most recent local data available from the 2001 census again indicate huge intra-regional disparities at the expense of smaller units and innermost areas. If these discrepancies are related to job opportunities and job market conditions, then aspects in relation to the difficulties of reconciling professional life with family life due to a lack of specific services cannot be underestimated.

The relationship between demographic change, a share in the job market and the range of social services, however, is quite complex. On the one hand, the lack of social services for infants and the increasing burden of an ageing population deter women from entering the job market, since they often have to rear their children or take care of elderly people in their family. On the other hand it is also true that in a southern society where family ties are still strong the presence of elderly people enjoying good physical and mental health constitutes a resource, since this replaces ineffectual social services and affords young couples greater flexibility to organise their daily lives.

In a more general sense, any evaluation of the role of the elderly must take account of the fact that the over-65s now constitute quite a heterogeneous unit, simultaneously composed of people often in good health, with efficient interest-friendly relations networks and modern consumer formats, and those with health problems and a modest pension who suffer social marginalisation. As shown by local surveys in the province of Potenza, here too there are considerable territorial differences. In the region’s larger urban areas, active involvement of the elderly in social activities is more practicable. For example, the ‘Third-Age University’ experiment in Potenza, considered to be an opportunity to provide a meeting place for social relations and cultural enrichment, has been extremely successful. Moreover, a large percentage of elderly people are involved in associations in Matera. In smaller centres affected by depopulation, traditional neighbourly relations are a solution to minor everyday problems. In general, however, elderly people in these areas, especially those who live alone, complain of isolation, a lack of social opportunities and a lack of vitality in residential areas whose active population has emigrated to study or work. One of the most visible effects of depopulation is that only the elderly and very young children remain in the smaller population centres. The latter, however, are in decline: according to data collated by Ancitel21, the number of pupils at primary schools in Basilicate fell by 19.6% between 1997 and 2005, and this figure rose to 24.5% in villages with populations of less than 1 000.

21 A member of the ANCI Group (National Association of Italian Villages), which helps villages to manage administrative and technological innovation processes.
6 Multiscalar governance?

Key questions
- What measures are being taken at European, national, regional and local level?
- Is the issue of 'shrinking regions' accompanied by the emergence of new forms of governance?

Main results
- The national level ensures an inter-territorial redistribution of wealth, but the context for the restructuring of the welfare state places local communities at the head of the queue when it comes to investments. Here the region has established itself as the main planning scale. News opportunities and constraints are beginning to emerge, and all this in a context of inequality of resources.
- The health sector is one example of this transformation: assertion of the regional level, difficulty in selecting ‘carrot and stick’ measures aimed at maintaining services, emergence of transborder projects ...
- These restructuring actions highlight two types of ‘troublespot’: those linked to the shortage of public resources, which mainly affects the countries of central and eastern Europe, and those linked to the crisis in inter-territorial solidarity, which mainly affects those countries undergoing regionalisation-federalisation but could also extend to include other European states.
- In such an environment EU cohesion policy, though the impetus it gives to national and regional policy making, represents an essential element of stability, even though the ultimate objectives of the cohesion policy still have to be clarified.
The term ‘governance’ denotes the affirmation of new forms of shared government for the administrative areas, involving bodies operating at different regional levels and often accompanied by a certain porosity between the public, the private and the associative sector. In the case of Europe this problem relates back both to decentralisation, a process now under way in various forms in a number of countries, and to the emergence of supranational levels, particularly the European Union itself. Between the latter, the 27 Member States and the 89 250 sub-national entities (CAIRN, 2007) that now exist we are therefore seeing new rules being created that are supposed to be more efficient but which at the same time involve commonalities of scale that are more complex and occasionally problematic too. When it comes to managing demographic decline and ageing the problem of assigning a place to these new scales of governance has to be dealt with on a national level. In fact it is at this national level that the main choices exist when it comes to managing ‘services of general interest’, whether this be public health or other arrangements: postal services, schools, transport, etc., which are fundamental to the problems of territorial contraction and demographic decline. The emergence of sub-national and European levels is a major factor that profoundly affects European societies, whether this be a positive impact (the region as the cohesion level, the local area as the preferred ‘everyday’ level) or a negative one (concerns over the state ‘off-loading’ cumbersome burdens and over Europe as a single market posing a threat to the welfare state).

6.1. Local government units ‘saturated’ by the welfare state

If the national context remains the key ‘fundamental’ for governance it is primarily because the global importance of the welfare-state system, regardless of its national, regional or local management, exerts a powerful contextual effect on the local and regional players. For instance, public administration employs 8.7 people per 100 inhabitants in EU27, while in Italy and in Austria the figure is 6.1 per 100, in Sweden 14 per 100 and in Denmark 17.1 people per 100 inhabitants (Istat, 2008/Eurostat). The affective importance attached to the notion of ‘public service’ or ‘general interest’ also varies considerable from one country to the next (Pardini, 2005).

- Marked contrasts between north and south and between east and west

The demographic contrasts referred to above also exist on a political level. The north-south divide is there because the historical weakness of the Greek and Portuguese situations continues to contrast sharply with the Scandinavian ‘model’: expenditure per capita by public administrations is three times higher in Sweden than in Portugal. The east-west contrast is even more significant, because the level of expenditure in Bulgaria (EUR 1 200 per inhabitant in 2006) is thirteen times less than that of France, Sweden, Luxembourg or Denmark (where it is more than EUR 15 000). Among the New Member States only Slovenia and Cyprus can match Portugal when it comes to public expenditure per capita. As far as the total number of civil servants is concerned the New Member States tend to fall somewhere in the middle (Istat, Eurostat 2008).

Since the 1990s the nations of Europe have suffered a downward trend in public investment, with the exception of the central European countries and the ‘cohesion countries’ of the old EU-15, namely Spain, Greece, Portugal and Ireland (EU, 2007). This restructuring of the welfare state has affected the ‘shrinking regions’ in very different ways. Sweden, for example, has witnessed significant stability in its public services (see Chapter 5 above). At the other end of the European spectrum we find that in Romania – where overall the number of civil
servants is diminishing, while public spending per capita is increasing – restructuring may be decidedly more drastic. Here we can focus for a moment on the example of the school system in Moldavia, where the problems created by the combined impact of ‘shrinking regions’ and welfare-state restructuring are presented all too clearly. Between 1990 and 2006, a period that saw the number of schoolchildren aged between 6 and 14 fall by 25%, half of all the primary and secondary schools closed and 14% of all the teaching posts in the primary-secondary sector, and nearly 10% of all the college and high-school teaching posts, disappeared. This situation forced successive governments to take various measures that were to prove inadequate for the purpose (acceptance of non-subsidised private education with fewer students per class; policy for reducing school drop-out levels; aid to young mothers, etc.). As well as concentrating investment on community focal points there has also been a recent attempt to set up a school-minibus network.

*Figure 44: The school-bus network in the province of Galați*
The demographic predictions for Moldavia (Figure 45) certainly do not encourage optimism. The reduction in enrolment numbers is already impacting seriously on access to education by children living in isolated rural areas, which mainly comprise small hamlets that are losing their population. This situation will continue to deteriorate over the next 5-10 years. Because of the reduction in the number of pupils attending high schools and colleges there is now a real possibility that several rural secondary schools will have to shut. It is difficult to predict the domino effect that will be produced by the decline in school population, although it is certain that this will have a negative impact on the quantity and quality of the training.

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22 Trends in the school population depend on fertility levels. Whichever theory is applied, and the estimates have only taken account of the pre-university age group, the current number of pupils and students cannot be maintained. The most optimistic figure for 2030 points to a reduction of 30% in the population compared with 2005 levels, while the most pessimistic suggests a 50% reduction. These estimates highlight the continued erosion of the base of the age pyramid and possibly an escalation of all the processes of demographic breakdown beyond 2030, as cited above.
courses available for specialists, and Romania – whose society is undergoing modernisation – is in desperate need of just such people.

- The residential economy caught between opportunity and constraint

Apart from their diversity (Bismarckian and Beveridgian systems23, etc.), national systems operate a system of redistribution between towns/cities and rural areas and between rich regions and poor regions (EU, 1996; Maggi & al, 1994; see Chapter 4 above). This largely ‘blind’ form of redistribution (Davezies, 2007) is linked both to private and public transfers as well as to the fact that public services primarily follow the constraints of providing a service to people and to territories. Even if the magnitude of this inter-territorial transfer is open to debate24, it still constitutes a ‘bonus’ for the smaller regions, which are often those with a low population density. In Italy this means the Alpine regions of the north and Molise and Basilicate in the south, while in France it would for example be Corsica.

This redistribution presents both new opportunities and constraints for the local and regional governance of areas in decline. Opportunities insofar as the ‘residential economy25’, as linked to life paths between training, working career and retirement, is today often taken into account when devising strategies for developing local administrative units, in particular those that are aimed at enhancing the attraction and appeal of the areas concerned. Communities that are facing demographic decline can, for example, promote the quality of their living environment in order to attract new residents. Another scenario for the low point: such communities can directly encourage the intake of new residents that is required for the survival of their public services, as has been done in southern Italy and in Navarre (Spain), which are famous for deliberately welcoming foreign immigrants who have been drawn in with a view to restocking areas that have become depopulated. Finally, tourism is also a factor to be taken into account when assessing the ‘presentational economy26’, (Terrier, 2005), as referred to above with the example of Sweden (Müller and Hall, 2003).

The residential economy also entails constraints, for there is the risk of breakdown in local public policy making because of the mobility of the population (Davezies, 2007): ‘greater personal mobility can strengthen the competitiveness of local and regional authorities that have to provide quality services at low cost’ (OECD, 2003). Admittedly, this problem also arises in urban areas in strong demographic growth, but for communities facing decline it often proves much more serious. Rural communities and areas in decline are often reluctant to commit themselves to spending money whose ‘added value’ is uncertain: ‘this can create the risk of under-production of public services when those communities that offer better-quality

23 The Bismarckian system is based on proportionality between contributions and pensions. The Beveridgian system is based on the principle of one standard pension for all.
24 For example, Italy is one of the European countries that spends most on its pensioners: this creates a prime link between public spending and the problem of ageing regions, which now particularly means those of central and northern Italy, whereas the South – which for the moment is younger but in migratory deficit – would be ‘penalised’ in this case (EU, 2004).
25 ‘Certain local authorities specialise in wealth creation, against a background of strong global competition, while others focus on the collection of revenue (...) laid end to end, public and private income transfers and their multiplier effect on jobs and incomes are providing increasing support to those local and regional authorities that are least well equipped for globalisation’, and in France this applies especially to communities situated to the west of the Cherbourg-Montpellier line (Davezies, 2007).
26 This term reflects the desire, as expressed in various statistical studies recently carried out by INSEE, to record not the ‘official’ resident population but the number of persons actually present in a particular area at a particular moment ‘t’. This concept is particularly useful for the tourist economy, but can also be applied more generally to local and regional planning and management problems.
services begin to attract the inhabitants from other municipalities’ (id). For example, it would appear that in Finland communities ‘are rarely willing to welcome new inhabitants from the older age groups’. It is also necessary to take account of the fact that communities are victims of the rebound effect of the various mechanisms overtaking them. In France, for example, the demographic decline now affecting rural areas partly relates back to the process of sub-urban dispersal around the large towns and cities, in this case to a certain Malthusianism in the local municipalities that are directly located at the sub-urban front, which – for lack of suitable budgetary resources for managing a major influx of new residents – are forced to receive fewer people than would have been the case had the circumstances been different, with the result that the sub-urban wave is transferred to municipalities that are further afield (Noyé, 2006).

6.2. A new order of scale and new institutional players

NUTS level 2, which in this study constitutes the prime observation scale for ageing and demographic decline, is only one of a number of such scales that can be used for managing problems of this kind.

• The Europe of decentralisation

The affirmation of local government units is certainly a process that is common to a number of European countries, although it tends to operate in different ways, there being a marked east-west contrast at work: this process ranges from simple deconcentration, as is the case in most central European countries (Rey & al., 2004) – and indeed in Greece and in the counties of England in the UK – to the development of quasi-federal structures, as found in Belgium and Spain, including the accentuated regionalisation of the Italian system. Furthermore, as the countries of Europe vary in size and in historical heritage their local administrative units tend to be very heterogeneous in scale: in Sweden the NUTS level 2 areas ‘weigh’ less than half of their French counterparts (Table 11). As a general rule NUTS areas in central and eastern Europe are smaller than those of the west. This impacts on the major levels at which public action is taken. In Sweden, for example, everything revolves around three key areas, namely the state, NUTS level 3 – which means 18 counties and two ‘regions’ – and the 2 500 or so local communities: in this case the eight NUTS level 2 areas (national areas) only play a secondary role, whereas in France and in Italy the ‘commune’, the department (NUTS level 3) and the region (NUTS level 2) play the key roles alongside the state itself.

Table 11: Average ‘size’ of NUTS level 2 areas in selected European countries in 2006

<table>
<thead>
<tr>
<th>Area (km²)</th>
<th>France</th>
<th>Italy</th>
<th>Romania</th>
<th>Sweden</th>
<th>Belgium</th>
<th>Poland</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 340</td>
<td>14 349</td>
<td>29 799</td>
<td>55 171</td>
<td>2 775</td>
<td>19 543</td>
<td>16 443</td>
<td></td>
</tr>
<tr>
<td>Population (thousand inhabitants)</td>
<td>2 430.6</td>
<td>2 806.7</td>
<td>2 698.5</td>
<td>1 135.1</td>
<td>958.9</td>
<td>2 383.8</td>
<td>1 823.1</td>
</tr>
</tbody>
</table>


Add to this the fact that, depending on the country, the affirmation of the NUTS level 2, NUTS level 3 or local scales depends in varying proportions upon a process of decentralisation – with the emergence of genuine local government units – or on the simple devolution of central services. In France the two go hand in hand, while in Italy, Spain and Belgium the first dominates, with the second being dominant in the countries of central and eastern Europe. All in all, the affirmation of new scales of governance makes Europe a
veritable kaleidoscope. For example, investment spending per capita at regional level (NUTS level 2) is in the ratio of 1 to 4 for France and Spain, which becomes 2 to 1, for the same countries, when comparing expenditure at local level (Marcou, 2003). In Sweden the sub-national administrative units together control more than 40% of public expenditure, while in France and in Poland they only account for one fifth (Table 12).

Table 12: Role of sub-national administrative units in 2001

<table>
<thead>
<tr>
<th></th>
<th>France</th>
<th>Italy</th>
<th>Belgium</th>
<th>Sweden</th>
<th>UK</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of expenditure/total</td>
<td>18.6</td>
<td>29.7</td>
<td>34</td>
<td>43.4</td>
<td>25.9</td>
<td>18.3</td>
</tr>
<tr>
<td>Proportion of income/ total of fiscal revenue</td>
<td>9.3</td>
<td>12.2</td>
<td>28.6</td>
<td>30.8</td>
<td>4.1</td>
<td>-</td>
</tr>
</tbody>
</table>


At all events there is an overall trend at work: the general environment of welfare-state restructuring places local and regional administrative units at the head of the queue for investment. These units now control 70% of public investment in EU27, though this mean figure masks some significant differences. In countries such as Greece, Malta and Cyprus they represent less than one fifth of public investment, while in most of the countries of central and eastern Europe they account for between 30 and 55%. The role of these local government units is greater in the former EU-15 – as indeed it is in Poland, Lithuania and the Czech Republic – where it can be nearly 100% in those countries that are highly regionalised or federalised, such as Belgium, Spain and Germany. This situation still applies, even though it has diminished somewhat in recent years (EU, 2007).

- **Pluri-scalar governance**

When it comes to the various issues associated with decline and ageing the NUTS level 3 scale often continues to plays a significant and even major role in the management of health and social services. Moreover, whether it be in highly decentralised countries such as those of Scandinavia or in the traditionally centralist nations like France, we are able to identify the role of those scales that represent the everyday operating space: the community or inter-community area. In Sweden it has been estimated that 80% of community spending goes on health care and other services for young people and the elderly. In France the Post Office signed an agreement with the Association of French Mayors in 2005 to put in place municipalised systems – community sub post offices or ‘post points’ set up in shops and retail premises – that would help compensate for the closure of main post-office branches. However, this solution has its limits, as witnessed by the reservations recently expressed about such a scheme in the UK.

Table 13: Selected expenditure categories of local administrative units

<table>
<thead>
<tr>
<th>Proportion of total expenditure of administrative units</th>
<th>France</th>
<th>Germany*</th>
<th>Sweden</th>
<th>UK</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>- on health spending</td>
<td>0.7</td>
<td>8</td>
<td>25.6</td>
<td>0</td>
<td>24.8</td>
</tr>
<tr>
<td>- on education spending</td>
<td>16.4</td>
<td>21.9</td>
<td>21</td>
<td>28.7</td>
<td>27.8</td>
</tr>
</tbody>
</table>

Source: OECD, 2003 (*for Germany: federal states)
• **The region as a planning scale**

In this overall scheme the promotion of the NUTS level 2 scale – or in the case of smaller countries that of NUTS level 3 – is of significance at the planning level and this has established itself in recent years, with the region playing a strategic role as the intermediate scale. This has been confirmed in the management of decline and demographic ageing as indeed it has in many other areas: *‘a general trend has become established. On one hand, the national level is gradually increasing its apprehension of the ageing agenda, beyond the traditional concerns about welfare provision and pensions, and is developing increasingly sophisticated political instruments. On the other, projects at local level are now emerging as part of a ‘bottom up’ approach. Led by determined individuals, and sometimes driven by European funding, these projects can constitute valuable and innovative initiatives, but they are usually small in scale and theme-specific. The regional level can therefore play a crucial role in coordinating these processes both ‘top down’ and ‘bottom up’, thereby responding to the demographic challenges posed at sub-national level’* (EPRC, 2006, pp. 19–27). This process affirming the regional level as the scale for coordination in multi-scalar governance is quite evident in countries that are highly regionalised, such as Italy, where the Basilicate region for example serves as a contact point for the local levels (Figure 46). It has also been significant in the various efforts towards deconcentration, as shown by the example of the health service in France, which is analysed below.

*Figure 46: Basilicate: a model for governance resulting from the law of 4/2007
Integrated network for social citizenship services.*

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27 Translation.
In terms of the content of these regional policies the northern countries, which were historically the first to be confronted with demographic ageing, have played a pioneering role. In Finland, for example, the Kainuu region has reorganised its health services in order to prevent older persons from being forced to leave the rural areas (EPRC, 2006). In Italy – and particularly in the region of Emilia-Romagna – ‘regional initiatives have promoted innovation, especially in social services for the elderly, where the trend has been towards the individualisation of benefits, maintenance of the living environment, private-sector involvement and planning’ (Marcou/Marzuoli, 2003). We could again take the example of the Basilicate region, where recent policies (regional law of 4/2007) indicate greater attention to the problems of rural development, including initiatives on tourism, the provision of services to people living in marginal zones, support for employment and for children’s services as a way of retaining the younger generation. Measures of a general nature designed to make regions more attractive also include the planning of university facilities. The founding of the University of Basilicate in 1982 has had an impact not only on the number of young persons leaving the area but also on the number of those coming in, with the decentralised facility at Matera attracting students from the neighbouring region of Puglia. However, with local jobs in short supply this only postpones the decision to emigrate after acquiring a degree.28

The employment of older persons (the Lisbon Agenda) is something that varies significantly from country to country. In the United Kingdom trials carried out primarily in the devolved regions (Wales, Northern Ireland, Scotland) and in the North of England have focused on this dimension, which is also present in the Scandinavian countries (EPRC, 2006). In Basilicate, on the other hand, the tendency has been to introduce early-retirement measures in order to replace the older generation of agricultural workers (Rural Development Plan 2007-2013).

6.3. The problem of resources: between horizontal and vertical cross-subsidies

Generally speaking, decentralisation in Europe is currently marked by budgetary tensions both on a horizontal level (between local government units on the same tier) and on a vertical level (for example between the state and the local administrative units). What is more, the problem of demographic ageing could itself also be regarded as one of the levers of decentralisation. In fact it leads to an upward pressure as far as expenditure is concerned and to a downward pressure on revenues, thereby accentuating the tendency in European states as well as in other countries – such as Canada – ‘to distribute the burden represented by an ageing population’ between the central level and the regional/local levels (OECD, 2003).

• Growing disparity

Decentralisation by definition means greater heterogeneity in local circumstances. In France for example, which is a country with a centralist tradition, the transfer of part of the social security benefits to sub-national units, while having little impact on the total level of social benefits received at the end of the day, constitutes a break with the ‘egalitarian model’ on which the welfare state is based: in 2001 welfare spending under the department of social services could vary on a ratio of 1 to 2 between Haut-Rhin and Gard. It appears that a substantial proportion of those eligible for minimum benefits, for example, were elderly

28 The ‘Youth Alliance’ initiative, which in 2006 was supported by the presidency of the regional government and then resubmitted for the period 2007-2013, is aimed at improving the area’s appeal further, promoting entry to the job market, supporting independent initiatives in business and encouraging economic self-sufficiency and the development of powers of innovation and creativity.
single women. In the case of Italy, ‘in the field of social actions designed to support the elderly the wide range of disparity that arose between the regions (on a scale of one to twenty between Calabria in the south and the province of Trento in the north) led to the adoption of a national framework act making the state responsible for financing these measures’ (Marcou, 2003, pp. 6), an act that was subsequently thrown into question by the constitutional reforms of 2001. In other national contexts, such as exist in northern Europe, the welfare-state model was from the outset developed on the basis of decentralised and plural forms. The whole debate is therefore presented in very different terms.

At all events, the triangle that comprises ‘transfer of responsibility’/‘transfer of resources’/budgetary autonomy’, which is central to the decentralisation process, can in reality adopt a multiple of shapes. While these three elements usually converge, they can occasionally prove to be contradictory. A factor that is common to numerous European countries is that local and regional tax revenues tend to take the place of allocations from the centre and that expenditure generally increases more rapidly than revenue, with the ageing of the population naturally contributing to this. Whatever the country, we find that the contribution that local government units make to public spending is greater than their contribution to public revenue (OECD, 2003). Numerous studies have therefore identified a growing disparity in resources between the local and regional administrative units as based on differences in average income per capita, which are also tending to increase. As Gérard Marcou observes (2003) ‘it is the very content of the public service that will be diversified at the risk of introducing major inequalities between people, despite the fact that the state has recognised powers to avert this risk’.

- **Demographic decline and resources**

In this overall setting demographic decline has a direct impact on the revenues collected by local and regional administrative units, be this in the form of local taxes or transfers from the centre. In Sweden, for example (Table 14), it is the urban and suburban municipalities that have the highest base-rate tax levels, as opposed to the sparsely populated communities. With this system communities with a low population density receive large grants from the government, while the urban and suburban zones show a ‘deficit’. Even with this aid we find that sparsely populated communities have the highest taxation levels, while it is the metropolitan and suburban areas that have the lowest. In the case of the former the larger proportion of older inhabitants has led to an increase in charges, while the migration of younger workers has reduced the level of tax income.

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29 In France, local taxation accounts for about half of the local budgets, as compared with the European average of less than 30%. Some countries, such as Austria, Portugal, Germany, Denmark, the Netherlands, Spain and Belgium, distribute a portion of the national tax revenue to various levels of local and regional government (Arthuis, 2003).

30 In France, the budgetary autonomy of the various administrative units was to some extent reduced between 1997 and 2002, especially at regional level: it fell from 57.8% to 37.3% (Arthuis, 2003).
**Table 14: Basic tax rate in Sweden by type of community (2008)**

<table>
<thead>
<tr>
<th>Type of community</th>
<th>Average basic tax (SEK)</th>
<th>Average tax per municipality (per 100 SEK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suburban municipalities</td>
<td>176 783</td>
<td>19.9</td>
</tr>
<tr>
<td>Metropolitan municipalities</td>
<td>165 253</td>
<td>19.9</td>
</tr>
<tr>
<td>Large towns/cities</td>
<td>153 314</td>
<td>21.3</td>
</tr>
<tr>
<td>Other municipalities (more than 25 000 inhabitants)</td>
<td>147 121</td>
<td>21.4</td>
</tr>
<tr>
<td>Urban fringe municipalities</td>
<td>146 914</td>
<td>21.4</td>
</tr>
<tr>
<td>Industrial towns</td>
<td>145 938</td>
<td>21.7</td>
</tr>
<tr>
<td>Other municipalities (from 12 500 to 25 000 inhabitants)</td>
<td>143 199</td>
<td>21.8</td>
</tr>
<tr>
<td>Other municipalities (fewer than 12 500 inhabitants)</td>
<td>137 146</td>
<td>21.9</td>
</tr>
<tr>
<td>Sparsely populated municipalities</td>
<td>133 212</td>
<td>22.6</td>
</tr>
</tbody>
</table>


The population is also included in the data that are used for the allocations to local and regional government units in Italy and in France, where the General Operating Grant (Table 5) is 43% based on the population, with allocations in some cases being doubled depending on the number of inhabitants (Table 16), and only 2% based on surface area (with an extra allowance for upland communities). Here the cross-subsidy policies are essentially adjusted as a function of the prosperity of the areas concerned, this usually being based on taxable income per inhabitant. In France, for example, the lower a community’s tax base (and social housing stock) the greater is the level of aid received.

**Table 15: General Operating Grant in France**

<table>
<thead>
<tr>
<th>Grant components in EUR billion</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population-based grant</td>
<td>6.232</td>
<td>6.438</td>
</tr>
<tr>
<td>Grant based on surface area</td>
<td>0.214</td>
<td>0.217</td>
</tr>
<tr>
<td>Core allocation for nature parks</td>
<td>0.003</td>
<td>0.003</td>
</tr>
<tr>
<td>Rural solidarity grant</td>
<td>0.650</td>
<td>1.093</td>
</tr>
<tr>
<td>Urban solidarity grant</td>
<td>0.999</td>
<td>0.711</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>22.254</td>
<td>22.925</td>
</tr>
</tbody>
</table>

**Table 16: Population-based grant in 2008 according to size of ‘commune’ (France)**

<table>
<thead>
<tr>
<th>Number of inhabitants</th>
<th>Grant per inhab. EUR</th>
<th>Logarithmic coefficient</th>
<th>Total grant EUR million</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 inh.</td>
<td>62.35</td>
<td>1</td>
<td>6.335</td>
</tr>
<tr>
<td>2000 inh.</td>
<td>76.8</td>
<td>1.23</td>
<td>156.016</td>
</tr>
<tr>
<td>500 000 inh.</td>
<td>124.75</td>
<td>2</td>
<td>63.350</td>
</tr>
</tbody>
</table>


As a general rule, ‘shrinking regions’ in fact depend less on their demography than on the way in which each society deals with the problem of managing cross-subsidies between rich areas and poor ones. For these regions, like any other, we have to take into account the budgetary tensions that exist between communities that are prosperous and those that are not, a situation that has been part of the decentralisation process in a number of
European countries. This applies particularly to Italy, Germany, Belgium and Spain. In the general context, where ‘cross subsidisation, while normally accepted in principle, is often contested in practice’ (Marcou, 2003), areas undergoing demographic decline are weakened. Of course ‘the Constitutions of Germany, Spain, Italy and Belgium guarantee the principle of equality just as much as does the French Constitution’ (Marcou, op.cit.) and most states have recently reaffirmed these egalitarian principles in a series of rules and standards. Similarly, in Sweden community actions are framed by so many national standards that you would be justified in thinking that these are doing no more than detailing the services that are to be provided for the population. Europe too engages in this protective approach. The Lisbon Treaty that is currently being ratified specifically refers to a ‘high level of social protection’ and recognises the specific nature of ‘services of general interest’, etc. There are sufficient safeguards in place in this area to exert a stabilising effect on those regions that are in decline. Nevertheless, the ‘stability pact’ applies to local and regional administrative units and compels them to reduce their spending. What is more, if the Services Directive is henceforth to exclude from its scope everything relating to health and services of general interest – or areas such as transport that are already governed by other directives – this does not signify that these services are evolving outside the competitive scheme of things. As for the payment of benefits, this comes under the scope of the Services Directive: this is a fairly substantial element when you consider the significance in this sector of the various organisations and associations (the ‘terzo settore’ in Italy) and of the immigrant population, especially in southern Europe.

- **Economies of scale**

In such a situation of budgetary tension it is not easy to establish the specific character of regions that are in demographic decline or sparsely populated. Questions concerning ‘economies of scale’ can arise here. In Sweden this concern almost certainly played a part in the transformation of some 2 500 small parishes to the 290 or so communities that exist currently. Such a merger would be difficult to implement today. In France this grouping together operates mainly by way of inter-communal cooperation. A certain amount of caution is required when it comes to these effects of scale. In Sweden there are many ‘new’ communities, especially in the north of the country, that are so small, so sparsely populated and so lacking in employment opportunities that it is not just the original ‘parishes’ that are deteriorating but the whole collective unit. The question is whether this situation would have been worse without the reform measure. In any case it clearly only applies at the margins. The explanatory processes primarily remain those that were referred to earlier, namely urbanisation and urban dispersal. Most people and most businesses, whether for good reasons or bad, want to settle down in relative proximity to their fellows and it is likely that this choice of location is not influenced in any way by the administrative boundaries.

It now remains to examine the functionality of these administrative divisions in that, if we take the Swedish example, neither the old counties – which date back some four centuries – nor the ‘new’ communities – which were created half a century ago – are equipped to face the challenges of the modern world. One measure that has been proposed is to group these districts together again into some 80 units. However such a reform is unlikely to take place as it would only spark off fierce controversy at local level. Another reform, which is still at the hypothetical stage, concerns the structure of the counties, which could be reduced from 20 to

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31 This is the case for example in Spain, where the equalisation fund applied between autonomous communities scarcely fulfils its remit (SVIMEZ, 2000), and in Italy, as witnessed by the postponement of the cross-subsidy fund established by law 56 in the year 2000.
just nine units (Figure 47). This change would doubtless be easier to implement because the population would identify less with this tier of government than at a more local level. It is interesting to note that those regions that are both poor AND in demographic decline are not necessarily the worst off. In Italy, for example, the Basilicate area, while in overall terms a poor region, is ‘coping’ decidedly better than Campania or Puglia when it comes to both current expenditure (it was not one of the regions recently penalised by the Italian Government for failing to comply with the stability pact) and the use of national and European funding (it has even been recognised by the European Union for its efficiency). The theory of merging together small and large regions in order to achieve economies of scale, which was once put forward in that country (Figure 47), has essentially been dropped.

- **Troublespots** in the east, in the south and in the countries undergoing ‘federalisation’

Even more than the problem of the network or size of the administrative units it is therefore the issue of resources that enables us to identify two or even three types of ‘troublespot’ in the European Union:

- **The first problem** is that which will henceforth be facing countries where the escalation of demographic decline combines with the process of state deconcentration (rather than decentralisation). This applies in the case of the revised post-Socialist inheritance of the countries of central and eastern Europe. It is also the case, as based on a very different
political inheritance, in Greece and in Portugal. In these different countries the biggest problem is the magnitude of the demographic decline and the relative rarity of resources, which are still managed mainly at national level as far as ageing is concerned (EPRC, 2006).

- **Another type of problem**, which is quite different, is posed by the combination of dynamic change contrasting with intense decentralisation that is accompanied by **budgetary tensions between rich regions and poor regions**. This is case in Germany (the former GDR, which is relatively poor and in demographic decline, contrasting with the rich and growing south-west region) and in Italy, where in the short term the poorer south of the country certainly has the advantage of a relatively youthful population, but in the medium term is set to go into decline, contrasting with the rich ‘Third Italy’ (the centre and north-east). These are high-risk situations for the ‘sustainability’ of development in the poor regions. On the other hand, in the Belgian ‘model’ the ‘good’ demographic prospects for the three regions of Flanders, Wallonia and Brussels tend to alleviate the problems relating to the equalisation of resources between Flanders and Wallonia, even if on a demographic level it is not in Flanders’ interest to separate from Wallonia. In the case of Spain too the demographic development of the south of the country partly helps offset the inequality of resources that exists between autonomous communities.

- **Finally**, to take the long-term approach, the second scenario could well extend, at some point in the near future, to include models that have until now frequently been quoted for their logic of solidarity. In Sweden, for example, the process of redistribution towards sparsely populated communities is relatively well received for the moment. The population changes that are likely to take place over the next few decades could alter this situation considerably. Here we could take as an example the community of Vilhelmina, in Västerbotten, which has lost 17% of its inhabitants since 1970. If we keep to projections, the proportion of retired persons in that population should increase from 20 to about 40% over the course of the next 30 years, growing at the same time from 18 to 30% in the county as a whole. All in all, as things stand at present, aid to elderly persons residing in peripheral areas can be seen as a minor problem that can easily be resolved by redistributing resources. However, in barely more than 20 years this local problem, as it is today, will begin to affect the entire country. In such circumstances the general conditions of solidarity that exist between the centre and the periphery will come to stand out in quite a different light, with the ‘central’ areas asserting that they have enough problems in taking care of their own elderly residents.

### 6.4. Health care: a textbook case

The way in which health services are organised reveals the issues of governance that arise in regions in decline. On one hand, the need for and use of care services changes with age. This means frequent recourse in childhood, followed by a low phase (with an increase for women during reproduction) up to the age of 45, when there is another upturn, especially for men aged between 45 and 65, and finally a major increase in recourse, for both sexes, from the age of 65. On the other hand, the organisation of health services, as with other personal services, is faced with the problem – and this applies especially in conditions of budget austerity – of having to combine quality of care with the need to provide the best possible service throughout the region. Here we shall focus on the French example by comparing it with the general situation in Europe and in other countries that are confronted by the problem of decline, such as Canada.
Unequal provision of services in the regions

In France there are on average 318 doctors per 100,000 inhabitants, of which 162 are GPs and 156 specialists. In half of the regions of France the number of GPs is below this threshold, while there is an even greater contrast in the case of specialist doctors (Table 17). This relative deficit affects regions with low demographic growth, such as Picardy, Centre, the Champagne-Ardenne area, Burgundy, Poitou-Charentes, Franche-Comté, the Auvergne and Nord-Pas-de-Calais, but it also impacts on regions with good demographic prospects, such as Haute-Normandie and Pays-de-la-Loire. Moreover, there is a marked contrast between the central urban areas (117 GPs per 100,000 inhabitants) and the mainly agricultural and working-class cantons, with the outer suburbs also deficient in this respect (71 GPs per 100,000 inhabitants).

Table 17: Number of general practitioners (per 100,000 inhabitants) by area type

<table>
<thead>
<tr>
<th>Type of canton</th>
<th>Working GPs</th>
<th>New GPs joining the system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairly disadvantaged rural and working-class cantons</td>
<td>70.7</td>
<td>3.6</td>
</tr>
<tr>
<td>Average working-class towns</td>
<td>84.7</td>
<td>4.8</td>
</tr>
<tr>
<td>Residential suburbs</td>
<td>85.7</td>
<td>4.6</td>
</tr>
<tr>
<td>Isolated rural areas</td>
<td>91.5</td>
<td>4</td>
</tr>
<tr>
<td>Disadvantaged urban cantons</td>
<td>94.6</td>
<td>4.9</td>
</tr>
<tr>
<td>Privileged urban cantons</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>Rural cantons with artisans</td>
<td>102.1</td>
<td>4.6</td>
</tr>
<tr>
<td>Regional metropolitan areas and major towns</td>
<td>134.2</td>
<td>6.7</td>
</tr>
<tr>
<td>National average</td>
<td>99.2</td>
<td>5</td>
</tr>
</tbody>
</table>


These long-established inequalities are now becoming more pronounced – though they are not comparable in magnitude with those found in Romania, as cited earlier – thus reflecting a more general trend in society as a whole. Recent studies undertaken under the supervision of the National Observatory on the Demography of Health Professions show that in France in general there are very few ‘ill equipped’ cantons (that is to say those in which the number of professionals is low in terms of population, social care requirements and proportion of elderly persons), namely 4% of all cantons, which represents 1% of the population. This relative lack of facilities is more widespread in some professions, some of which play an important role in the provision of care for the elderly, for example masseurs and physiotherapists (18% of cantons representing 6% of the resident population, especially in the north and east of the country) and nursing staff (10% of cantons representing 10% of the resident population in the east, but also in Ile-de-France). Zones particularly affected include the rural areas, where isolation, the need to provide very restrictive permanence and continuity of care services and low economic viability all combine to make these communities as unappealing as they are remote. However such problems are not exclusive to these isolated districts. Some urban and outer-urban areas are also avoided by health professionals, for the deterioration in the social

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32 There are several reasons for this. It can be due to the reduction in quotas over the last 40 years, to the feminisation of the profession (the activity ratio of women is 70% that of men over their entire professional life), and to the ageing of the medical profession: the average age of doctors will be 51 in 2015 as compared with the current age of 47.5 and the proportion of doctors over 55 is set to rise to 45% in 2015 as against 20% in 2002. This is all tied in with the desire of young doctors to work fewer hours, to find employment in more secure environments and to be part of a shared practice.
and economic fabric along with the physical and economic insecurity, whether real or perceived, affect the medical professions just like any other.

- Complex governance

In France, as elsewhere, the reorganisation – if not to say the redrawing – of the medical map, especially for hospitals, is a sensitive and often controversial subject because it affects not only health issues but also town and country planning, and this against a background of public-service restructuring that primarily impacts on small and medium-sized towns, such as Carhaix in Brittany, for example. In France, the reorganisation of the hospital system is characterised by a process of deconcentration, even though the 2002 annual report of the Inspectorate of Social Affairs refers to ‘the extraordinary complexity of the institutional schemes that have been put in place’ and notes the irreversibility of identifying the regional level as the relevant framework for driving health policy. The Shared Health Services Scheme, which was set up in 2001 under DATAR (Delegation for Town and Country Planning33), is heavily influenced by a strong regional approach that envisages a system of interlinked levels of health care throughout France. This scheme lays down the framework for institutional cooperation between the many parties involved in the health sector and identifies areas for public/private collaboration along with strategies for taking preventive action and for recourse to IT and communications technologies that are designed to promote the emergence of a ‘reliable, high-performance and modern’ health system. The regional level has been playing an increasingly important role, especially with the latest laws on decentralisation. In 1996 France began setting up Regional Medical Care Agencies (ARH) and Regional Health Insurance Associations (URCAM), to be followed in 2004 by the establishment of Regional Health Teams under the responsibility of the Prefect. All these new structures are designed to provide overall management of the health system at regional level. Finally, at local level, France has since 1992 had a system of ‘district doctors’ who are responsible for providing community health and hygiene services and locally-based mother and infant welfare facilities along with welfare and public health services and reception centres and accommodation facilities for the elderly34.

The health system can also be reorganised within a decentralised structure. In Italy, for example, where in the context of the north-south tension referred to above the regionalisation of the health service is one of the most hotly contested issues in the debate on state reform (Rivièrë, 2004), the regions are already at the head of the queue. Since the constitutional reforms of 2001 health care has in fact been a bone of contention between the state and the regions, with the latter already having responsibility for ‘public wellbeing and hospital care’. In Basilicate, regional law 4/2007 has the stated objective of achieving regional cohesion and is aimed at ‘guaranteeing all Lucanian citizens equal access to opportunities for active participation in the life of the community’. In order to combat excessive regional fragmentation and offset the lack of health-care specialists the region has, among other things, introduced a programme of rationalisation that will reduce from 15 to 6 the number of domains that practice mixed management of these services. The model of governance chosen (Figure 46) has set each region the task of drawing up a framework for policy, coordination and planning; the provinces (NUTS level 3), for their part, are required to set up the operating bodies and to handle supervision and the integration of this system with the employment

33 Now renamed DIACT, the Delegation for Town and Country Planning and Competitiveness.
34 They are responsible for drawing up therapeutic projects for the services they provide and/or for the establishments where they work, for running preventive-action and health-promotion schemes and for helping to develop and implement their community public-health policy.
services, while the town councils are given responsibility for the planning, implementation and evaluation of social actions at local level and, in conjunction with the ASL (Aziende Sanitarie Locali or Local Health Agencies), for evaluating social and public health measures. Provision is made for one of the town councils to be designated as the ‘leader’ of each social-health domain.

**The ‘stick and carrot’ approach to the geography of health-care services**

The medical map itself is now under supervision. If we go back to the French example we see that the regional agencies have to identify those rural and urban areas where professional GPs are in short supply. Various recommendations have been proposed for defining zones of this kind: there must be a sufficient population base to maintain economic viability and an assessment has to be made of the time needed to gain access to a GP, of the special problems associated with the percentage of inhabitants over 75 and of various issues connected with social fragility. Here we find that the routes taken are similar to those that have been explored in other countries. In Italy the Basilicate region is planning to subdivide itself into ‘socio-territorial domains’, as defined on the basis of demographic criteria (a minimum threshold of 50,000 inhabitants) and the presence of one or more urban centres that can operate as a hub for each zone.

*Where doctors are concerned the measures that exist or are being proposed tend to vary between two types:*

- **Incentives:** the aid ‘carrot’ being proposed in France, which is based on solutions that exist in various countries, could take the form of lump-sum payments, aid for setting-up, for developing group practices and for establishing professional health networks and town-hospital health networks, the payment of study allowances to medical students prepared to commit themselves to working for five years as a GP in a loss-making region, and even tax exemptions on payments to those providing round-the-clock care. Similarly, in Canada, for example, increased rates of pay are awarded to doctors who work in rural areas; this can be as much as 25% for GPs, 40% for hospital doctors and 45% for specialists. A recent study conducted by the Interdisciplinary Health Research Group (University of Montreal) shows that the key factor for setting up doctors in rural areas is the fact of them having lived there. However, the introduction of a specific training programme for those practising in a rural environment also appears to have had a positive effect.

- **Coercion:** the ‘stick’ is used in some countries, such as Germany, where the law prohibits doctors from setting up in any district where the density of physicians is 10% greater than the national density. Canada too has adopted restrictive measures on GPs setting-up in ‘well equipped’ regions (with salaries cut by 30% even in the case of private practices). In France, if the *numerus clausus* is calculated on the basis of university and specialism, taking into account the density of doctors in the region concerned, nothing can prevent a house officer from going off to practise medicine in the region of his or her choice. In the autumn of 2007 the Audit Authority proposed a system of penalties for doctors who set up practice in areas where they were already overrepresented (no social-security reimbursement for services rendered), a measure that was obviously challenged by students and house officers alike.

How can we assess all these different measures? In Germany, for example, hospitals in outlying or rural districts are currently experiencing difficulties in recruiting staff. In Canada the impact of these measures is real enough, but they result in a high turnover of doctors in
rural areas. Other modes of support are currently being put into practice: development of medical faculties in the countryside, development of replacement systems and the organisation of a ‘mentor’ scheme to help young doctors. In Germany telemedicine is being studied as a potential solution. This system has been identified as a possible means to encourage doctors to set up and remain in isolated rural areas, to help meet the growing expectations of those who are seeking better health care in their local district and to enable doctors working in isolated regions to stay in touch with the main hospital centres and not to be isolated at their place of practice.

- **The emergence of a cross-border mindset**

Health is also a vehicle for cross-border cooperation in Europe, where ‘it constitutes an important element in the ‘bassins de vie’ that are gradually emerging in the border areas’ (MOT, 2007). Cooperation and the opening of borders also help make services of general interest more of a two-way affair: health care becomes ‘a service like any other whose proximity, level of excellence and speed of access help motivate potential ‘clients’’ (id). This domain has been opened up thanks to administrative arrangements, introduced as part of various bilateral agreements that have been instigated particularly by the situation of frontier workers. Explicitly supported by European programmes such as Interreg, this process is mainly sustained by the hospital structures themselves (62 initiatives out of 66 that apply in France). Paradoxically, in the French case the fact that the hospital organisations have a lot of autonomy in their dealings with local government no doubt contributes to their current ability to establish cross-border connections, but it also poses the problem of how this approach can be incorporated into a more comprehensive regional project, a factor that may well constitute the ‘value added’ ingredient when it comes to local and regional public authorities (MOT, id).

The problems that affect Europe’s densely populated regions provide fertile ground for these cross-border contacts to become established. Such interactions have also been taking place on either side of the Pyrenees, where the initiatives tend to be limited in scope (with civil protection measures overrepresented) and mainly relate to the coastal districts and built-up areas. On a more local level cross-border cooperation in health care also involves various Alpine hospitals in France and in Italy that particularly cater for elderly citizens35.

### 6.5 The role of Europe and cohesion policy

Europe involves itself in many ways in the problems that affect regions in decline. Nevertheless, regional policy, which is now called cohesion policy, merits special attention inasmuch as it impacts directly on issues relating to governance.

- **Indirect impact of European policy making**

At first analysis there is no doubt that it is by indirect means that the European Union’s policies are having the greatest impact on the regions in decline. The creation of the single market, with the competition between regions and the process of metropolisation that accompany it (EU, 2007) and with the restructuring of services of general interest (spelling

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35 Cooperation between Aiguilles and Torre Felice on the provision of joint training for care staff and the harmonisation of methods for home-based care. There is also a joint initiative on geriatrics between Vêsubie and Entraques (exchange of residents and employees) and a joint perinatal programme between Menton and Ventimiglia (MOT, 2007).
the end for protected markets) that are a consequence of it, all clearly have an influence on the problems of demographic decline.

The European Union’s sectoral policies also impact on these issues, whether directly or indirectly. For example, the transport policy – which is currently targeted on trans-European networks – has various structuring effects on the national and regional policies associated with regional development. If we take the Italian example of ‘corridor I’ and ‘corridor VIII’ it is evident that any interconnection here, which means improving the links between Naples, Bari and Brindisi, and further afield between southern Italy, Greece and central Europe, would in passing affect intervening regions like Basilicate. However, the funding of these major European projects remains a problematic issue due to the budget restrictions referred to above. Moreover, when assessing the potential impact of these major schemes of European proportions we also have to remember the so-called ‘tunnel effect’: this was demonstrated in the course of the many engineering projects undertaken in French towns and villages as part of the high-speed train network (TGV), where it was found that the improvement in accessibility primarily benefits the ‘bridgehead’ metropolitan centres rather than the intervening areas. Another example of sectoral action is the common agricultural policy, which to go by the results of the last two decades has not been of particular help to sparsely populated regions any more than it has benefited the poorer areas, even if their portion of the budget has increased (EU, 1997, EU, 2007/data ORATE, 1999). In this respect it has mainly been national policies with a limited budget (for example the French system of subsidies to upland cattle) that have served to demonstrate the public authorities’ awareness of the specific problems facing those areas that are sparsely populated and/or in decline. While it is not possible in the context of this study to review every aspect of EU policy, it is nevertheless important to bear in mind the scale and complexity of the whole policy programme in that European cohesion policy was in fact largely set up to act as a complement and if necessary a counterbalance to it.

- **Cohesion and its impact on governance**

Cohesion policy, as drawn up by the 1988 reform of the Structural Funds (then referred to as ‘regional policy’), plays an important role in the emergence of NUTS level 2 as the regulatory scale: in fact it is at this level that the action programmes are established and the regions eligible for the Convergence Objective (formerly Objective 1) are defined. Moreover, under the former Interreg programme and the new Cooperation programme cohesion policy impacts on frontier zones by contributing to the emergence of a specific form of governance that is sustained by the opening up of borders.

While, in theory, cohesion policy adds to rather than supplements the national policies for regional development, it also plays a significant role when it comes to the cross-subsidy problem referred to above. In fact it is active both on an international level, where it organises solidarity between rich and poor countries (and if there is now greater public investment in the ‘cohesion countries’ and in the countries of central and eastern Europe, this can largely be explained by the support provided by this European policy), as well as on an interregional level. In Italy and in Germany, for example, cohesion policy supports national solidarity actions involving the poorer regions. Like other public policies it also acts as a vehicle for the development of regional policies by spreading the principle of ‘ emulation’. For example in Italy, as part of the 2007-13 cohesion-policy programme, the National Strategic Framework is

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36 For the 2007-13 budget: 2.4% of the total, or EUR 7.5 billion.
to provide financial recompense for those regions that manage to achieve the specific objectives that will be quantified between now and 2013. This mainly includes specific targets relating to the provision of services to particular population groups.

- ‘Shrinking regions’ are often categorised as ‘convergence regions’

However, this policy presents a contrasting picture when it comes specifically to the problems facing ‘shrinking regions’ (Figure 48). With the 1988 reform of the Structural Funds the European Union targeted as an absolute priority (Objective 1) the ‘catch-up’ problem facing the poorer regions (defined as a GDP/inhabitant of less than 75, where 100 corresponds to the European average), and in the current situation post-enlargement this remains a key priority for 2007-13, with 81.7% of the funding devoted to this objective. Indeed if we take the 84 regions that are included in the convergence category (representing 31.7% of the population of EU27) we find that a large majority of them are affected by problems linked to demographic decline: only one third of these regions are in probable growth, and they include all the most remote islands apart from Madeira. While decline is not in fact the criterion for eligibility there is nevertheless a very good ‘coverage’ between regions that are both poor and in demographic decline.

Cohesion policy also has a particular role to play in the convergence regions (formerly Objective 1 regions) due to the very wide range of cofinanced investments, which in fact covers a large proportion of the services provided to the population (water, telephone, etc.). However, the end-result at regional level is a contrasting one, for it is also in these Objective 1 regions that we find the greatest tendency towards population concentration. One of the main contributory factors here has been EU policy itself: eligibility extends to entire NUTS level 2 regions, and even to entire countries, which in fact allows investment to be concentrated in the central areas and in the major cities.

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37 Such as:
- The establishment of childcare services (aim: to increase to 35% the number of municipalities that have a system of childcare services in place)
- Provision for those who use childcare services (aim: to increase to 21% the percentage of 3-year-olds who have benefited from childcare services)
- Provision of an integrated home-care service for the elderly (aim: to increase the percentage of elderly persons receiving this type of care to a figure of 35% of all those in this age group).
... and what about the others?

Alongside this major European priority, namely the situation of the poor regions, the call for European policy makers to give attention to the problems of low population density, rurality and/or remoteness – which is a recurring demand in France and in the Scandinavian countries – has already been well received. In fact, under the former system of Objectives – in this case Objectives 1, 2, 5b and 6 (1994-99) – two referred to the problems of low population density, namely rural development (Objective 5b) and sparsely populated regions (Objective 6, which moreover mainly concerned areas with a high or even very high GDP per capita). Admittedly these objectives were at the bottom of the list when it came to financial allocations, but they did help gain recognition for the problems of decline and/or low population density, not just at European level but beyond that in the regional and national policy arena (for example the ‘priority rural development areas’ in France). However, this recognition has gradually been ‘nibbled away’ by developments in European priority setting. Thus, in 2000 Objectives 6 and 5b were included in Objectives 1 and 2 respectively, even though these two aims were in fact
clearly identifiable with specific zoning criteria – such as population density and levels of employment in agriculture – and specific actions\textsuperscript{38}.

Things took a more radical turn in the period 2007-13: planning for the 2007-13 Structural Funds was in fact marked by the primacy given to the Lisbon Strategy and by greater budgetary constraints than the previous programmes\textsuperscript{39}. While it is of course too early to assess the impact of this new orientation, the attention now being directed towards innovation, the knowledge economy and so on could well penalise those regions that are in demographic decline under the terms of the ‘competitiveness’ Objective (formerly Objective 2), which with less than 16% of the funds comprises some 155 regions in 2007-13, or 61% of the population of EU27. Witness for example the concerns expressed by bodies such as the National Union of Local Development Actors and Organisations (Unadel) in France, faced with the abolition of the zoning system and greater competition between the regions for the allocation of funding. What is more, under the new planning arrangements sparsely-populated rural districts, and rural development issues in general, will come under the common agricultural policy. This is consistent with the increasing dominance of environmental issues: taking the European budget as a whole the funding that is specifically directed at the ‘preservation and management of natural resources’, apart from market support, has risen to EUR 80 billion as compared with EUR 30 billion for the period 2000-2006. However this transformation also raises new problems as regards the integrated approach used for the regional units, which formed the basis for the previous programmes. This only leaves a few opportunities that are either new or better established than in the preceding programmes, especially everything that relates to social inclusion (within the framework of the Gothenburg objectives), or – still in France – centres of rural excellence. By way of illustration, in the ‘allocation key’ for funding as set by the European Council in December 2005 for regions that are classed as ‘in competitiveness’ the problems of density are given a relatively low weighting (only 0.05) in relation to population (weighting 0.5) and to various criteria linked to underemployment.

On the other hand, in the Convergence Objective 2007-13 the changes will doubtless be decidedly less significant\textsuperscript{40}, even if here too the content of the programmes will have to comply with the Lisbon Strategy, particularly in reserving a definite place for towns and cities. Dealing with the issues of low population density and demographic decline is more straightforward because of the scale of the financial resources that have been mobilised. If we take the example of southern Italy, in the ‘National Strategic Framework 2007-2013’ a key role is given to raising standards in the delivery of social services in the regions that come under the Convergence Objective, the aim being ‘to increase the level of services in the area of child care and aid to the elderly so as to reduce the burden on families and increase the participation of women in the job market’. In the longer term, however, some regions will be faced with the problem of how to ‘withdraw from’ the Convergence Objective, a process already under way for Basilicate, which is currently in ‘phasing-out’ mode.

\textsuperscript{38} Account also has to be taken of the sectoral objectives financed by the ESF, particularly for the employment of senior citizens. As indicated above, these concern regions in decline but are doubtless of greater importance in metropolitan regions (EPRC, 2006).

\textsuperscript{39} According to the conclusions of the European Council of December 2005, the financial envelopes for each state are primarily based on GDP per inhabitant and employment rates, and to a lesser degree on population density.

\textsuperscript{40} By way of illustration, in the recommendations for the allocation of funds as proposed by the European Council of December 2005 the criteria are regional GDP per inhabitant, national GNP per inhabitant and the number of job seekers.
In the complex and often tense situation that governance in Europe is currently experiencing, EU cohesion policy, through its guidance and its ability to give impetus to national and regional policy making, represents an essential element for stability and generates significant ‘leverage’. However, we really need to clarify its objectives and in particular to generate a specific budget for the Lisbon Strategy in order to guarantee a given place to the problems of ‘cohesion’ as distinct from those of competitiveness.
Conclusion: ‘Shrinking Regions’, territorial cohesion and multiscalar governance

The two main conclusions of this study are as follows:

- The emergence of demographic decline over entire regions has come on top of – and sometimes merges with – the various problems associated with the disparities in development that traditionally lie at the heart of the European Union’s cohesion policy. This should lead to a rethink of this policy area in all its dimensions: economic, social, environmental and, most particularly, territorial.

- Producing a response to the problem of regional decline means putting in place a multiscalar system of governance involving levels of intervention that are at the same time supra-regional (European Union and Member States), infra-regional (local authorities and conurbations) and trans-regional (cross-border zones, fringe areas).

‘Shrinking regions’ and territorial cohesion

The relatively straightforward medium-term predictability of demographic changes at national level, and to a lesser extent at regional and local level too, carries special responsibility for the political decision-makers. While it is possible, to some degree, to excuse the lack of foresight displayed by policy makers when faced with external economic crashes (such as the sub-prime crisis and the increase in energy prices) or environmental disasters (floods, storms, earthquakes and so on), it is much more difficult to forgive the failure to anticipate demographic phenomena when it is generally known what their predictable trajectories will be for the next 20 or 30 years.

The economic and social studies conducted both at European level and in the Member States have prepared the ground very well in this respect. A great number of reports provide accurate projections of the development of the active population, retirement systems, transfers between generations, new forms of activity that could give rise to an extension in lifespan in good health. There are certainly grounds for debate on the possible solutions (an increase in the rate of activity among women, an extension in working life, use of international immigration, development of private pension funds, etc.). However, it can be said that the political debate on the macroscopic effects of demographic changes is well documented by numerous rigorous studies at both national and European level (CEC, 1999, 2002, 2005), in particular the Green Paper presented in March 2005 entitled ‘Confronting demographic change: a new solidarity between the generations’. The common point in all of these types of studies lies in their generally liberal economic orientation (in line with the Lisbon Strategy) and in their focus on national and European age pyramids, thus causing a focus on too few of the problems and solutions (Box 5).

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Although phenomena that are said to be ‘random’ (uncertainty as to when exactly they will occur) become ‘probabilities’ or even ‘certainties’ if sufficiently long periods of time are taken into account (certainty of more frequent appearance of external climate phenomena).
**Box 6: The European Union demographic galley**

Let us imagine the population of a country as a vast, ancient galley in which each individual is allocated a place according to age and sex. Let us arbitrarily decide that men will be placed on the right of the stem and women on the left; that young people who are not old enough to work will be placed at the back, where there are vast classrooms; and that the oldest people, who have served the navy well, will be at the front where they can rest on the deck, watching the horizon and giving useful advice to the active population that is rowing in the centre of the ship … This metaphor is just about an accurate description of the most common and most symbolic representation of a human population: the age pyramid. Its shape indisputably evokes the shape of a ship, whose aerodynamic qualities vary according to how thick the front and back parts are, which indicate the proportion of young and elderly people in the total population.

The shape of the demographic ship in the European Union economy appears favourable at first glance, with a large representation of potentially active rowers, who will be placed arbitrarily in the age categories between 20 and 59 (55 %). It is true that the front of the ship does seem rather heavy laden, with 22 % elderly people over 60, but a large proportion of them are continuing to row on the 60 to 65 thwarts, and the ship-owners have wisely planned an extension of working life. Each rower moves forward a row each year (ageing), but now it is only from the 65 or even 70 or 75 thwart that people will be allowed to rest on the front deck. No-one is talking about reducing the rations for any veterans that refuse to make this contribution to the collective effort (pensions problem).

The situation is more concerning at the back of the ship on thwarts 0 to 19 where the numbers of future rowers is in constant decline. For years there have been vain attempts to convince the rowers on the left-hand side of the boat to contribute more actively to renewing the life forces of the vessel (pro-birth policies). However, the majority are balking, as they realise that leaving the central thwart of the vessel generally results in a reduction in the rations received. Curiously, it is the most active female rowers that contribute most to the renewal of the generations, especially when their partners on the right-hand thwarts agree to do their fair share of all of the work in the galley.

Another solution would obviously be to attract new rowers from other ships where the number of active rowers exceeds the capacity for employment and where the rations are considerably smaller (policy of immigration from poorer countries). This is the solution chosen by competing ship-owners such as the United States, where the potential growth of the economy has been largely boosted for several years by migration from neighbouring countries, including Mexico. We could also envisage, rather than attracting foreign sailors, making the vessel larger by adding younger crews (enlargement) or forging closer cooperation relations (neighbourhood policy). However, there are misgivings about these solutions, which have been used a great deal in the past and are still used now.

In the end, the owners of the European Union ship proposed a new strategy on 24 March 2000 called the ‘Lisbon Strategy’, which at first glance appeared to be simple and obvious. It involves noting the scarcity of new generations of rowers but compensating for it by training them better (prioritising education, training policy) and by making a massive investment in seeking new, more efficient navigation methods (increased productivity, investment in research and development) in order to take as much advantage as possible of being open to the winds of the high seas (liberalisation). In summary, replacing the old galley, which used a great deal of labour, with a caravel with large sails, propelled by experienced sailors, always a new technique ahead of the other vessels in the competitiveness race …

The age pyramid does not so much resemble a caravel, but rather a huge oil tanker whose direction can only be altered by changing course several dozen kilometres in advance. Sudden shifts of the helm (opening or closing the borders) do not have any effect for several decades and only long-term policies can eventually produce tangible results. By refusing to anticipate demographic changes, the European Union has for a long time applied a head-in-the-sand policy and is in danger of being condemned, like Phileas Fogg in ‘Around the World in 80 Days’, to burning the vessel’s quickwork (insecurity of assets, reduction of pensions, etc.) in order to maintain its position on an economic course against the clock.

An awareness of the territorial dimension, which is both regional and local, of the demographic changes under way radically alters the issues involved because it raises new questions and allows a new set of responses in relation to the macro-economic studies carried out at national level. If the Commission Green Paper of March 2005 marks a departure from the traditional thinking at European level it is less as a result of its written conclusions – which are relatively commonplace – and more to do with the fact that for the first time it includes in its annex regional demographic projections for the period 2005-2030. Whether consciously or not, the European Commission is thereby opening up a fundamentally new political debate since it appears that the local and regional impact of demographic change is totally different from that which might be perceived at state level. The question of public services, for example, can no longer be regarded as a simple parameter for adjusting the budget but becomes a real political and social issue since the free market will eventually lead to the abandonment of entire tracts of Community territory. Similarly, the question surrounding the environmental impact of the demographic changes can no longer be evaded since it appears that the process of desertification in sparsely populated areas is likely to create an increased risk of erosion, fire outbreaks, etc. Last but not least the question of social and territorial cross-subsidies is something that will have to be addressed when examining the impact of depopulation at local and regional level.

Demographic decline and ageing form a complex system of interactions involving economic, social, political and environmental aspects and it is therefore impossible to take a sectoral approach to the problem. It would for example be futile to try to create centres of employment or competitiveness in zones that are losing population unless a policy is developed at the same time for maintaining and reorganising health, education and transport services. It would also be pointless to develop a pro-active policy of attracting national and international migrant workers to zones that are being abandoned (to provide support to services for the elderly, for example) unless account is taken of the problems associated with the economic and social integration of the new arrivals in the zones in demographic decline.

From this viewpoint the concept of territorial cohesion constitutes the most relevant deliberative framework for developing an integrated approach to demographic questions for it specifically includes the territorial dimension associated with these phenomena and proposes a strategic vision for regional development that takes account of the compound effects of each of the sectoral policies being pursued. While there is room for debating the relevance of NUTS level 2, the central role in drawing up a sustainable demographic development policy should certainly be played out on a regional level, provided that this is done in complementarity and not in competition with the national level. In fact from the moment the national and European levels introduced the cross-subsidies that were needed between the rich and the poor territories a new tier of management – intermediate between the local and the national levels – was created that certainly made it much easier to identify the issues of demographic ageing and to plan the reorganisation of the spatial population framework. This does not mean that other territorial levels cannot contribute, by way of specific actions, to the establishment of a global political response to demographic change. The European level and the national level remain more crucial than ever for providing the global cross-subsidies that will reduce the inequalities that exist between social groups, territories and generations, though the region constitutes a vital intermediary when it comes to producing an operational and territorial response, especially as regards access to welfare and medical services for the inhabitants of the ‘shrinking regions’.
‘Shrinking regions’ and multiscalar governance

Producing a response to the problem of regional decline means putting in place a multiscalar system of governance involving levels of intervention that are at the same time supra-regional (European Union and Member States), infra-regional (local authorities and conurbations) and trans-regional (cross-border zones, fringe areas).

At European Union level priority has to be given to the development of simple and reliable statistical indicators capable of both following and anticipating the demographic trends. No Community policy could in fact be implemented without the support of such indicators for assessing ex-ante and ex-post the effect of the policies to be decided on. From this point of view the typology of the ‘shrinking regions’ that we have put forward in this study comprises a simple and reliable indicator that can easily be updated by Eurostat on the basis of regional demographic projections. The indicator for sustainable demographic development, which is defined as the ratio between the healthy life expectancy and the average age of the inhabitants, also constitutes an innovative index inasmuch as it is not based on predefined age groups (0-19, 20-64, 65 and +) that tend to fix people in specific roles (‘young’, ‘working’ and ‘elderly’).

Figure 3: Indicator for sustainable demographic development in the European regions

This indicator expresses the ‘remaining life potential’ (the percentage of years lived in relation to the number of years left to live), which does not prejudge the economic or social uses that may be made of it by a particular society. A region with a high percentage of elderly persons can have a good sustainable demographic development index if its inhabitants are likely to live for a long time and in good health. Such a region then has a number of options for making the most of this potential. Conversely, a region that appears to be ‘youthful’ may
have an unfavourable sustainable demographic development index if its inhabitants have a low healthy life expectancy and if their prospects are poor when they reach retirement age. Unlike the traditional ‘dependency ratio’, which only relates to the working life-span and the legal retirement age, the sustainable demographic development index takes account of longevity and the quality of the social facilities as a positive factor and not as a problem. The question of whether innovative demographic indicators can be introduced when reviewing regional policy clearly remains an open one.

At national level the central question concerns the social and economic transfers that operate simultaneously between individuals and places, both as a result of public action and through the activities of economic bodies. Our study has shown that ‘shrinking regions’ are by and large poorer than the national average, but that the differences are largely reduced when account is taken of the indirect transfers that are associated with retirement pensions, public allocations for equipment and facilities, spending by tourists, etc. The effect of these invisible transfers, which do not benefit all the regions in the same way, should probably not be overestimated, but they do need to be considered if a more equitable cross-subsidy system is to be achieved. Fair regional accounting should take account of the fact that certain peripheral regions provide training for young workers whose labour is subsequently used by distant metropolitan regions; or conversely that some metropolitan regions transfer a large part of the added value they produce to regions specialising in tourism and in catering for wealthy retired people. The question here is to know whether national cross-subsidy logic can be maintained in the future or whether in fact the beggar-my-neighbour attitudes of the richest and most dynamic regions will prevail.

At regional level the main problem is that of the reorganisation of services and facilities in an environment where there is a dwindling population whose characteristics are gradually being transformed. A reduction in the number of young people will therefore require a downsizing of the training and education facilities (reduced number of classes) but leaves a number of options open as to the manner in which these closures can be effected, both in time and in space. Grouping schools together may in fact improve the educational system just as much as it may lead to a worsening of the demographic crisis in sparsely populated and isolated areas. In the same way an increased demand for care services for the elderly may provide an opportunity for regional economic development and the reorganisation of the spatial framework for care services. However it may also result in a deterioration in the quality of the service and in socio-spatial polarisation between zones that are well provided for and those that are not. While experience indicates that various institutional solutions are possible (devolution, decentralisation, federalism), it is nevertheless desirable that the region should constitute a political entity with a strong element of legitimacy (system of elections, budget and so on) when it has to take decisions of major consequences for the daily lives of its inhabitants, such as overhauling the services sector as a result of the decline in population. Disputes are inevitable when facilities become in short supply and the decision-making process has to be based on proper consultation of the people and of the local elected representatives. Special account has to be taken of the different demands of urban and rural areas, and of large towns and small towns, that will inevitably arise in such a context. The introduction of mobile services can often prove to be a useful option for isolated areas, thereby avoiding any dispersal of under-used facilities. The question here is to know whether the regional policy for the reorganisation of the spatial framework for the local population and the provision of facilities would be better directed by giving priority to economic efficiency or by seeking to protect social equity and sustainable development.
At local level the main challenge is to make villages and towns aware of the fact that they alone cannot resolve the problem of ageing and depopulation. In rural zones in demographic decline each community will try to protect its school and its local shop, at the risk of competing with neighbouring villages that are developing the same strategy, which will either result in everything closing or in prohibitive expenditure from public funds in order to support unprofitable activities. In urban areas the same type of opposition may be displayed between urban centres in demographic decline and the fast-growing urban fringes, the result being a waste of resources and seeking local responses to questions that should be addressed at a higher level. Short of leaving matters to the authoritarian decisions taken at regional or national level the best way to deal with the question of local town and country structuring, when faced with demographic change, is to put in place intercommunal structures (town and village communities, urban communities) or to resort to intermediate levels (areas, conurbations, etc.). The question here is to know what forms of dialogue can be found with officials from the upper levels so that local authorities can participate without being subjected to reconstruction where applicable.

It should be added that this multiscalar approach to the governance of ‘shrinking regions’ should not simply operate vertically but should also include a horizontal dimension in order to avoid discontinuity at the boundaries between political and administrative entities.

At cross-border level, which in the wider sense also means intercontinental (the EU’s external borders), international (the EU’s internal borders), interregional (administrative boundaries) and intercommunal, there are numerous opportunities for cooperation on demographic issues that have hardly been exploited to date due to political, legal or administrative obstacles. There are plenty of examples of ‘shrinking regions’ that adjoin areas experiencing economic growth where the former are organising the expensive demolition of vacant and unwanted housing, while the latter are constructing new dwellings at great financial and ecological cost. Of course not all situations involving cross-border demographic complementarity are as striking as this, though it is certain that there is a rich seam of initiatives to be explored in the political contact zones. The question here is to know whether the fear of demographic decline and unsustainable ageing would be sufficient to transcend the opposition and animosity that can exist towards ‘strangers’ and to do this on an inter-continental level (e.g. a north-south partnership for the Mediterranean), on an international level (e.g. cross-border medical care) and at an intercommunal level (e.g. pooling of public health and educational services).
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Health


**Basilicate case study**


**Brittany case study**


**Moldavia case study**


**Upper Norrland case study**


Annex 2: Glossary of abbreviations and acronyms

BG: Bulgaria
CNET: National Telecommunications Study Centre (France)
DATAR: Delegation for Town and Country Planning (France)
DIACT: Delegation for Town and Country Planning and Competitiveness (France)
EPRC: Centre for Economic Policy Research
ESPON: European Spatial Planning Observation Network
EU: European Union
FR: France
GDP: Gross domestic product
GDP at PPP: Gross domestic product at purchasing power parity
IT: Italy
MOT: Cross-border operational mission
NMS: New Member States
NUTS: Nomenclature of territorial units for statistics
OECD: Organisation for Economic Cooperation and Development
RMI: Basic guaranteed income
RO: Romania
SE: Sweden
UK: United Kingdom of Great Britain and Northern Ireland
UNADEL: National Union of Local Development Actors and Organisations (FR)
UNFPA: United Nations Population Fund
UNPP: United Nations Population Prospect